

Undergraduate Catalog

2011-2012



Towson University

2011-2012 Catalog

CollegeSource®

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Towson University Academic Calendar

Information regarding course offerings and registration is online at www.towson.edu/registrar.

Fall Term 2011

Classes begin	August 31 (W)
Change of Schedule period begins	August 31 (W)
Labor Day holiday (TU closed)	September 5 (M)
Change of Schedule period ends for first 7-week courses.	September 6 (T)
Change of Schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course.	September 9 (F)
Last day to withdraw from first 7-week courses with a grade of "W"	October 5 (W)
Mid-term and end of first 7-week courses.	October 20 (Th)
Second 7-week courses begin	October 21 (F)
Change of Schedule period ends for second 7-week courses	October 26 (W)
Last day to withdraw from full-term courses with a grade of "W." Last day to change to Pass/Fail or Audit grading options	November 9 (W)
Thanksgiving Holiday.	November 23-27 (W-Su)
Classes resume	November 28 (M)
Last day to withdraw from second 7-week courses with a grade of "W"	November 29 (T)
Last Saturday class	December 10 (Sa)
Last day of classes.	December 14 (W)
Final examinations begin.	December 15 (Th)
Last day of examinations and end of term.	December 21 (W)

*Saturday exams will be held at the regularly scheduled meeting time.

Minimester 2012

Minimester begins	January 2 (M)
Minimester Change of Schedule period	January 2-3 (M-T)
Last day to withdraw from Minimester	January 9 (M)
Martin Luther King Day—No Classes	January 16 (M)
Minimester ends	January 20 (F)

Spring Term 2012

Spring classes begin	January 30 (M)
Change of Schedule period begins	January 30 (M)
Change of Schedule period ends for first 7-week courses.	February 2 (Th)
Change of Schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course	February 7 (T)
Last day to withdraw from first 7-week courses with a grade of "W"	March 2 (F)
Spring Break	March 18-25 (Su-Su)
Classes resume. Mid-term and end of first 7-week courses	March 26 (M)
Second 7-week courses begin	March 27 (T)
Change of Schedule period ends for second 7-week courses	March 30 (F)
Last day to withdraw from full-term courses with a grade of "W." Last day to change to Pass/Fail or Audit grading options.	April 13 (F)
Last day to withdraw from second 7-week courses with a grade of "W."	April 30 (M)
Last day of classes (Last Saturday classes meet May 14)	May 15 (T)
Final examinations begin	May 16 (W)
Last day of examinations and end of term	May 24 (Th)

The purpose of this catalog is to provide information about the university and existing resources and services and current curriculum programs, rules, regulations and policies. Catalog information is thus to be used as an informational guide and practical resource. The university, however, in its discretion and from time to time, may amend the information contained in this catalog by modification, deletions or additions to it. Accordingly, the catalog and information it contains do not constitute a contract.

EMERGENCY CLOSING POLICY

Announcements about schedule changes or cancellations will be broadcast over the following major radio and TV stations: WBAL (AM/1090), WYPR (FM/88.1), WMZQ (FM/98.7), WLIF (FM/101.9), WTOP (FM/103.5), WBAL-TV (11), WJZ-TV (13), WMAR-TV (2) and WRC-TV (4). Information will also be available by calling 410-704-NEWS or 410-704-2000.

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Dear Students:

Welcome to Towson University. Whether you're a first-year student or transferring from another institution, Towson is a place where you can develop your full potential and explore our rich array of educational opportunities. Depending on the choices you make, you'll learn in a traditional classroom, in a studio or a laboratory, using paper and pencil or computer technology, through internships or perhaps a class that is centered on service learning.

U.S. News & World Report's America's Best Colleges Guide ranked Towson University among the top 10 in its 2011 list of the best public regional institutions in the North. We offer you more than 60 different undergraduate majors, with opportunities for internships and study abroad, as well as opportunities to take part in undergraduate research and civic engagement. Our focus on being a metropolitan university means you'll learn about the importance of civic engagement and be able to take advantage of the many relationships that the university has with the community around us. You'll learn about our world as an urban environment and as an urban institution in the global economy.

It is critical that you commit to making the most of your time at Towson. Retain a sharp focus on your academic coursework, but also realize that learning occurs beyond the classroom. You will have the opportunity to attend arts performances and gallery openings, athletic events, public forums on current topics, and film festivals that challenge your thinking.

Get engaged. Get involved in the community. Talk to the faculty. Ask the hard questions of yourself as well as of others. Advance your personal and intellectual development. We have so much to offer you here at Towson, and we hope that during your time with us you will grow to become your very best.

Sincerely,



Marcia G. Welsh
Interim President





The University

Towson University, Maryland's Metropolitan University, is nationally recognized for its excellent programs in the arts and sciences, communications, business, health professions, education, fine arts and computer science. The university is located in the suburban community of Towson, Maryland, just eight miles north of downtown Baltimore.

Its beautifully landscaped 328-acre setting provides a pleasant environment for study and a diverse campus life, as well as easy access to a wealth of university and community resources. Towson University enrolls and graduates more undergraduate students from the region than any other institution.

MISSION STATEMENT

Towson University, as the state's comprehensive Metropolitan University, offers a broad range of undergraduate and graduate programs in the liberal arts, sciences, arts and applied professional fields that are nationally recognized for quality and value. Towson emphasizes excellence in teaching, scholarship, research and community engagement responsive to the needs of the region and the state. In addition to educating students in the specialized knowledge of defined fields, Towson's academic programs develop students' capacities for effective communication, critical analysis, and flexible thought, and they cultivate an awareness of both difference and commonality necessary for multifaceted work environments and for local and global citizenship and leadership. Towson's core values reflect high standards of integrity, collaboration, and service, contributing to the sustainability and enrichment of the culture, society, economy, and environment of the state of Maryland and beyond.

HISTORY

The institution known today as Towson University opened its doors in 1866 in downtown Baltimore as the Maryland State Normal School—the only institution devoted exclusively to the preparation of teachers for the public schools of Maryland. The first class consisted of 11 students.

In 1915 the school moved to Towson. By 1935, it established the Bachelor of Science degree in education and changed its name to Maryland State Teachers College at Towson. In 1946 it introduced an arts and sciences program, and in 1963 the institution expanded its offerings in the arts and sciences and became Towson State College.

Towson was granted university status on July 1, 1976, in recognition of its development into a comprehensive university. In 1988 Towson State University joined the University System of Maryland. On July 1, 1997, Towson State University became Towson University, a change that reflects its evolution from a state-supported to a state-assisted institution. As of May 2010, the university has awarded 125,688 degrees. Of those, 18,742 were advanced degrees.

Enrollment for the 2010 fall term was 17,529 undergraduates and 4,311 graduate students.

PHILOSOPHY OF LIBERAL ARTS EDUCATION AT TOWSON UNIVERSITY

Excellence at Towson University begins with its commitment to a sound liberal arts education for every student. All students explore the historical development and interrelationships among the four central areas of knowledge (fine arts, humanities, science and mathematics, and social and behavioral sciences), and how each of them addresses the world, investigates, reaches conclusions, and presents findings—extending the reaches of human knowledge. The university helps all students develop a range of intellectual skills that will continue to enrich and shape their lives long after their formal education has ended.

COLLEGES

Students choose their programs of study from the university's academic colleges: the College of Business and Economics, the College of Education, the College of Fine Arts and Communication, the

College of Health Professions, the Honors College, the College of Liberal Arts, and the Jess and Mildred Fisher College of Science and Mathematics. All undergraduate programs within each college are fully described in the *Undergraduate Catalog*. For information on the College of Graduate Studies and Research, see the description in this catalog.

FACULTY

Towson University offers many opportunities for close student-faculty collaboration and promotes a supportive environment that encourages exploration and personal growth. A student-faculty ratio of approximately 17:1 allows students to interact frequently with their professors. More than 74 percent of the 830 full-time permanent faculty have earned the highest degree of academic preparation in their fields from some of the finest colleges and universities in the world. Many faculty members are recognized nationally and internationally for their published works and honors. Small classes and the tradition that all instructors—including most full professors—teach introductory courses helps to enhance the strength of Towson's faculty and their dedication to excellent teaching.

GOVERNANCE

Towson University is a member of the University System of Maryland (USM), which comprises 11 universities, two research centers and a system office.

A Board of Regents, consisting of 17 regents appointed by the governor, has oversight over the USM campuses and institutes.

The president and his or her designees are responsible for the day-to-day governance of the university. The University Senate and its committees develop university policies and procedures, with the senate also serving in an advisory capacity to the university president.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association (SGA) is the representative governing body of undergraduate students authorized by the administration of the university. Working jointly with students, faculty, staff and administration, the SGA is dedicated to improving students' academic, social and cultural environments. The SGA comprises an executive branch, directors, representatives, justices and a legislative body, the Senate. The SGA's student officers work diligently to better the Towson University community.

ACCREDITATION/AFFILIATIONS

Academic Affairs:

The Middle States Association of Colleges and Schools
The American Association of State Colleges and Universities
The Association of American Colleges

College of Business and Economics:

The Association to Advance Collegiate Schools of Business for both business and accounting programs (AACSB)

College of Education:

The Maryland State Department of Education
The National Council for the Accreditation of Teacher Education (NCATE)

Association for Childhood Education International (ACEI)
American Library Association (ALA)/American Association of School Librarians (AASL)
Council for Exceptional Children (CED)
Educational Leadership Constituent Council (ELCC)
International Reading Association (IRA)
National Association for the Education of Young Children (NAEYC)
National Council of Teachers of English (NCATE)
The Holmes Partnership
Teacher Education Council of State College and Universities

College of Fine Arts and Communication:

The National Association of Schools of Music
The National Association of Schools of Dance
The National Association of Schools of Theatre

College of Health Professions:

The Maryland State Board of Nursing
The Accreditation Council for Occupational Therapy (ACOTE)
The American Occupational Therapy Association (AOTA)
Council on Academic Accreditation of the American Speech-Language-Hearing Association
The Commission on Accreditation of Athletic Training Education (CAATE)
The Association of University Programs in Health Administration (AUPHA)
The National League for Nursing
The American for Health Education/National Council for the Accreditation of Teacher Education (AAHE/NCATE)
The Association for Gerontology in Higher Education (AGHE)

College of Liberal Arts:

National Council of Family Relations
Non-Profit Leadership Alliance
National Child Life Association
National Council on the Teaching of Foreign Languages
National Association of Child Psychologists

The Jess and Mildred Fisher College of Science and Mathematics:

The American Chemical Society
The Computing Accreditation Commission of ABET

ASSESSMENT

Assessment is the ongoing process of establishing clear, measurable expected outcomes of student learning; systematically gathering, analyzing and interpreting evidence to determine how well student performance matches those expectations, and using the resulting information to understand and improve student learning throughout Towson University. All Towson University activities that aim to deepen student learning—undergraduate and graduate courses and programs, co-curricular activities, student life programs, and the Core Curriculum—systematically assess learning outcomes. Because assessment is an integral part of the teaching-learning process, Towson students participate in a variety of assessments as part of their education experience.

The University Assessment Council works closely with the Assistant Vice President of Assessment to oversee Towson University's assessment efforts.

For more information on Towson's assessment program, contact the Office of Assessment at 410-704-2557. Information is also available online at www.towson.edu/assessment.

PRIVACY RIGHTS OF STUDENTS

Towson University is in compliance with the Family Educational Rights and Privacy Act of 1974, as amended (aka Buckley Amendment). As such, it is the policy of the university (1) to permit students to inspect their academic records; (2) to limit disclosure to others of personally identifiable information from education records without students' prior written consent; and (3) to provide students the opportunity to seek correction of their education records where appropriate.

A more complete description of the policy and the records considered confidential may be found in Appendix D.

NON-DISCRIMINATION IN EDUCATION AND EMPLOYMENT

Towson University's policies, programs and activities comply with federal and state laws and regulations prohibiting discrimination on the basis of race, color, religion, age, national origin, sex, disability and sexual orientation. For further information, contact the Towson University Office of Diversity and Equal Opportunity, 410-704-2360, www.towson.edu/odeo/.

NOTICE OF THE ANNUAL CLERY CAMPUS SECURITY REPORT

In accordance with the guidelines established by Towson University and pursuant to federal law identified as the "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act of 1998," all currently enrolled students, campus employees and all prospective students and prospective employees are entitled to request

and receive a copy of the Towson University Annual Security and Fire Safety Report. The report contains crime statistics about certain specified crimes or incidents that have been reported to the Towson University Police Department and/or campus security authorities over the past three years and have occurred either on campus, in off-campus buildings on property owned or controlled by the university, or on public property adjacent to campus. It also contains statistics on fires that occurred in on-campus student housing facilities during calendar year 2009, the first year that fires are included in the report.

The report also contains policies and practices pertaining to campus security, emergency response policies and procedures, crime reporting, alcohol and drugs, victims' assistance programs, student discipline, campus resources, timely warnings and emergency notifications, community safety alerts, crime prevention, access to campus facilities/properties, and personal safety tips. The report describes how and to whom to report crimes. It also contains policies and procedures concerning on-campus residential students who are missing for more than 24 hours.

This report is available online at www.towson.edu/police. Copies can also be obtained by calling 410-704-2505 or by visiting the Towson University Police Department located in the General Services building on Towson town Blvd.

University Curriculum

CURRICULUM

Towson University takes pride in the breadth and depth of its undergraduate academic programs. Students acquire a broad background in the liberal arts and sciences based on the Core Curriculum requirements, upon which they build concentrated study in one subject, their major field of study. They may select courses ranging from the traditional to the contemporary. This undergraduate foundation prepares them to take their place in the professional world or in graduate studies.

The university's seven undergraduate colleges—the College of Business and Economics, the College of Education, the College of Fine Arts and Communication, the College of Health Professions, the Honors College, the College of Liberal Arts and the Jess and Mildred Fisher College of Science and Mathematics—offer more than 60 undergraduate majors leading to the baccalaureate degree. The university also offers specialized programs, including minors, concentrations, tracks, combined majors and double majors.

DESIGNING YOUR COURSE OF STUDY

Although many students enter the university fully aware of their academic and occupational goals, others have yet to select a field or program of specialization. Frequently, students change their majors several times over the course of their college careers. Students may explore the range of programs that interest them in several ways:

- consulting with an adviser at the Academic Advising Center, Lecture Hall, 410-704-2472
- meeting with their assigned faculty adviser or with a faculty member whose field of study interests them



- exploring career opportunities and vocational interests through the Counseling Center, Glen Esk, 410-704-2512
- investigating career opportunities at the Career Center, 410-704-2233

DEGREE REQUIREMENTS

Student Responsibility

Students are expected to familiarize themselves with the *Undergraduate Catalog* and to satisfy all published degree requirements. Failure to do so does *not* provide a basis for exceptions to academic requirements or policies. It is expected that students will receive assistance from general academic and faculty advisers, but students must assume responsibility for completing published degree requirements.

Students are also expected to be familiar with regulations pertaining to campus life and deportment, and to conduct themselves in a way that reflects well upon themselves and Towson University.

Finally, Towson University requires all students to provide both a current local address and a permanent address and current phone number. This information must be updated each term and within 15 days of a change of address.

Changes in Terminology

Students use Towson Online Services to register for classes and track their academic progress. Please note that some academic terms used online and in the catalog are interchangeable. For example: majors and minors are referred to as Academic Plans; concentrations and tracks are referred to as Academic Sub-Plans.

Bachelor of Science

Students must fulfill the following requirements to graduate with a Bachelor of Science degree:

1. Completion of the online graduation application (<http://onestop.towson.edu>) according to the following deadlines:
 - May graduates file by December 1 of the year prior to graduation.
 - August graduates file by May 1 of the year of graduation.
 - December graduates file by August 1 of the year of graduation.
2. At least 120 earned units
3. A minimum of 43 units of Core Curriculum requirements (see below)
4. At least 32 units (part of the 120 total units required) of upper-level work (courses numbered 300+ and 400+); courses taken at two-year institutions *cannot* count as part of the 32 upper-level units required. Courses from four-year institutions will transfer at the numerical level as they were taken at the transfer institution and may *not* be converted to an equivalent TU number or level.
5. Completion of Writing for a Liberal Education (ENGL 102) or its equivalent with a grade equivalent of 2.00 or higher
6. Completion of a major (a grade equivalent of 2.00 or higher must be earned in all courses applied toward the major and, if applicable, minor)
7. A cumulative GPA of at least 2.00
8. Completion of at least 15 units *after* formal matriculation as a degree candidate

9. Completion of the final 30 units in residence at Towson University.

The undergraduate records of all persons receiving a bachelor's degree are CLOSED 180 days following graduation. Any changes to the permanent record MUST be made within this period of time.

Bachelor of Arts

The requirements for the Bachelor of Arts degree mirror those for the Bachelor of Science degree, but Bachelor of Arts candidates must also complete a foreign language through the intermediate (202) level (or the equivalent). See the Department of Foreign Languages section in this catalog.

Bachelor of Fine Arts

The Bachelor of Fine Arts degree is available only to students who complete the majors in Dance or Art + Design. The requirements for the Bachelor of Fine Arts degree are identical to those for a Bachelor of Science degree, but Bachelor of Fine Arts candidates must also fulfill the performance and studio requirements specified by the Department of Dance or the student requirements specified by the Department of Art + Design, Art History and Art Education.

Bachelor of Music

The Bachelor of Music degree is available only to students who complete the major in Music. The requirements for the Bachelor of Music degree are identical to those for a Bachelor of Science degree, but Bachelor of Music candidates must also fulfill the performance and studio requirements specified by the Department of Music.

Bachelor of Technical and Professional Studies

The Bachelor of Technical and Professional Studies (BTPS) is available only to students in specifically articulated programs between Towson University and area community colleges. For example, the Chemical Dependency Counseling and Education major within the Health Science curriculum is a BTPS program.

Concurrent Degrees

Students simultaneously pursuing course work in two programs of study may wish to earn two degrees concurrently and receive two diplomas. In such cases, the Academic Standards Committee will consider requests from students wishing to receive two degrees provided they:

1. Complete a minimum of 150 units.
2. Complete both programs of study.
3. Complete a minimum of 60 units in residence at Towson University.
4. Complete at least half of the units required in each major in residence at Towson University.
5. Have no more than 12 units overlap between each major, including program requirements and program electives.
6. Complete an appropriate advanced writing course for each of the majors, where required.
7. Notify the Graduation Office during the graduating term.

CATALOG SELECTION

Students must fulfill all degree requirements from a single catalog. They will be assigned the catalog in effect at the time of their formal admission to Towson University and will have 10 years to complete the requirements of that catalog in order to graduate.

Students may request an alternate catalog under the following conditions:

1. They may select the catalog in effect at the time of formal admission at their initial transferring institution, provided 10 years have not elapsed. Students may elect this option by completing the Catalog Selection Petition and submitting the form to the Registrar's Office for final approval.
2. They may select a later catalog than the one assigned to them at the time of formal admission to Towson provided that the chosen catalog has not expired. The student will be required to complete the general degree requirements in effect for the selected catalog year. This will not alter the original transfer package/option received at the time of formal admission to Towson University as long as the student has maintained continuous enrollment. Students may elect this option with the signed approval of their major department chairperson on the Catalog Selection Petition. This form must be submitted to the Registrar's Office for final approval.

These forms are available in the Registrar's Customer Service Center, Enrollment Services 223, or online at <http://onestop.towson.edu/forms>. Students must see an academic adviser before submitting this form in order to determine the impact their catalog selection may have on their degree requirements. Please note that any change in catalog may affect degree requirements and may negate previous advising.

UNIVERSITY CORE CURRICULUM REQUIREMENTS

Higher education serves a greater purpose than simply providing basic occupational training. The General Education (Core) Requirements are designed to help students gain essential intellectual skills and knowledge that will be important throughout life.

These skills include successful speaking and writing, the gathering and evaluation of information, the appreciation of diverse points of view, and the ability to understand and formulate ideas and values. These skills will provide students with: 1) the flexibility and resourcefulness required to adapt successfully to rapid social, economic and technological change, 2) the understanding and tolerance necessary for informed citizenship and social action, and 3) the interest and curiosity essential to the pursuit of learning throughout life.

To fulfill Towson University's Core Curriculum requirements, students must complete one course from each of the following 14 categories. For a complete list of Core Curriculum courses, visit www.towson.edu/core.

Fundamentals

(Normally to be taken during the first year at Towson.)

- (1) **Towson Seminar:** Focusing on exploration and discovery, this course introduces students to the academic expectations for college-level work and to the intellectual, communication, and collaborative skills needed for academic success. Seminar formats emphasize active learning, with variable content in different Towson Seminar courses. Introduces multiple perspectives and may draw from more than one discipline.

- (2) **English Composition:** This course focuses on exploring ways of writing and thinking in the branches of knowledge and on developing rhetorical strategies for successful college-level expository writing.
- (3) **Mathematics:** Requires skills at the level of college algebra or above. Treat concepts and skills in the mathematical sciences and emphasize both theoretical foundations and problem-solving applications such as finite mathematics, statistics, discrete mathematics and mathematical survey courses.
- (4) **Creativity and Creative Development:** Specific creative activity emphasizing symbolic, affective, and imaginative thinking in the creative activity and understanding the creative process through participating in it. Reflect current scholarship in the field, provide reference to theoretical frameworks and methods, and explore the critical standards central to the genre or medium.

Ways of Knowing

(Normally to be taken during the first two years at Towson.)

- (5) **Arts and Humanities:** The arts examine aesthetics and the development of the aesthetic form. Courses in this area may include, but are not limited to fine, performing and studio art, appreciation of the arts and history of the arts. All courses, including fine, performing and studio arts, will explore the relationship between theory and practice. The humanities examine the values and cultural heritage that establish the framework for inquiry into the meaning of life. Courses in the humanities may include but are not limited to, the language, history, literature, and philosophy of Western and other culture. *(The course meeting this requirement must be taken in a discipline different from the course meeting requirement 4.)*
- (6) **Social and Behavioral Sciences:** The social and behavioral sciences examine the psychology of individuals and the ways in which individuals, groups, or segments of society behave, function, and influence one another. They include, but are not limited to, subjects that focus on history and cultural diversity; on the concepts of groups, work and political systems; on the applications of qualitative and quantitative data to social issues; and on the interdependence of individuals, society and the physical environment.
- (7) **(8) Biological and Physical Sciences:** The Biological and Physical Sciences systematically investigate living systems and the physical universe and introduce students to methods used to collect, quantify, and interpret scientific data and to synthesize and apply scientific concepts. Courses in this category present the historical development and structural nature of these sciences, and employ mathematics and computing techniques as appropriate. Students must take two courses in the Biological and/or Physical Sciences with at least one four-unit course that includes a laboratory. The laboratory experience will emphasize hands-on investigations and scientific inquiry. Students must select either two courses from different scientific disciplines or two sequenced courses within one discipline.

Writing in a Chosen Field

(Normally to be taken during the third year at Towson.)

- (9) **Advanced Writing Seminar:** Courses in this category will address (1) the discourse models and practices important to a specific discipline and (2) techniques of formatting and reporting, validation and documentation, required to write with authority and authenticity within the discipline.

Perspectives

(Normally to be taken during the first three years at Towson.)

One course under Perspectives must be taken in a discipline in the arts and humanities, different from the discipline in requirement 5. One course under Perspectives must be taken in a discipline in the social and behavioral sciences, different from the discipline in requirement 6.

- (10) **Metropolitan Perspectives:** Courses in Metropolitan Perspectives examine and explore the metropolis (as broadly conceived) in its past and present complexities. The category includes courses that describe characteristics of specific places, like the Baltimore-Washington metropolitan areas, or that describe characteristics or dynamics of metropolises in general, whether in the US or in other countries, whether contemporary or historic, through the lens of an appropriate discipline.
- (11) **The United States as a Nation:** Courses addressing The United States as a Nation explore the institutions, history, culture, or traditions of the United States with an emphasis on addressing through a particular subject matter the broader experience of the nation as a whole.
- (12) **Global Perspectives:** Courses in Global Perspectives examine how the global environment is changing, and is being changed, by major social, cultural, religious, economic, political, and technological forces, and how new patterns of relationships are shaping and being shaped by the global environment.
- (13) **Diversity and Difference:** Courses in Diversity and Difference will explore relationships of distinctiveness and interdependence, conflict and cooperation, between and among people with varying cultures, beliefs, identities and capabilities. Courses will cultivate in students the ability to examine and articulate differences of conviction and perception through open exchange and civil discourse. As part of that process, students will also come to understand more fully the lenses through which they view the world.
- (14) **Ethical Issues and Perspectives:** Courses in Ethical Issues and Perspectives will develop one or more ethical issues of current importance to any of a broad range of academic disciplines. These courses are designed to help students understand different perspectives on ethical problems and different processes and techniques helpful in reaching sound judgments.

TRANSFER PACKAGES

AAT Degrees (Associate of Arts in Teaching)

Maryland public community college students who have earned AAT degrees (Associate of Arts Degree in Teaching) will be awarded a maximum of 64 transfer credits "without further review," in accordance with MHEC policy, (toward the articulated education programs) at Towson. Students are encouraged to contact the appropriate education department chairperson at their institutions for specific details and program deadlines.

Course work for students who do not complete all requirements of the AAT degree, will be applied toward Towson's Core Curriculum and major requirements on a course-by-course basis.

CHOOSING A MAJOR

The Core Curriculum requirements allow students to explore a broad range of subjects, while the major and minor provide in-depth study of one or more fields. A major may require as few as 30 units and as many as 84 units. The exact number varies and is set by the academic department.

All students must declare a major or be in a pre-major pool upon completing 60 units.

In order to add or change a major or minor, students must complete a Change of Major/Minor Form available online.

Changes in Terminology

Students use Towson Online Services to register for classes and track their academic progress. Please note that some academic terms used online and in the catalog are interchangeable. For example: majors and minors are referred to as Academic Plans; concentrations and tracks are referred to as Academic Sub-Plans.

Major

A major consists of courses required of a particular discipline that may include both lower-level (100–200) and upper-level (300–400) courses within and outside the discipline. A grade equivalent of 2.00 or higher is required in all courses completed toward the major.

Combined Majors

A combined major blends the requirements of two majors, allowing students to complete both majors by taking fewer units than if each major were completed separately.

Double Major

A double major requires the completion of all requirements for each of two majors.

Minor

An institutionally approved set of courses within a major area of study, or a separate, distinct thematic area of study consisting of at least 18, or no more than 30 units. A minimum of 12 units must be upper-level courses (300–400 numbered courses) and no more than 12 units can be taken outside of the minor or thematic discipline. A grade equivalent of 2.00 or higher is required in all courses completed toward the minor.

Concentration (MHEC Approved)

A concentration is a sequential arrangement of courses representing a specialized area of study

within a program. A concentration requires a minimum of 25 units and should have enough unique units to distinguish it from the major, a track or another concentration. A concentration will appear on the student's transcript as a Sub-Plan upon graduation.

Track (Towson University Approved)

A track is a sequential arrangement of courses representing a specialized area of study within a program. A track requires between 18 and 24 units; two-thirds of the units should be unique to that track and distinguish it from the major, a concentration or another track. No course can be common to all tracks and concentrations within a major. A track will appear on the student's transcript as a Sub-Plan upon graduation.

Screened/Competitive Majors

Some programs of study are screened. Students must meet certain academic and/or curricular criteria, such as completing prerequisite courses or attaining a specific grade point average, before they are admitted to these programs.

Other programs of study, while not officially approved screened majors, are competitive. Students must either submit a portfolio of work or audition before they are admitted to these programs. Examples of competitive majors include Art, Music and Dance.

The criteria are published in the applicable sections of this catalog. **Admission to the university does not guarantee admission to screened or competitive programs.**

Out-of-State Students

Recognizing the advantages of a diverse student body, the university welcomes out-of-state applicants to its screened programs. However, because the university is partially supported by Maryland taxpayers, the proportion of out-of-state students admitted to its screened programs must be limited. Therefore, no more than 25 percent of each class of new students admitted to screened programs will be out-of-state residents unless qualified in-state students are unavailable.

COLLEGES

The university comprises eight colleges: the College of Business and Economics, the College of Education, the College of Fine Arts and Communication, the College of Health Professions, the College of Liberal Arts, the Jess and Mildred Fisher College of Science and Mathematics, the Honors College and the College of Graduate Studies and Research.

Once students have determined a program of study, they become members of, and graduates from, the academic college administering the program.

Students in teacher education programs may have requirements listed in more than one college. Teacher education programs are screened and highly competitive, requiring successful completion of specific prerequisite courses and attaining a minimum cumulative GPA, to be considered for admission.

Students interested in pursuing a career in teacher education should read the "Standards for Students Enrolled in Teacher Education Programs" before

deciding on a teaching career. This information can be found in the College of Education section of this catalog under the heading "Admission to Teacher Education."

College of Business and Economics

The Towson University College of Business and Economics (CBE) prepares students for success in business and the larger community through its unique combination of experiential learning, applied research, and community outreach. The CBE supports high-quality faculty who are actively engaged in teaching, scholarship, service and citizenship, and promotes the economic, educational, and societal advancement of Maryland. The CBE embraces a culture of excellence, ethical behavior, respect, civility, accountability, diversity and inclusion.

The CBE's high-quality, contemporary and relevant curriculum focuses on achieving concrete and measurable objectives in student knowledge, skills and attitudes (KSAs). These KSAs are designed to lead CBE graduates to obtain an integrated understanding of the functional areas of business; think critically and creatively; make ethical decisions; produce effective written and oral communication; use technology appropriately; demonstrate leadership and teamwork; and develop the accredited business knowledge, skills and attitudes that lead to marketability and professional success—whether in careers with multinational and Fortune 500 companies or entrepreneurial pursuits.

Students may earn degrees in Accounting, Business Administration, e-Business, and Economics. Within the Business Administration major, students choose from concentrations/tracks in Economics, Entrepreneurship, Finance, International Business, Human Resource Management, Legal Studies, Management, Marketing, and Project Management and Business Analysis. Towson's Accounting and Business Administration programs are accredited by AACSB International—the Association to Advance Collegiate Schools of Business—the highest distinction that business schools can receive worldwide.

College of Education

The mission for professional education at Towson University is to inspire, educate, and prepare educators as facilitators of active learning for diverse and inclusive populations in environments that are technologically advanced. The professional education unit is accredited by the National Council for Accreditation of Teacher Education and the Maryland State Department of Education.

As the first teacher-training institution in Maryland, Towson University has been preparing men and women for teaching careers for more than 140 years. Today, the College of Education has a nationwide reputation as a leader in teacher education. Programs of study lead to the baccalaureate degree in education with certification to teach Early Childhood Education, Integrated Early Childhood and Special Education Elementary Education, Elementary Education, Integrated Elementary Education and Special Education, Middle School Education, and Special Education.

In addition, the college offers programs that lead to teacher certification in secondary education and K-12 education for students enrolled in other colleges of the university.

College of Fine Arts and Communication

Recognized as a fine arts center for Maryland, the College of Fine Arts and Communication educates talented men and women to pursue careers in the arts and communication. Additionally, the college offers all TU students the opportunity to participate in both academic and artistic experiences in these areas.

Because the creative process involves close dialogue between teacher and student, programs are structured to allow for individual attention. All programs provide a broad liberal education as well as specialized professional training.

The university holds national accreditation for several programs in the college: the National Association of Schools of Dance for the B.F.A. degree programs in dance, the National Association of Schools of Music and the National Council for Accreditation of Teacher Education for the degree programs in music, and the National Association of Schools of Theatre for the theatre arts degree programs.

College of Health Professions

The departments of the College of Health Professions have the common goal of preparing students to provide human services designed to improve the quality of life. The college is composed of the departments of Audiology, Speech-Language Pathology and Deaf Studies, Health Science, Kinesiology, Nursing, and Occupational Therapy and Occupational Science, and college-based programs in Allied Health and Allied Health/Respiratory Therapy. Graduates of the baccalaureate programs in Athletic Training and Nursing and the combined B.S./M.S. in Occupational Therapy are eligible to sit for their respective certification examinations.

A major in the College of Health Professions can prepare students for one of many health care and sport-related careers. Some examples include nursing, occupational therapy speech-language pathology, community health, health education, health care management, elder care, athletic training, physical education, coaching and government service.

College of Liberal Arts

The largest of Towson's colleges, the College of Liberal Arts includes the disciplines commonly identified with the humanities and the social sciences, as well as a robust array of interdisciplinary programs. Because it contains many of the fundamental disciplines of higher education, the college also contributes heavily to the Core Curriculum course offerings of the university. Departments and programs in the College of Liberal Arts are committed to developing in students the essential attributes of a liberal education: the ability to develop questions, to evaluate evidence, to think critically, to represent ideas fairly, to weigh competing claims, to reach sound judgments, to construct arguments and

to express ideas clearly and effectively. Students encounter the challenges of working with others and the reality of differences between cultures—locally, nationally and globally—and they build an appreciation for the complexities of human expression and social interaction.

The College of Liberal Arts maintains classes of limited size to enhance student-faculty interaction, and it promotes a variety of opportunities for undergraduates in research, internships, service learning, study abroad and creative expression. Whether studying the technical or the poetic, the legal or the historical, the clinical or the cultural, students in the College of Liberal Arts will enhance their capacities for both personal and professional success. Graduates may move toward immediate employment in teaching, planning, publishing, counseling, business or public service, or they may pursue graduate programs in a variety of disciplines and in professions such as law.

Jess and Mildred Fisher College of Science and Mathematics

The Fisher College of Science and Mathematics provides students with the science, mathematics and technology dimension of their liberal education. Courses are offered in all of the traditional physical, mathematical and life sciences disciplines. Programs are vigorous, yet highly flexible. Students may choose a traditional science major or may elect interdisciplinary majors, such as Environmental Science and Studies; or Molecular Biology, Biochemistry, and Bioinformatics. A Dual-Degree

Engineering program; pre-professional preparation in pharmacy, medicine, dentistry and veterinary medicine; and international studies programs leading to a Master of Science are also available. Students who major in Mathematics or in one of the sciences may also pursue certification to teach at the secondary or elementary level.

The Honors College

The Honors College is a unique community for academically talented and high-achieving undergraduate students. More than 700 Honors students participate in all majors, compete in varsity athletics and are accomplished musicians, student government leaders, community volunteers and more. All accepted first-year students receive a renewable merit scholarship of at least \$1,000. Honors students experience smaller class sizes (20 or fewer students per class), priority registration, enriched curriculum, faculty advisers, scholarship opportunities and advising, recognition of honors course work on transcripts, diploma and at graduation, a strong support network, and the option to live in Honors residence halls. Students also have opportunities to participate in special social, cultural and leadership activities.

College of Graduate Studies and Research

The College of Graduate Studies and Research has offered graduate degrees since 1958. Recently, it has expanded programs and streamlined administrative processes to accommodate a graduate student population which has grown to more than 4,300 students. The mission of

the Graduate School at Towson University is to provide programs of study that will allow individuals to advance their knowledge, increase their practical skills, and develop leadership abilities in a broad spectrum of professions. The College of Graduate Studies and Research also aims to help students enhance knowledge of their disciplines through collaboration on research projects with faculty; to be actively engaged in the process of improving the quality of life for others and themselves; and to develop the desire in each individual to become a continuous life-long learner. The college currently administers five doctoral, 46 master's and 29 certificate programs.

A hallmark of graduate education at Towson is the emphasis on applied programs that provide the skills and knowledge needed by career professionals. Faculty and student research is closely related to graduate education and advances the college's mission as well as that of Towson University. The Office of University Research Services (OURS) was established to assist faculty and staff in obtaining external support for research and scholarly activity. It serves the dual function of protecting the university's interests in matters relating to external funding, while providing a high level of service to university faculty and staff members in identifying funding opportunities, and submitting complete and competitive proposals for research and scholarly projects. In fiscal year 2010, Towson University received more than \$30 million in external funding for research and other scholarly projects.



Undergraduate Programs

COLLEGE OF BUSINESS AND ECONOMICS

Accounting Major*+◆

Business Administration Major/Minor*+◆

Concentrations

Finance

Human Resource Management

International Business

Management

Marketing

Tracks

Economics

Entrepreneurship

Legal Studies

Project Management and Business Analysis

Combined Major

Business Administration and

Information Systems

e-Business Major*+

Combined Major

e-Business and Information Systems

e-Business and Business Administration
(Management)

e-Business and Business Administration
(Marketing)

e-Business and Business Administration (Project
Management and Business Analysis)

Economics Major/Minor◆

Combined Majors

Economics and Geography

Economics and Mathematics

Economics and Political Science

COLLEGE OF EDUCATION

Art Education (K-12) Major*

Dance Major with K-12 Certification (B.F.A.)*+ #

Early Childhood Education Major*+

Elementary Education Major*+

Minor

Mathematics, other select minors

Combined Major

Elementary Education and Deaf Studies

Elementary Education Major with

Early Childhood Certification

Integrated Early Childhood Education – Special
Education Major*

Integrated Elementary Education – Special
Education Major*+

Middle School Education Major

Music Education (K-12) Major*+ #

Concentrations

Instrumental#

Vocal/General#

Physical Education (K-12) Major*+

Secondary Education Major*+

Certification Areas

Biology+

Chemistry+

Earth-Space Science+

English+

French+

Geography+

German+

History+

Mathematics+

Physics+

School Health+

Social Science+

Spanish+

Special Education Major*+

Tracks

Elementary

Secondary/Adult

COLLEGE OF FINE ARTS AND COMMUNICATION

Art+Design Major/Minor

Concentrations

Digital Art and Design

Graphic Design

Illustration

Interdisciplinary Object Design

Metalsmithing and Jewelry

Painting, Drawing, Printmaking

Photo Imaging

Sculpture

Art Education (K-12) Major*+

Art History Major/Minor

Communication Studies Major/Minor

Combined Major

Communication Studies and Political
Science

Dance Major (B.F.A.)*+ #

Dance Major with K-12 Certification
(B.F.A.)*+ #

Electronic Media and Film Major/Minor

Concentrations

Film and Media Studies*

Film/Video/Digital Media*

Radio/Audio*

Mass Communication Major/Minor

Tracks

Advertising

Journalism and New Media

Strategic Public Relations and Integrated
Communication

Combined Major

Mass Communication and Political
Science

Music Major*+ #

Concentrations

Bachelor of Science in Music#

Composition#

Guitar Performance#

Jazz/Commercial Composition#

Jazz/Commercial Performance#

Keyboard Performance#

Voice Performance#

Winds/Strings/Percussion Performance#

Music Minor

Tracks

Literature (application to department
required)

Performance#

Music Education (K-12) Major*#

Concentrations

Instrumental#

Vocal/General#

Theatre Major/Minor

Tracks

Acting

Design and Production

Theatre Studies

COLLEGE OF HEALTH PROFESSIONS

Allied Health Major

Allied Health/Respiratory Therapy (Community
College Partnership)

Athletic Training Major*+

Deaf Studies Major

Focus Areas

Deaf Culture

Human Services

Combined Majors

Elementary Education and Deaf Studies

Speech-Language Pathology, Audiology and
Deaf Studies

Exercise Science Major

Gerontology Major/Minor

Health Care Management Major/Minor+
Track

Long-Term Care

Health Science Major/Minor+

Concentrations

Community Health

School and Community Health Education

School Health—Teacher Education (5–12)

Nursing Major*+

Basic Program

RN Completion Program

Occupational Therapy Combined

B.S./M.S.*+

Physical Education/Teacher Education Major
(K-12 Certification)

Speech-Language Pathology and Audiology
Major*+

Combined Major

Speech-Language Pathology and Audiology
and Deaf Studies

Sport Management Major

Pre-professional

Physical Therapy Preparation

COLLEGE OF LIBERAL ARTS

Cultural Studies Major/Minor

English Major/Minor◆

Tracks

Literature

Secondary Education

Writing

Minor

Creative Writing

Environmental Science and Studies Major/Minor
(with FCSM)

Concentration

Environmental Studies

Family Studies Major/Minor
Tracks
 Child Life
 Family and Human Services
 Leadership in Nonprofit Sector
 Services to Children and Youth
 Foreign Languages Major/Minor/Proficiency
Tracks
 French
 German
 Spanish
 Literature/Professional
 Secondary Education
Minors
 Chinese
 Italian
 Geography and Environmental Planning
 Major/Minor
Track
 Global Skills
Minor
 Geography
 Geography Information Sciences
 Meteorology
Combined Majors
 Geography and Economics
 Geography and History
 Geography and Political Science
 Geography and Sociology/Anthropology
 Geography and Land Surveying Major
 (with Community College of Baltimore County,
 Catonsville)
 History Major/Minor
 Combined Major History and Geography
 Interdisciplinary Studies Major
Tracks/Minors
 American Studies
 Asian Studies
 Individually Designed Thematic Option
 Latin American and Latino/a Studies
Tracks Only
 Animal Behavior
Minors Only
 African and African American Studies
 Ancient Mediterranean Studies
 Business, Communication and the Liberal Arts
 Jewish Studies
 Lesbian, Gay, Bisexual and Transgender Studies
 Museum Studies
 International Studies Major/Minor
Tracks
 General
 International Development
 Asia
 Europe
 Latin America
Minor
 European Studies
 Law and American Civilization Major
 Metropolitan Studies Major
 Philosophy Major/Minor

Political Science Major/Minor
Combined Majors
 Political Science and Economics
 Political Science and Geography
 Political Science and Communication Studies
 Political Science and Mass Communication
 Prelaw Program (See Dual Degree Programs)
 Psychology Major/Minor
Options
 Clinical Specialization
 Honors Thesis Program
 Religious Studies Major/Minor
 Social Sciences Major
 Sociology-Anthropology Major/Minor
Concentrations
 Anthropology
 Criminal Justice
 Sociology
Combined Majors
 Anthropology and Geography
 Sociology and Psychology
 Sociology and Geography
 Women's and Gender Studies Major/Minor
Dual Degree Program
 Prelaw Program (with University of Baltimore)

JESS AND MILDRED FISHER COLLEGE OF SCIENCE AND MATHEMATICS

Biology Major/Minor
Concentrations
 Cell and Molecular Biology
 Functional Biology of Animals
 Organismal Biology and Ecology
 Secondary School Biology and General Science
 Teaching+
 Chemistry Major/Minor (ACS accredited degree)+
Tracks
 General
 Professional
 ACS Certification Option
 Chemistry Secondary Education+
 Computer Science Major/Minor+◆
Track
 Computer Security
Combined Majors
 Computer Science and Mathematics
 Computer Science and Mathematics with
 Security Track
 Earth-Space Science Major
 Environmental Science and Studies Major/Minor
Concentration
 Environmental Science
 Forensic Chemistry Major
Tracks
 General Forensic Science
 Trace Evidence/Drug Analysis
 DNA
 Geology Major/Minor

Information Systems Major/Minor◆
Combined Majors
 Computer Information Systems and Business
 Administration
 Computer Information Systems and e-Business
 Information Technology
 Mathematics Major/Minor◆
Concentrations
 Actuarial Science and Risk Management
 Applied Mathematics
 Pure Mathematics
 Mathematics Secondary Education+
Combined Majors
 Mathematics and Computer Science
 Mathematics and Computer Science Security
 Track
 Mathematics and Economics
 Medicinal Chemistry Major (Dual Degree
 Program with University of Maryland School
 of Pharmacy)
 Molecular Biology, Biochemistry and
 Bioinformatics Major/Minor
Tracks
 Molecular Biology
 Biochemistry
 Bioinformatics
 Physics Major/Minor
Tracks
 Applied Physics
 Astrophysics
 General Physics
 Physics Secondary Education Program+
Minor
 Astronomy
 B.S. Physics/M.S. in Computer Science
Dual Degree Programs
 B.S. in Biological Sciences/M.S. in Aquaculture or
 Antarctic and Southern Ocean Studies (with
 University of Tasmania)
 Medicinal Chemistry (with University of
 Maryland School of Pharmacy)
 Physics and Engineering (with University of
 Maryland, College Park)
Pre-Professional Preparation
 Premedical/Pre dental
 Prepharmacy
 Preveterinary Medicine

Concentrations, minors and tracks are listed under majors.

*Screened or competitive major. Admission to the university does not guarantee admission to this major program.

+This program is accredited by a national association.

#Auditions are required.

◆This major can be completed 100 percent during the evening hours.

OPPORTUNITIES FOR OFF-CAMPUS STUDY

Students at Towson may expand their educational opportunities by studying in universities throughout Maryland, the United States, and in countries around the world. In some programs, students are able to pay tuition approximately equal to that at Towson (plus transportation), while others will require additional funds. Students considering one of the off-campus study options will want to plan ahead for their experience.

Inter-Institutional/Baltimore Student Exchange Registration Program

Enrollment Services 235, 410-704-2007

The Inter-Institutional Registration Program at Towson University is designed to foster an interchange of students between Towson and other University System of Maryland institutions. Certain private colleges, such as Goucher, Loyola, Johns Hopkins, College of Notre Dame, Morgan State University, Maryland Institute College of Art, Peabody Institute, and Stevenson University also participate in a similar program called the Baltimore Student Exchange Program (BSEP), with no additional tuition costs to students.

Interested full-time degree candidates should contact the coordinator at Towson. Students must maintain a combined full load (12 or more units) with a minimum of 6 units at TU. With approval of the coordinator, students may register for one or two courses at the host institution. Enrollment is on a space-available basis. Students must obtain special permits or instructor consent to register for courses that require them at the host institution. Students participating in these programs must follow the withdrawal deadlines at the host institutions.

At the end of the term, the host institution's registrar will send an official transcript to Towson, and the courses completed and grades earned will be posted to the Towson record and *calculated into the Towson cumulative average*. Additionally, a notation will be made that the course work was completed through the program, indicating the name of the host institution.

National Student Exchange (NSE)

Lecture Hall, 410-704-3583

This program allows full-time degree candidates an opportunity to become acquainted with social and educational patterns in other areas of the United States. Through Towson's membership in the NSE, students may attend one of the 190 participating schools for a term or a full year. Schools participating in the program include ones in Puerto Rico, Guam, the Virgin Islands, and in 47 states. For more information, contact Tracy Miller, 410-704-3583, or Sally Rominski, 410-704-2007.

Consortia Agreements

Enrollment Services 233, 410-704-3104

Students at TU may participate in consortia agreements between accredited two- and four-year colleges and universities. Consortia agreements are useful for students who wish to use part of their financial aid to pay for all or part of the tuition and fees at the participating institution.

Students wishing to participate in a consortia agreement must:

1. Be in good academic standing at TU. Students for whom an exception to suspension, dismissal or disenrollment has been made or who have been readmitted on probation are ineligible;
2. Not have completed more than 64 units at community colleges or more than 90 total units at all schools attended, including TU;
3. Must have financial aid for the specific period;
4. Obtain from the appropriate TU academic department(s) verification that the courses selected are transferable in accordance with current transfer credit policies and procedures;
5. Not attempt to repeat courses at the participating institution if they have been attempted at TU.

Note: Students do not need a consortia agreement if they register through either the Inter-Institutional Registration or Baltimore Student Exchange Programs (see section describing requirements).

For more information, contact Marilyn Leuthold, Office of the Registrar, 410-704-3104.

STUDY ABROAD

Administration Building

7720 York Road, Second Floor, 410-704-2451

Fax: 410-704-4703

E-mail: studyabroad@towson.edu

www.towson.edu/studyabroad

The Study Abroad Office provides a wide range of overseas academic experiences for Towson students. It plays an important role in the university's mission to internationalize the campus community and to provide all of its students with a broad knowledge and understanding of the global society. Over 10 percent of TU students from a variety of disciplines study abroad during their time at Towson.

The university maintains relationships with various institutions abroad and U.S.-based organizations providing overseas study opportunities worldwide. For an up-to-date list of exchange partners and affiliates, please visit the website at www.towson.edu/studyabroad.

The length of programs varies from one week to one year during fall, spring, Minimester, spring break, summer or a full academic year. Many programs focus on specific academic disciplines, while others emphasize language study, internships or service combined with traditional course work.

Courses taken through Towson University Study Abroad administered programs, exchanges and affiliated programs can be applied toward requirements and electives for degree programs. Courses are recorded under the Pass Grading Option (PS/DX/FEX) and cannot be calculated in the TU GPA or count toward the 12 unit maximum toward graduation for the Pass Grading Option. (Exceptions: Towson University faculty-led programs and the Towson University Dublin Internship Summer Program, in which the grades will be posted and calculated into the Towson University GPA.) Students are permitted to transfer credit from study abroad toward the final 30 units of their undergraduate degree.

Financial aid and TU scholarships may be applied toward study abroad exchanges and programs. Special scholarships for study abroad are also available. Contact the Study Abroad Office for more information.

The Study Abroad Office provides the following services: coordinates and manages study abroad and exchange programs; advises interested and eligible students on incorporating an overseas experience in their degree program; acts as a liaison for the student, academic departments, various administrative offices on campus and foreign universities; and provides support services to students prior to, during, and following a study abroad experience.

Information sessions are conducted by the Study Abroad Office daily at 2 p.m. to provide students with preliminary information about overseas study opportunities and procedures. Study abroad advisers are available by appointment to meet with students who have attended an information session. During an advising appointment, students can expect to receive information and advice on study abroad program options and how to choose an appropriate program, as well as financial aid and scholarship information, specific course information, transferring credit, registration, housing, etc. The office maintains a resource area for students with program/course catalogs, student evaluations, scholarship and financial aid resources, travel guides, and miscellaneous international publications.

For further information, contact the Study Abroad Office at 410-704-2451 or visit www.towson.edu/studyabroad.

UNDERGRADUATE NON-DEGREE PROGRAMS

Office of Admissions

Enrollment Services, 410-704-2113

The Office of Admissions oversees the following programs and services: Non-Degree Student Enrollment, Teacher Certification, High School Parallel Enrollment, and Golden I.D. Tuition Waiver Program.

The academic policies described in the **Admissions, University Curriculum, and Academic Standards and Procedures** sections of this catalog apply to students in the above programs unless otherwise specified.

Admission

Admission is the official acceptance of a student as a degree candidate by the TU Office of Admissions. Registration is the enrollment in courses for a particular term. Persons who meet the criteria for non-degree enrollment (outlined below) may register for courses without formal admission to the university. Eligibility requirements for formal admission and deadlines are detailed in the **Admissions** section of this catalog.

Non-Degree Students

Students who wish to enroll as non-degree students (not formally admitted by the university) must complete an Enrollment Form and submit it to the Office of Admissions before registering. Non-degree students are permitted to register for classes after full-time degree candidates. Persons who have been denied admission to TU because of academic ineligibility are not permitted to attend as non-degree students. They may, however, transfer to Towson University after attending another college or university if they meet TU's transfer admission requirements (see **Guidelines for Transfer Admission** in this catalog). Persons who have graduated from high school *within the last two years* are

not eligible to attend TU as a non-degree student during the fall or spring terms. They must apply for admission as a degree-seeking student.

Non-degree students are expected to maintain the following cumulative GPA based on calculable grades at Towson University as indicated below:

Units (includes Towson units only)	Minimum GPA
9–29.5	1.50
30–59.5	1.75
60 and above	2.00

Students who fail to meet the criteria for good academic standing outlined above will be sent letters of warning. After being warned, if students do not maintain good academic standing in *any subsequent term*, their enrollment will be permanently discontinued.

Non-degree students may apply for formal admission as degree candidates according to published deadlines, and admission will be based on a competitive GPA and space availability. Advising is available through the Office of Admissions and the Academic Advising Center.

The following policies apply for non-degree students who wish to earn a degree at TU:

1. No catalog will be assigned until you are formally admitted as a degree candidate. You must complete the requirements listed in your assigned catalog. Please note: It is to your benefit to be formally admitted as soon as you are eligible.
2. You must complete the final 30 units of your degree in residence at TU.
3. You must complete the final 15 units of your degree at TU as a *degree candidate*.
4. Transfer credits earned at another institution will not be evaluated until you are formally admitted as a degree candidate. **Academic advising received prior to formal admission will not be considered binding by Towson University.**

International students who are on a visa of any type may not enroll as non-degree students without written permission from the International Student and Scholar Office. Non-native English speakers will be tested in English and placed in remedial English courses if needed.

Teacher Certification

Students who already hold a baccalaureate degree and wish to take courses (including teaching internships) to become certified to teach in the state of Maryland should contact the Department of Secondary Education. Students must complete a Teacher Certification Enrollment Form in order to register. The form is available online and should be submitted to the Office of Admissions. Certification students will be advised by the appropriate department in the College of Education.

Students taking courses for recertification do not need to file an application with the Center for Professional Practice. They only need to file the Non-Degree Enrollment Form with the Office of Admissions. (See section above on Non-Degree Students.)

Immunization

All non-degree students will be required to submit immunization records. For more information, contact the Dowell Health Center at 410-704-2466.

High School Parallel Enrollment

The High School Parallel Enrollment Program is designed for high school students who want to take courses at Towson for college credit. **Students must have a B average and an SAT score of 500 on each section of the SAT (or 50 on the PSAT).** If you are a home-schooled student, please send the most recent evaluation from the supervising organization, as well as any standardized test results. Please note the admission to the Parallel Enrollment program does not guarantee admission to Towson as a degree seeking student.

The program allows students to:

- Experience college first-hand
- Take courses not offered at the high school level
- Earn college credit

High School Parallel Enrollment students enroll in regular courses at Towson during the summer sessions or the fall and spring terms and attend class right along with other college students. They may take any TU course, provided the prerequisites have been met.

To apply, download the printable application form. Send the completed form and \$25 application fee to the Office of Admissions, Towson University, 8000 York Road, Towson, MD 21252-0001. Also enclose a copy of SAT scores and high school transcript. The application and supporting documentation can also be faxed to 410-704-3030.

Golden I.D. Tuition Waiver Program

Retired Maryland residents, 60 years of age or older, are eligible for the Golden I.D. Tuition Waiver Program. Golden I.D. students may enroll for up to



11 units in the fall and spring terms (and 8 units in the summer session) and pay a discounted fee rate. Participants may take courses for audit or on a space-available basis (special format courses Towson Learning Network (TLN) programs, Applied Information Technology (AIT), and some satellite campus programs are excluded). To apply for the Golden I.D. program and find out the current fee rates, contact the Office of Admissions, 410-704-2113.

CREDIT FOR PRIOR LEARNING

Registrar's Customer Service Center, Enrollment Services 233, 410-704-3104

TU recognizes that some students may have acquired abilities through life experience, personal study, and/or military course work. The Credit for Prior Learning (CPL) Program offers an opportunity for students to receive college credit by taking "challenge" tests in the area of their proficiency, presenting portfolios, and providing documentation of military course work/experiences.

A maximum of 45 units for "non-traditional learning" may be granted with a grade of PE through the Credit for Prior Learning Program (this includes any CLEP credit granted in transfer). CPL units can be used to fulfill Core Curriculum, electives, and/or major requirements. Students must be degree candidates with at least a 2.00 cumulative GPA to have CPL units recorded on the TU transcript. Please note that some academic departments may accept a lower maximum number of CPL units toward the major. Please check with the major department first to find out if such restrictions exist.

Different ways to earn CPL units at Towson University are described below:

Departmental Exams

TU offers departmental "challenge" exams in Chemistry, Health Science, Mathematics, Foreign Languages and Psychology. Students' achievement in a particular test must be equal or superior to that of students having earned a grade equivalent of 2.00. Although departmental standards for granting credit may exceed this minimum, credit may not be granted when achievement is below 2.00 level work. Departments may also offer advanced placement with no credit given based on an individualized assessment.

CLEP (College Level Examination Program)

TU offers, and grants units for, the following computerized CLEP tests: Humanities, Mathematics, Natural Science, and Social Science/History. Tests are also offered in Accounting (ACCT 201, 202), Business Law (LEGL 226), Economics (ECON 201, 202), Marketing (MKTG 341), Management (MNGT 361), Computer Science (COSC 111), Freshman Composition (ENGL 102), American Literature (ENGL 230), English Literature (ENGL 221, 222), Educational Psychology (PSYC 201), and Sociology (SOCI 101). For information about the minimum passing scores for CLEP tests, call 410-704-2471.

Individualized Assessments

Students who wish to earn credit for courses that do not have standard departmental or CLEP exams

may contact the academic department to determine if individualized assessment is possible. This type of assessment may include portfolio review, oral or written examination, demonstration (e.g., dance or music), or written report/paper.

Military Course Work/Experience

TU is a member of Servicemembers Opportunity Colleges (SOC). Students who have served or are currently serving in the United States military may receive college credit for basic training, military occupational specialties, and other military course work. Official documentation must be submitted. Work will be evaluated per the *Guide to the Evaluation of Educational Experiences in the Armed Services* by the American Council on Education (ACE).

For further information on the Credit for Prior Learning Program, call the Office of the Registrar, 410-704-3104.

MILITARY SCIENCE PROGRAMS

Registrar's Office, Enrollment Services 235, 410-704-2007

Towson offers undergraduate students who are interested in officer training for the military several opportunities to pursue that training.

Reserve Officers' Training Corps (ROTC) Credit

TU will accept transfer credit hours earned from a recognized ROTC Program sponsored by an accredited college or university. Such credits will be considered upper- or lower-level credits as defined by the transferring school, and are applicable as elective units toward a TU degree. ROTC units are considered to be non-traditional units and are part of a maximum of 45 non-traditional units allowed by academic policy.

U.S. Army Reserve Officers' Training Corps (ROTC)

Towson University offers Army ROTC to its full-time undergraduate degree candidates through a cooperative agreement among Loyola College, TU, and the U.S. Army.

The primary objective of the ROTC Program is to prepare selected students with potential to serve as commissioned officers in one of the three components of the U.S. Army—Active Army, National Guard and Army Reserve. The program is totally voluntary and is conducted in two phases—the basic course and the advanced course.

The basic course is taken in the freshman and sophomore years. No military commitment is incurred during this time, and students may withdraw, as with any other course, through the end of the second year. The basic course is available as an elective to all qualified students.

TU students who decide after either their freshman or sophomore years that they are interested in the ROTC Program may attend a special ROTC Basic Camp. This camp will fully substitute for the first two years of on-campus study. This camp is held for six weeks during the summer, and all participants receive pay and allowances.

Normally, students must have a minimum of two years of college remaining before graduation in order to join ROTC.

Except for veterans, the basic course or a basic camp must be successfully completed prior to entering the advanced course.

The advanced course is normally taken in the final two years of college. A paid, six-week advanced camp is held during the summer between the junior and senior years.

Army ROTC graduates may serve three or four years, or an entire career on active duty, or request Reserve Forces Duty (RFD) and serve as little duty as three months on active duty. The remainder of their obligation is spent in the Army Reserve or the Army National Guard where they assume roles equally important to those of their active duty counterparts.

Specialized branch assignments are made in the students' senior year, which will determine the nature of their duties once they are commissioned. These specialized assignments are based largely upon students' majors and personal preferences.

Prior to graduation and commissioning, the senior student will make known personal preferences regarding the geographical area of the world in which he or she desires to serve his or her first tour upon entering the active Army.

The Army awards scholarships on a competitive basis to outstanding young men and women who are interested in serving in the active or reserve components of the U.S. Army. Details of the ROTC scholarship program are available from the Office of Financial Aid. All TU students are eligible to apply.

Enrollment for ROTC is done through the Military Science Department at Loyola College. Contact the Military Science Department at 410-617-2387 or 410-617-2276 for class days and times. Generally, freshmen and sophomores have classes on Monday and Wednesday afternoons either at Loyola or at Towson. Juniors and seniors attend classes at Loyola on Tuesday and Thursday afternoons.

Air Force ROTC

Air Force ROTC is available to full-time undergraduate degree candidates at Towson University through an agreement with the University of Maryland, College Park. Air Force courses are scheduled so that students from Towson University may complete most AFROTC requirements during one morning per week at the College Park campus. In addition, students at Towson are eligible to compete for all AFROTC scholarships; four-, three-, and two-year scholarships pay for total tuition and fees at both the University of Maryland and Towson University, for all required books, and provide a \$100 per month subsidy for both pilot and navigator training programs. Upon graduation from Towson University and completion of the AFROTC curriculum at the University of Maryland, students will be commissioned second lieutenants in the Air Force. Students who are interested in the Air Force ROTC can contact: Air Force ROTC, Det. 330, Cole Field House, Room 2126, University of Maryland, College Park, MD 20742; telephone: 301-314-3242/7649/7644.

Academic Standards and Procedures

An education from Towson University includes a broad liberal arts base and a strong knowledge of one or more major fields of study. To ensure that the Towson degree continues to have weight and meaning, and that it signifies student work meeting or exceeding a particular level of excellence, the university insists that certain standards and policies apply to all undergraduate students. These policies are published every year in this catalog, and any revisions are effective as of the date of the catalog's publication (unless otherwise stated).

The Academic Standards Committee, comprising faculty, administrators and students, meets regularly to formulate policy and to review appeals from students asking for exceptions to policies.

Students who wish an exception must appeal in writing to the Academic Standards Committee, c/o the Registrar's Office. Appeals must be written by students. Letters received from third parties will be considered only as support of students' appeals. Letters of appeal should be as brief as possible, and must include all pertinent academic information, including, when appropriate, supporting documentation. Appeals should include the student's name, address and student ID number. All appeals receive a written response from the committee.

This section will explain the policies and regulations that govern academic standards at Towson.

DEFINITIONS OF TERMS

A **unit** is the value given generally to one 50-minute class (or its equivalent) meeting weekly for a term. This means that a class meeting Monday, Wednesday and Friday from 9–9:50 a.m. or Tuesday and Thursday from 8–9:15 a.m. will be a 3-unit course. Most classes fit this format. Classes that require laboratory or studio time in addition to lecture time will usually merit an extra unit, becoming 4-unit courses, just as those requiring less class time will merit fewer units. The course description section of the catalog lists the number of units each course carries. **Faculty expect students to spend at least two hours reading, writing and doing research outside of class for each hour spent in class.**

A **term** is 14 weeks of instruction, exclusive of final examinations.

Term of Study. Each term in which students register and do not cancel or withdraw during the change of schedule period counts as a term of study.

Minimester is an intensive condensed term in January that allows students to take courses that lend themselves to a highly focused format (15 hours of instruction each week) to discuss ideas that interest students or that may fill a gap in their requirements. Students may take a *maximum* of 6 units in this term.

The **Summer Trimester** is made up of four sessions of varying lengths, including an evening session, that allow students to complete regular course work in a shorter period of time and fulfill degree requirements sooner. Students may take

a maximum of 9 units in any one session and a maximum of 15 units in all sessions combined.

Unit Load. In a regular fall or spring term, students take about 15 units (five, 3-unit courses). In the Minimester, students may take a maximum of 6 units. Students may register for a maximum of 15 units during the summer, but they may not take more than 9 units during any one summer session.

To be considered full-time, undergraduate students must be enrolled in a minimum of 12 units each term. For graduate students, the minimum is 9 units each regular term.

All students in good academic standing may register for 19 units in any fall or spring term. Students with a cumulative GPA of 3.25–3.49 may register for 20 units. Those with a cumulative GPA of 3.50 or higher may register for 21 units. Graduating seniors in their last term must ask permission from the Registrar's Office to take units beyond 19.

Prerequisites. Prerequisites are requirements imposed by an academic department for certain courses within its curriculum. Such requirements may include, but are not limited to, other courses (C or higher grade), a specific GPA, or class standing, (e.g., junior, senior). Prerequisites may also include successful completion of screened requirements, where applicable, or successful completion of a specific test or examination, either departmental or standardized, where applicable. Prerequisites may also include department or instructor permission in addition to, or in lieu of, a specific course, testing, or class standing requirements.

Departments are responsible for enforcing prerequisites. Students are advised to read carefully course descriptions found in the *Undergraduate Catalog* and to make sure they have met any prerequisites before registering for courses. Students who remain in courses without having met prerequisites, with or without the permission of the instructor, do so at their own risk. Failure to meet prerequisites and withdraw from a course by the published deadline is not a basis for petitioning the Academic Standards Committee for an exception to academic policy.

ENROLLMENT AND REGISTRATION

Students who have applied for admission to degree candidacy and have been admitted must return their Enrollment Contract to acknowledge their acceptance of the university's offer of admission. After they do this, they will receive information about academic advising and course registration. Orientation is available to new freshmen and transfer students prior to the beginning of the term. The process in which students select courses and have those courses entered into the computer is called registration.

Registration appointments are based on the number of units the student has earned. Students must see their adviser before they register. Students who have no adviser may check with their major department or, if they have no declared major, with the Academic Advising Center (Lecture Hall, 410-704-2472).

After students have met with their advisers, they plan their schedules and register online at <http://towson.edu/registrar> then click on Registration.

Students may also register in person at the Registrar's Customer Service Center, Enrollment Services, room 223. [Non-degree students (those not formally admitted to the university) are encouraged to seek advising at least once each academic year.]

Important. Students may not attend a class until they register for that class, and they must satisfy all financial obligations to the institution before they register.

Special Format Courses

Directed readings and independent studies are examples of special format courses. Students may not apply more than 12 units of special format courses toward graduation. Departments may set limits for fewer units, but they may not exceed the maximum of 12 units set by the University Curriculum Committee. Because of the concentrated nature of these courses, students are advised to take no more than 6 units of upper-level special format courses per term.

Pass Grading Option

Students may elect to be graded on a Pass basis for a maximum of 12 units toward their degree. If students register for more than 12 units under the Pass option, only 12 will apply toward graduation. This option is not available for courses required toward a major, minor, Honors College requirements, or for certification in teacher education unless special permission is obtained from the department chairperson. **Students must make all changes to the option before the published withdrawal deadline each term.** In order to elect this grading option, students must complete a Change of Schedule Form in the Registrar's Customer Service Center, Enrollment Services, room 223.

Students electing this option must earn a grade equivalent of 2.00 (C) or higher in order to receive the Pass (PS) grade, which is not calculated in the average. Students who earn below the grade equivalent of 2.00 will earn that grade, which will be calculated. Refer to Grades/Grading for more information.

Auditing Courses

Students may audit a course with the permission of the instructor. An audited course will be graded AU and will not apply toward the degree. Students may elect the audit option at any point up to the withdrawal deadline by presenting a completed Change of Schedule Form with the instructor's signature to the Registrar's Customer Service Center, Enrollment Services, room 223. If students then choose not to elect this option, they must follow the same procedure, including obtaining the instructor's signature, to remove the option up to the withdrawal deadline.

Students are advised that audited courses:

- do not count as part of the term's unit load
- do not count as part of the term or cumulative totals
- do not apply toward graduation unless repeated later for credit
- will be graded AU
- will be graded AUX if the student registers for a course as an audit and fails to attend
- may not be used to repeat a course for which credit has already been earned
- are billed at the same rate as unit courses

CHANGING A SCHEDULE

Adding a Class

Students may add classes to their schedules through the Change of Schedule period by going to Towson Online Services. Check the Academic Calendar for deadlines.

Students may not enter a class after the Change of Schedule period ends. Exceptions are considered only with written authorization from the instructor and department chair.

Dropping a Class

Students may drop classes until the end of the withdrawal period by going to Towson Online Services. Check the Academic Calendar for deadlines.

- No grade is recorded when dropping a class through the Change of Schedule period.
- A grade of "W" is recorded on the transcript when dropping a class after the Change of Schedule period through the end of the withdrawal period. There is no academic penalty associated with the W.

Students who do not officially drop courses during the established time periods receive grades in the courses (A to F or FX) as determined by the instructors.

Withdrawal after the Deadline

Students with *documented* medical problems or *verified* circumstances beyond their control may request to withdraw from one or more courses without academic penalty after the established deadline. Students must send a letter to the Academic Standards Committee requesting a late withdrawal; documentation *must* accompany the request. If the request is approved, a grade of W will be recorded. *Requests must be submitted prior to the beginning of final examinations.*

Cancellation of Enrollment. Newly admitted undergraduate students who decide not to attend the university **before or during the first week of classes of the term for which admission was approved** *must* notify the Office of Admissions in writing. Their admission file will be canceled accordingly, and they will be required to submit an additional application for any future entrance date.

Re-enrollment. Previous degree candidates who miss one fall or spring term must apply for readmission through the Registrar's Office. Forms are available in the Registrar's Customer Service Center, Enrollment Services 223, or online at www.towson.edu/registrar then click Readmission. The deadlines for readmission are August 1 for the fall term and December 1 for the spring term.

Readmitted students must comply with the GenEds that were published in the *Undergraduate Catalog* at the time they were originally admitted to Towson.

Students who withdraw from the university, enroll elsewhere, and return to Towson after having completed transfer course work *cannot* qualify for a transfer package (1996 and later catalogs). This option is available only upon initial admission. (Refer to the **Admissions** section of this catalog.)

Students who officially withdraw must comply with the competency standards (required developmental courses) in effect at the time of readmission if the standards were not met prior to withdrawal.

CLASS STANDING

Students are classified according to the number of units earned:

Freshman	0–29.5 units
Sophomore.....	30–59.5 units
Junior.....	60–89.5 units
Senior.....	90 units and above

CLASS ATTENDANCE/ ABSENCE POLICY

1. Students are expected to attend all classes. Consistent attendance offers the most effective opportunity for students to understand concepts, materials and expectations of those courses in which they are enrolled. Although some courses do not use attendance as a criterion for grading, there are others where in-class participation is an integral part of the course. Examples include, but are not limited to, seminars and courses that require public speaking, laboratories, language learning, group discussions or student teaching. Frequent absences from these types of courses, whether excused or unexcused, may affect the final grade.

Faculty who use absences as a factor in grading must explain in the course syllabus what effect even an excused absence might have on the evaluation of a student's work.

2. It is policy of the university to excuse the absences of students for the following reasons:
 - illness or injury when the student is unable to attend class
 - religious observance where the nature of the observance prevents the student from attending class
 - participation in university activities at the request of university authorities (e.g., Intercollegiate Athletics, Forensics Team, Dance Company, etc.)
 - compelling verifiable circumstances beyond the control of the student

Students requesting an excused absence must provide documentation to the instructor two weeks prior to the scheduled absence when known in advance or as soon as possible when not known in advance.

3. Absences that do not fall into any of the categories outlined in item number two are unexcused. Faculty may set a limit on the number of unexcused absences.
4. Students who are absent from class are responsible for any missed work, assignments, or assessments (e.g., quizzes, tests, papers, etc.). Faculty members are required to allow students with documented excused absences to make up missed work or assignments when this is feasible. When the nature of the assignment makes this impossible, faculty members should attempt to make a reasonable adjustment of the assignment.

Students who will be representing TU at events, conferences, or other official activities should obtain a Notification of Absence from Class Form from the Office of Student Activities, University Union 217, to be given to their instructors to verify the excused absence. Students are encouraged to notify faculty of anticipated class absences as soon as they learn they will be missing class. Faculty should use

their discretion regarding making up missed assignments and the ramifications of missing certain class periods.

Important! Students who fail to appear for the first two class sessions, or the first session of evening classes, may forfeit their space in class. Instructors have the right to release these spaces to other students wishing to add the class to their schedules. Students who lose their spaces MUST OFFICIALLY WITHDRAW FROM THE COURSE THROUGH THE REGISTRAR'S OFFICE TO AVOID EARNING AN FX GRADE FOR NON-ATTENDANCE. See the sections on Changing a Schedule and Grades/Grading for further information.

GRADES/GRADING

The Plus/Minus Grading System (4.00 scale, term system), implemented in fall 1998, applies to all undergraduate students and cannot be applied retroactively to grades earned or recorded, including incomplete (I) grades or contested grades, before fall 1998.

Grade	Grade Points Per Unit
A	4.00
A–	3.67
B+	3.33
B	3.00
B–	2.67
C+	2.33
C	2.00
D+	1.33
D	1.00
F	0.00
FX	0.00

Effective Minimester 2006, the university suspended use of the C– grade.

Grade Point Averages

The Grade Point Average (GPA) is computed as follows: First, multiply the units for each course taken in a term by the grade points (values above) assigned to the grade earned. Second, total the units and grade points for the term. Third, divide the total number of grade points by the total number of units to find the GPA for the term.

The grades of S and U (satisfactory and unsatisfactory) are used primarily in those courses offered for development and selected courses that have been recommended by the academic departments and approved by the Academic Standards and University Curriculum committees. The grade of S denotes that work of 2.00 level or higher has been completed and that students have attained a level of competence sufficient to advance to the next course. A grade of U is given to students whose work is below 2.00 level quality. S and U grades are not calculated in students' GPAs.

The grade of PS (Pass) is assigned to a course selected on the Pass grading option when students earn a C grade or higher. **Students who elect the Pass grading option and earn a grade of D+ or below will have that grade recorded on the permanent record and used in calculation of the GPA.**

The grade of PE is assigned to those courses passed under the Credit for Prior Experience/

Learning option. All grades are recorded on students' permanent records, but are not calculated in students' GPAs.

The grade of FX is calculated in students' GPAs. A grade of FX is given to students who never attend class or who stop attending during the term without officially withdrawing. (If students have officially withdrawn, a grade of W will appear on the final class roster.) A grade of FX is given to students who stop attending before they have completed more than half of the course work. Students who attend most classes but miss the final examination without a legitimate excuse, will receive a zero or F grade for the final examination and have that value or grade calculated with other grades earned during the term to determine the final grade.

The grade of W is administrative, nonpunitive, and is not calculated in students' GPAs. A grade of W is given to students who officially withdraw from a course by the published withdrawal deadline each term. It is also given to students who obtain authorization from the Academic Standards Committee to withdraw from a course or courses after the deadline. Such withdrawals must be based on documented medical difficulties or verifiable circumstances beyond students' control.

The grade of I is given to students by their instructors when verifiable circumstances prevent students from completing a course within the term. The I grade should be given only in cases where students have completed most of the course work and have a reasonable expectation of successfully completing the remaining work required. It should not be given at a point earlier in the term when a withdrawal is appropriate. For more information on the Incomplete grade, see the section immediately following.

International students: Please be aware that FX and W grades do not contribute toward the Full Course of Study requirement of your F-1 status.

Changing Grades and Changing Incompletes

Incompletes may be granted toward the end of the term and only for verifiable medical reasons or for documented circumstances beyond the control of the student. Earlier in the term, a withdrawal may be more appropriate. *The grade of I automatically becomes a grade of F 180 days from the end of the term following the granting of an I unless changed to another letter grade.*

The grade of I may be extended by the instructor for a period not to exceed an additional regular term if the conditions for granting the original Incomplete still verifiably exist. To grant this extension, the Change of Grade/Incomplete Form must be used.

Although not part of the formal Incomplete grading option, as approved by the Academic Standards Committee, Incomplete Grade Agreement Forms may be used by faculty to establish a specific time by which students must complete the work for a particular course. This form may be used to supplement the issuance of the Incomplete grade on the Final Grade Roster. It allows faculty to designate a time prior to the end of the following term of study for the course work to be completed. These forms are available from each department's administrative

assistant and are to be retained by the faculty member with a copy being issued to the student.

It is the student's responsibility to complete the work required before 180 days has elapsed in order for the Incomplete to be converted to a regular grade. *Students do not repeat the course in which the Incomplete was given.* Instructors may specify an earlier time by which the work required is due in order to remove the Incomplete. An Incomplete grade that is not resolved by the end of the next full term of study, excluding summer and Minimester sessions, is converted to an F grade and is calculated in students' GPAs.

Grade changes, excluding I grades and repeated courses, must be submitted by the faculty member within one year. After one year, requests for grade changes may be made only for verifiable medical reasons and by petition to the Academic Standards Committee.

Graduating seniors must resolve any outstanding Incomplete grades **within 180 days following graduation.** Specific dates for each graduating class are included in the correspondence from the Graduation Office.

Unsuccessful Term/Academic Clemency. The following guidelines determine approval of the declaration of an Unsuccessful Term:

- five full academic years must have elapsed since the term in question and graduation has not occurred
- students must have completed at least 24 units of 2.00 level work at Towson University since the term in question
- only one Unsuccessful Term can be granted in a student's academic career

Disagreements Related to Grading. Students who feel an earned grade is unjust must address their disagreements first to their instructor, who is primarily responsible for assigning grades. If the matter is not satisfactorily resolved through this approach and the issue warrants further consideration, students may then direct an appeal through the following channels: department chair/program coordinator, college dean, Division for Student Affairs.

REPEATING COURSES

When courses are repeated, students will receive credit for the course only once. Only the higher of the two grades will be calculated in the GPA. The lower grade will remain on the record with the letter R preceding (e.g., RF, RX, RD, etc.) to indicate the course has been repeated.

Effective fall 2003, the lower grade will remain on the record with a *repeat included or excluded* message, whichever is appropriate.

Students may **not** make a third attempt of a course except with prior approval. Students must complete a Petition for a Third Attempt Form and submit it to the Registrar's Customer Service Center, Enrollment Services 223, **before registering for the course.** Grades of W are administrative and are *not* considered as part of the repeated course procedure. Courses that have been accepted previously for transfer credit by TU or have been attempted or completed for units at TU may **not** be repeated at other institutions.

Courses in which low or failing grades were earned at Towson **MUST** be repeated at Towson in order for the record to be adjusted and the GPA to be recalculated.

Note that repeating a grade of C-, D+ and/or D will not raise the number of earned units.

DEAN'S LIST

Office of the Provost, 410-704-2463

Full-time degree candidates are eligible for Dean's List recognition each fall and spring term provided they complete a minimum of 12 calculable units and attain a 3.50 or higher GPA.

Part-time degree candidates are eligible for Dean's List recognition each academic year provided they complete a minimum of 12 calculable units and attain a 3.50 or higher GPA during that academic year. An academic year is designated as fall through summer and includes the January Minimester.

Applicable course work is only that in which *calculable grades* (A, A-, B+, B, B-, C+, C, D+, D, F, FX) are earned. Pass (PS), Audit (AU), and Satisfactory/Unsatisfactory (S/U) grades do not apply toward the 12-unit minimum.

Additionally, students who receive Incomplete (I) grades for the term are *not* eligible for Dean's List honors in that term, nor may they retroactively receive those honors once the work is made up and a letter grade is earned.

GOOD STANDING AND SATISFACTORY ACADEMIC PROGRESS

Students are considered to be in good academic standing and making satisfactory academic progress toward the degree if they are permitted to continue enrollment at the university. Students who have been **academically suspended** and are later **readmitted on probation** are **not** considered to be in good academic standing and might not be eligible for participation in intercollegiate athletics, financial aid, housing or certain extra-curricular activities.

To remain in good academic standing, students must possess a minimum cumulative GPA based on the calculable grades at Towson University and accepted transfer credits as indicated below:

MINIMUM GRADE POINT AVERAGE REQUIRED

Units (includes Towson units and accepted transfer credits)	Minimum Cumulative GPA
1-29.5	1.50
30-59.5	1.75
60 and above	2.00

FAILURE TO REMAIN IN GOOD STANDING

Students who fall below the level required for good academic standing are subject to the following actions:

1. **Academic Warning.** The first time degree candidates fail to attain the minimum cumulative GPA required, according to the above table, they receive an academic warning and must receive additional academic advising. They

must attain the minimum GPA required by the end of the next spring term of attendance or be **academically suspended**. If no further action is taken, the notice of academic warning will be removed from students' academic records upon graduation. Eligibility for housing, financial aid, and participation in intercollegiate athletics will be determined by the appropriate departments according to their established criteria. In accordance with policy, students who are **readmitted on warning** must also attain the minimum required GPA by the end of the spring term following readmission or be **academically suspended**.

Regardless of cumulative GPA, freshmen and sophomores on academic warning who earn at least a 2.00 term average based on at least 12 units toward GPA will be automatically continued on warning for one term.

2. **Academic Suspension.** Students failing to attain good standing in any spring term following academic warning are academically suspended and may not attend the university for one term and the intervening summer/Minimester sessions.

If students complete course work elsewhere while academically suspended, they must be in good standing at the school(s) attended and must provide official transcripts from the schools to the Readmission Office at Towson University if they plan to return to Towson. Work remaining to resolve any Incomplete grades may be completed during suspension. Academic suspension is noted *permanently* on students' academic records.

Students who fail to attain good academic standing at the end of any fall term following academic warning will be allowed to continue their enrollment for one additional term. This **Mid-Year Extended Warning** will be *permanently* noted on the student's academic record. Failure to attain good academic standing at the end of the following spring term will result in academic suspension.

3. **Academic Probation.** After the suspension ends, students may be readmitted on **academic probation**, during which time they may enroll for a maximum of 13 units per term. They must also receive additional advising and may **not** register without written clearance from the Academic Advising Center. **Academic probation** is noted *permanently* on students' academic records.

Students on **academic probation** have three academic years or 24 earned units toward GPA, whichever comes first, to attain good academic standing. If students attain good academic standing during probation but subsequently fall below the minimum requirements for good academic standing, they will be given a **one-term** exception during which good academic standing **must** be attained. If they do not, they will be academically dismissed. Otherwise, they are considered to be on **academic probation until they have either graduated or are academically dismissed** (see below).

While on **academic probation** (not in good academic standing), students may *not* complete course work elsewhere for transfer to Towson.

4. **Academic Dismissal.** Students failing to attain good academic standing after the period of academic probation will be academically

dismissed. **Academic dismissal** is a final action and is noted *permanently* on students' academic records. Students who are academically dismissed cannot be readmitted to the university in any capacity.

TRANSFERRING WORK TO TOWSON

The following regulations pertain to current TU students wishing to transfer course work from other institutions to Towson University. Only currently enrolled degree candidates in good academic standing are eligible to transfer course work.

Regulations Pertaining to Transfer Credit

1. Towson students who wish to take courses at other accredited institutions with the intent of applying those credits toward a degree at Towson must complete a Transfer Petition Form, available in the Registrar's Customer Service Center, Enrollment Services 223, or online at <http://towson.edu/registrar/forms>. The petition may require the signature of the chair of the department in which the equivalent course is offered at Towson. Petitions must be completed and returned to the Registrar's Office for approval *before* registration for the course(s) at another institution.
2. Credit is accepted by Towson for courses completed at regionally accredited colleges or universities. Only the courses and credits completed at other institutions are transferable to Towson. Grades and GPAs earned at other institutions are *not* transferable. Credit will count toward graduation but will *not* be used in calculating the academic average required for graduation.
3. Courses transfer to Towson as they were taken at the host institution. For example, if a student completes a 200-level course at the host institution and transfers it to TU, the course will transfer as 200-level, even if the course's equivalent at TU is 300- or 400-level.
4. Courses transferred from two-year institutions *cannot* be used to satisfy the Advanced Composition requirement. Writing courses taken at four-year accredited institutions may be considered as meeting this requirement upon request by students for evaluation by the appropriate academic department or, where necessary, by TU's Department of English.
5. **Transfer students.** Courses that have been accepted previously for transfer credit by TU or have been attempted or completed for credit at TU may *not* be repeated at other institutions with the purpose of transferring them to TU. Courses in which a grade equivalent of 1.00 or higher has been earned at accredited institutions are transferable. However, courses in which a grade equivalent of 1.00 was earned and transferred to Towson cannot be applied toward a major or minor program. A grade equivalent of 2.00 or higher is required for major/minor credit.
6. **Native students.** Courses attempted at Towson may NOT be repeated at other institutions for the purpose of receiving credit at TU or adjusting the Towson record. (See **Repeating Courses**.)
7. **With prior permission**, students may take courses for transfer to Towson University until they have attained 90 units. However, no more than 64 units may be transferred from an accredited two-year institution.

8. Students are expected to complete the final 30 units toward their degrees at Towson. Exceptions may be granted in cases of documented extraordinary circumstances. Students **must** petition the Academic Standards Committee to transfer work after having earned 90 units. Petitions must be presented *before* students register for courses at other institutions.

Students with 90 or more units seeking to transfer courses required toward the major or minor program must include with the petition a brief note from the department chair or program coordinator supporting the request and accepting the course and units toward the major or minor.

TRANSCRIPTS OF ACADEMIC RECORDS

The Records Office can normally process a transcript request within three to five working days, except during periods of increased demand at the end of each term, when transcript requests may take longer to process. Regular transcript requests will be processed without charge. Rush transcripts, mailed within 24 hours of the request, require a \$10 service fee. Towson requires a written request. Requests must include dates of enrollment, full name at the time of enrollment, Social Security number or TU ID, and current address. **All requests must have the signature of the requestor.** Transcript Request Forms are available in the Registrar's Customer Service Center, Enrollment Services, room 223, or students may send a letter to the Records Office, Towson University, 8000 York Road, Towson, MD 21252-0001. A fax is also acceptable: The fax number is 410-704-3443. Current students may request transcripts online at <http://students.towson.edu>. Click on Online Services and Official Transcript.

GRADUATION

ALL students must **apply for graduation** for the term in which **ALL** requirements will have been met. Participation in the Commencement ceremony is optional. Students in pre-major status or those below a 2.00 cumulative GPA are not eligible to apply for graduation.

Before applying, students should check their record online using Towson Online Services: Click Self Service; Student Center; Other Academics; Degree Progress Report to make certain all requirements will be met. Please be advised that if grades of D or higher, are being repeated in the last term prior to graduation, students **must** register for additional units, equal to the units of the class being repeated, to compensate for the loss of units which will occur when the record is adjusted at the end of the term. Those grades are earned units and already have quality points; only the GPA will increase if a higher grade is earned. **All students must have a minimum of 120 earned units to graduate.**

Once that has been completed, apply online at Towson Online Services; Self Service; Student Center; Other Academics; Apply for Graduation.

Also, students must verify their **permanent** home address (Towson Online Services; Self Service; Student Center; Personal Information) as important graduation information and diplomas will be mailed to that address.

Deadlines for applying are five to eight months prior to the expected graduation date:

May graduation—apply by December 1

August graduation—apply by May 1

December graduation—apply by August 1

There are three graduation evaluation periods: December, May and August. Ceremonies are held in May and January. *Note, however, that attending the ceremony does not automatically denote graduation*, since evaluation of records cannot be completed until all grades are available.

Please refer to the **University Curriculum** and **Academic Regulations** sections of this catalog for additional graduation information.

GRADUATION WITH HONORS

Towson University undergraduates may achieve recognition as honors graduates in several different ways: through Latin Honors, Departmental Honors and as members of the Honors College.

Latin Honors

Visit the Towson University graduation website for details at www.towson.edu/registrar/graduation/undergrad/honors.

Honors College

Visit the Honors College website at www.towson.edu/honors, or the Honors College section of this catalog.

Departmental Honors

See below for information on earning departmental honors.

DEPARTMENTAL HONORS PROGRAMS

Many departments at the university offer students the ability to complete a Departmental Honors program. Students interested in participating in a Departmental Honors program are encouraged to meet with the Departmental Honors faculty coordinator, department chair or Honors College representative preferably during their first two years at Towson University.

Departments with Honors programs list requirements in the catalog under the individual major departments. Students accepted into a Departmental Honors program must complete the requirements as listed in the catalog for their major. Most departments require that students complete 9 units in Advanced Content, Directed Readings

and/or Independent Investigations and an Honors Thesis, but some departments may offer other options, such as an extensive design project. The thesis/project culminates in a significant piece of writing and a final presentation that is open to the public. A completed, signed copy of the thesis/project approval form must be submitted to the Honors College no later than two weeks before graduation. When the Honors College receives the thesis/project, the appropriate designation appears on the final transcript and diploma.

For more information on Departmental Honors programs, see the *Departmental Honors Program Handbook*, found on www.towson.edu/honors or in the Honors College.

CLASS RANK

Towson University calculates class rank for three set percentiles: the top 10th, 20th and 25th percentiles of the graduating class. These rankings are automatically posted to the transcript of qualified graduates three months after the graduation date. This calculation is based on the whole Towson University record.



Undergraduate Planning Guide

To help you think about the many wonderful opportunities available to you at Towson University, here is a simple planning guide.

YEAR 1

Career Choices (see the **Career Action Plan** in this section)

Explore on- and off-campus part-time and summer jobs at The Career Center. Meet with a career counselor to assess your skills and interests and determine a major.

Begin to build a career network; seek faculty, staff, alumni and peers to discuss major/career choices.

Study Abroad

- Freshmen are eligible to participate in faculty-led programs during the Minimester or summer term.
- Start planning how to incorporate a study abroad experience into your academic career.
- Attend the Fall or Spring Study Abroad Fair.
- Attend an information session at the Study Abroad Office.
- Apply for study abroad scholarships.

YEAR 2

Career Choices (see the **Career Action Plan** in this section)

Whether you seek a job after you finish college or attend graduate school, you will need references from your professors. Develop relationships with faculty who teach subjects that interest you.

Explore requirements for a related internship.

Study Abroad

- Students with 30 units or more are eligible to study abroad for the fall, spring or full academic year.
- Attend the fall or spring Study Abroad Fair.
- Attend an information session at the Study Abroad Office.
- Meet with your academic adviser to discuss how study abroad fits into your TU degree.

- Meet with a Study Abroad Adviser to select your program and discuss funding.
- Apply for study abroad scholarships.

Graduate School

Whether you plan to go on for graduate study or not, talk to your adviser or a faculty member you know about what graduate school is like and what might be the benefits of earning a master's degree or doctorate in any of the fields that interest you.

YEAR 3

Career Choices (see the **Career Action Plan** in this section)

Participate in campus leadership activities and career-related organizations.

Seek major-related part-time, summer or on-campus employment.

Obtain an internship.

Study Abroad

- Students with 30 units or more are eligible to study abroad for the fall, spring or full academic year.
- Attend the fall or spring Study Abroad Fair.
- Attend an information session at the Study Abroad Office.
- Meet with your academic adviser to discuss how study abroad fits into your TU degree.
- Meet with a Study Abroad Adviser to select your program and discuss funding.
- Apply for study abroad scholarships.
- Attend the Study Abroad Reentry Conference for returnees.

Graduate School

Fall term: Browse through a college guide, such as *Peterson's Guide*, to get a feel for the admission requirements, curriculum and expectations of several schools that offer graduate programs in your field of interest.

Spring term: Meet with your adviser in your major department to explore which schools offer the best graduate programs in your field of interest. Request admission materials and catalogs from the three or four schools you might like to attend.

Talk to your adviser about what, if any, graduate school exams you should take for entry into a program. Once the exams are decided upon, you should take them as early as possible because several of the exams can be retaken.

YEAR 4

Career Choices (see the **Career Action Plan** in this section)

Participate in an internship.

Identify and research potential employers.

Plan job search strategy.

Investigate and pursue job openings. Use the resources available in The Career Center.

Study Abroad

- Students can study abroad in the final year (or term) of their degree.
- Attend the fall or spring Study Abroad Fair.
- Attend an information session at the Study Abroad Office.
- Meet with your academic adviser to discuss how study abroad fits into your TU degree.
- Meet with a Study Abroad Adviser to select your program and discuss funding.
- Apply for study abroad scholarships.
- Attend the Study Abroad Reentry Conference for returnees.

Career Action Plan

A satisfying and rewarding career doesn't happen overnight and is not necessarily the automatic outcome of a college education. Career development occurs gradually, throughout a person's lifetime. It is the product of decisions made, knowledge

acquired, experiences gained, and actions taken. The years associated with college are ones in which *great strides* in an individual's career development usually take place.

Use your time at TU to shape the future YOU desire.	Freshmen Assessment and Awareness	Sophomores Inquiry and Exploration	Juniors Gaining Career Experiences	Seniors Job Search and Transition to World of Work
CHOOSE MAJOR AND CAREER	- Consult with FYE adviser about major options. - Meet with career counselor at (CC) to explore major and appropriate career paths. - Use <i>Discover</i>, a comprehensive career computer program available through CC. - Register for GENL 121 <i>Personal Life and Career Planning</i> course. - Read through the TU <i>Undergraduate Catalog</i>.	- Meet with faculty advisers about major/career interests. If unsure about major or unclear about Core Curriculum requirements, see UAAC. - Meet again with career counselor at (CC) about major/career choices. - Begin to build career network. - Finalize declaration of major.	- Expand knowledge of major and its relationship to possible careers. - Consider options for graduate or professional school. - Focus on career network. Set up informational interviews with TU alumni, professionals in an area of interest, and internship employers. Obtain information at CC.	- Meet with career counselor at CC to discuss transition from school to work. - Identify and research potential employers. - Plan job search strategy at CC. - Learn to market yourself effectively. Attend seminars sponsored by CC.
SUPPLEMENT ACADEMIC STUDIES	- Attend events related to major/career interests. - Visit career libraries in CC, CL, public libraries; browse Internet - Visit AAC to improve study skills. - Visit OSA for information on campus activities.	- Participate in campus leadership activities. Contact OSA for information. - Continue to visit career libraries in CC, CL, public libraries; browse Internet. - Attend career-related events sponsored by CC, UAAC. - Consider a job shadow through CC.	- Continue to attend career-related events: job fairs, seminars, open houses, etc. - Assume an active role in clubs or organizations to develop or enhance leadership and other transferable skills. - Get involved in career-related professional organizations.	Attend conferences, meetings and career-related events.
DEVELOP PORTFOLIO	Collect outstanding course work, projects, writing samples, accomplishments, letters of recommendation, photographs of activities, evaluations, etc.	Continue collection of portfolio materials. Include works-in-progress to show ability to edit, revise and improve.	Organize for presentation to employers. Solicit feedback on contents from adviser, department chair, and professionals in chosen field.	Submit completed portfolio to adviser, department chair, and other professionals for critique.
BUILD WORK EXPERIENCE AND VALUES	- Identify life and work values with CC inventories. - Explore on-campus, off-campus, part-time and summer jobs at CC. - Consider a FWS/CS experience. - Check out volunteer opportunities at OSA. - Consider non-credit internships.	- Increase marketability; develop transferable skills through part-time and summer jobs, FWS/CS, and volunteer work experiences. - Determine and test work values in part-time and summer jobs. - Explore requirements for major-related internship in junior year.	- Seek and apply for an internship at CC. - Look for major-related part-time, summer and/or FWS/CS positions at CC.	Participate in the On-campus Recruiting Program via CC: job fairs, on-campus interviewing, mock interviews, and information sessions. Consider additional internships to increase marketability.
CREATE RESUMÉ	Sign up for Hire@TU, a FREE Web-based job search database offered by CC.	- Add new volunteer and work experiences and indicate newly developed skills. - Visit CC for résumé critique.	- Update résumé and post via Hire@TU. - Continue to meet with CC staff for additional résumé reviews.	- Use Hire@TU and the employment services at CC. - Continue to update résumé. - Prepare a list of references.

AAC Academic Achievement Center/410-704-2291
 AR Alumni Relations/410-704-2234
 CC The Career Center/410-704-2233
 CL Cook Library/410-704-2462

COC Counseling Center/410-704-2512
 FA Financial Aid/410-704-4236
 FWS/CS Federal Work Study/
 Community Service/410-704-4236

OSA Office of Student Activities
 410-704-3307
 UAAC University Academic Advising
 Center/410-704-2472

Counseling Center
 Glen Esk
 410.704.2512
www.towson.edu/studentlife/center

The Career Center at Towson University
 7800 York Road
 410.704.2233
www.towson.edu/careercenter

University Academic Advising Center
 Lecture Hall
 410.704.2472
www.towson.edu/advising

Undergraduate Admissions

OFFICE

Enrollment Services Center, Second Floor
410-704-2113

Fax: 410-704-3030

www.towson.edu/discover

Hours: 8 a.m.–5 p.m., Monday–Friday

WHEN TO APPLY

The application deadlines for undergraduate degree-seeking students are as follows:

Freshmen: First term of senior year of high school for the fall term

Transfer Students: By November 15 for the spring term; by February 15 for the fall term

International Students: By December 1 for the spring term; by June 1 for the fall term

Scholarship Candidates: By December 1 for the fall term

Second Bachelors: By November 15 for the spring term; by May 1 for the fall term

Students seeking freshman admission for the fall should file an application during the first term of the senior year of high school. Students seeking transfer admission may file as early as October 1 for the following fall term. Full-time applicants for the fall term who would like to be considered for an Admissions scholarship should submit an application, high school or college transcript(s) and SAT/ACT results no later than December 1.

Applications for fall received after the February 15 deadline are processed provided space is available in the entering class. Students who fail to enroll for at least one course during the term for which they have been admitted as a degree candidate will have the offer of admission revoked because of non-matriculation. To enroll as a degree candidate for any subsequent term, students must reapply and submit new application materials and pay all appropriate fees.

Persons who have been denied admission to Towson University will not be permitted to attend as non-degree students. They may, however, transfer to the university if they meet transfer admission requirements after attending another college or university. Persons who have graduated from high school within the last two years must formally apply for degree-seeking status in order to attend the university.

ADMISSIONS PROCEDURE

1. An applicant for full-time admission may receive application materials from the guidance office of the secondary school, the counseling office of the junior/community college, or from the Office of Admissions of the university. Electronic, online applications are also available through the Towson University website at www.towson.edu/discover.
2. The applicant should complete the application and return it to the Office of Admissions with

the appropriate application fee. The application fee is neither deferrable nor refundable. Each applicant is responsible for the office's receipt of his or her official high school transcript, including final grades with verification of graduation, as it becomes available, and a completed transcript supplement (Guidance Counselor's Recommendation). *The transfer applicant must forward official transcripts of all college work attempted or completed, whether or not credit was earned, from all institutions attended.*

3. The standardized test required for admission is the SAT Reasoning Test/SAT (R) of the College Entrance Examination Board. All freshman applicants and transfer students with fewer than 30 transferable college-level credit hours must submit the official results of this test sent to the director of Admissions. To be considered official, scores must be delivered by the testing agency. Students should take the test in the junior and/or senior year of high school. Students entering TU beginning fall 2006 must submit SAT (R) scores that include the new writing score. Students who completed high school prior to 2006 may submit prior SAT I test scores. Towson University's College Board identification code number is 5404. ACT results may be substituted for SAT (R), but must include the writing portion of the ACT.
4. Incomplete applications will be canceled. Approved applications which remain incomplete for lack of final high school or college transcripts will also be canceled. The applications of admitted students who do not enroll for the given term will be canceled.
5. All entering degree-seeking students born after December 31, 1956, including new graduate students and transfers, will be required to demonstrate physician-documented proof of immunity to the following diseases: Diphtheria, Pertussis-Tetanus, Polio, Measles, Mumps, and Rubella.

An Immunization Record Form is sent to every admitted student. The completed form, signed by a physician, must be returned to the Dowell Health Center by the time of orientation and registration. Students who fail to return the form or to correct any inadequacies in immunity status in a timely fashion will be blocked from the following spring term registration. (For those students entering in the spring term, noncompliance will result in blocked registration for the following fall term.) The block will be lifted by Dowell Health Center as soon as the requirements are filled.

The specific vaccine requirements are listed on the Immunization Record Form. Students are responsible for obtaining any immunizations needed to satisfy university requirements from their regular source of medical care prior to arriving on campus.

GUIDELINES FOR FRESHMAN ADMISSION

Admission to Towson University is competitive based on the applicant pool and available space in

the freshman class. Priority for admission is based on high school performance (in grades 9–11) as demonstrated by the grades earned. Strength and rigor of the curricula are considered. Many applicants exceed minimum required course work and level of work in their high school curriculum. In some cases, senior mid-year grades are requested and considered in the review of an application. Performance on the SAT Reasoning Test or ACT is also evaluated.

Freshman candidates will be expected to have completed four (Carnegie) units of English (including one each of composition, English literature and American literature), three units of social sciences, three units of science (two with labs), three units of mathematics (Algebra I, Algebra II and Geometry), two units of a foreign language (some technology, computer science and sign language courses may be substituted) and six elective units. Any applicant whose high school transcript does not include this combination of curriculum requirements may be admitted with the understanding that select deficiencies must be completed during the first term of the freshman year at Towson. Students who are admitted under this condition and who fail to complete the stipulated courses within the first term will have their degree candidacy withdrawn. High school-level reading, writing and mathematics courses taken at Towson will not carry graduation credit.

GUIDELINES FOR TRANSFER ADMISSION

To be considered for transfer, students must have completed a minimum of 30 credits of transferable college-level work and be in good academic standing; this cannot include remedial or preparatory courses or nontraditional course work, such as Credit for Prior Experience/Learning, Military Science, the College Level Examination Program (CLEP), DANTES, USAFI, ACE evaluations, etc. Students with fewer than 30 transferable credits must comply with the requirements for incoming freshmen *and* possess the minimum transfer GPA.

The requirements for transfer admission vary, depending on the total number of transferable credit hours completed and the cumulative combined GPA from all institutions attended.

Priority admission (space available) is reserved for transfer students from a Maryland community college who have earned at least 56 transferable credits, are in good academic standing, and have maintained a GPA that meets the policies set by the Maryland Higher Education Commission and University System of Maryland policies. Students who have earned fewer than 56 transferable credits or who are transferring from an institution other than a Maryland community college, will be admitted based upon combined cumulative GPA of transferable credits and space availability.

Upon official acceptance to the university, students must maintain the established cumulative GPA required for admission (inclusive of current course work) and remain in good academic standing; otherwise, the university's offer of admission will be withdrawn.

Any transfer applicant who has attended Towson as a non-degree student must possess at least a 2.00 GPA for all course work attempted through the university, even if the applicant is admissible based on course work subsequently completed at other institutions. Students who apply for transfer admission based on their non-degree status must meet the admissions requirements listed above.

Waiting List

Applicants who are currently enrolled in course work that may qualify them for admission will have their applications reviewed after official transcripts, including grades for that work, are received. These students are encouraged to make alternative plans for admission to other colleges in the event that the university is not able to extend an offer of admission because of lack of space at the end of that particular term. Refer to the current undergraduate admission application or transfer guide for specific details.

TRANSFER POLICY

(Also see the **Academic Regulations** section and **Appendix B** of this catalog.)

1. Transfer of course credit.

The Office of Admissions at Towson University assists transfer students with a variety of services, from personal interviews to the ARTSYS on the Web, <http://artweb.usmd.edu>. These services are designed to guide students in judicious course selections while they are still enrolled at their transfer institutions. Through a well planned selection of courses prior to transfer, students can often complete some major requirements and some TU Core Curriculum requirements upon official matriculation.

Transfer course work is evaluated by the Office of Admissions on a form known as the Evaluation of Transfer Credit. Transfer credit will be allowed for most academic courses completed at any regionally accredited two- or four-year college or university; this credit will transfer into TU as either Core Curriculum or free elective/potential major credit. Some restrictions do apply, however; courses that are not parallel or discipline-compatible with TU courses may not transfer; development/remedial, personal development, college orientation, technical/occupational, and selected business courses do not transfer; finally, any course transferred as equivalent to ENGL 102 Writing for a Liberal Education, must carry a grade equivalent of 2.00 or higher to meet graduation requirements.

2. Maximum number of transfer credits accepted.

The maximum number of credits allowed in transfer from a two-year institution (community/junior college) is 64. The maximum number of credits allowed in transfer from a four-year institution or from a combination of two- and four-year institutions is 90. The standard measure of credit at TU is the unit; quarter-hour credits are converted into units by a two-thirds ratio.

3. Maximum number of units allowed for non-traditional learning.

CLEP credit is selectively transferred. Credit will be awarded for the following exams if the minimum score of 50 is earned:

Humanities.....	6 units
Math	6 units
Natural Sciences.....	6 units
Social Sciences and History	6 units

A total of 24 units (6 units for each successfully completed section) will be awarded in transfer. Credit for CLEP exams after admission to Towson University is offered through the Office of the Registrar. Refer to **Credit for Prior Learning** in this catalog for a list of approved CLEP programs.

AP credit is usually awarded on the basis of scores of 3 or above. A detailed description of Advanced Placement credit follows under the appropriate heading. There is no limit to the number of units that can be earned through AP.

In order for any CLEP or AP credit to be reviewed and/or awarded, students must provide the Office of Admissions with an official report from Educational Testing Service.

Credit for military training is reviewed and awarded or denied by the Office of the Registrar. Before credit can be posted, students must have attended TU for one term as degree candidates with a 2.00 cumulative GPA and have submitted all of the necessary official military documents to the Office of the Registrar.

4. Minimum number of units required through classroom instruction in the major field and for the degree.

Towson University requires that students earn a minimum of 120 units toward a degree. Of these 120 units, 32 must be upper-level, that is, junior/senior (300–400) level courses. Students *must* complete a minimum of 30 units in residence at TU; at least 15 units must be completed in degree candidate status.

The number of units required for the completion of a single major at TU varies from 30 to over 70 units, depending on the intended major.

Grades of D will transfer into the university as Core Curriculum/elective credit; however, in order to satisfy TU's ENGL 102 Writing for a Liberal Education graduation requirement, a grade equivalent of 2.00 or higher must be earned. Grades of C- or lower will not qualify for major credit.

5. Transfer of Core Curriculum requirements.

Transfer students who have satisfied the Core Curriculum requirements at a Maryland public postsecondary institution will only be required to complete 10–16 additional Core Curriculum units at TU, with the total number of Core Curriculum units not to exceed 46 units. (For information regarding specific Core Curriculum requirements refer to **Core Curriculum Requirements** under the **University Curriculum** section of this catalog.)

6. Transferability of credit for non-traditional learning.

Source	Accept Credit	Elective or Required	Grades/Scores
Advanced Placement Program (CEEB)	yes	elective & required	usually 3 or higher
CLEP	yes	elective & required	see Transfer Policy (item 3 above) and the section on Credit for Prior Learning under University Curriculum
DANTES	no		
Departmental Exams from other Colleges	yes	elective & required	passing grade; a grade equivalent of 2.00 or higher in college's composition courses
Excelsior College Exams	yes	required	evaluated individually by the Office of the Registrar and Nursing Dept.
Military Credit (ACE Guide to the Evaluation of Educational Experiences in the Armed Services)	yes	elective & required	evaluated individually by the Office of the Registrar
Nursing School	no		
Noncollegiate Work Accredited by ACE	yes	elective	evaluated individually by the Office of the Registrar
Portfolio Units from other Colleges	yes	elective & required	passing grade; a grade equivalent of 2.00 or higher in composition courses
High School Articulation (college courses at high school)	yes	elective & required	passing grade; a grade equivalent of 2.00 or higher in composition

Evaluation of Transfer Credits

The letter of admission for a transfer applicant includes the estimated number of credits transferable to Towson. After the student accepts the university's offer of admission (by returning the Enrollment Contract and fee), he or she will receive an official evaluation of transferable credits from the Office of Admissions. This evaluation is usually (but not always) preliminary in nature, as the student is usually taking additional courses at the time of admission. A final evaluation of credit will be prepared after the final grades for the most current term are received in official transcript form from the student's former college or university. All final transcripts are due in the admissions office prior to the student's *Orientation date*. The appropriate cumulative average, as determined by the number of credits completed and good academic standing must be maintained, however, or the university's offer of admission will be withdrawn. See **Guidelines for Transfer Admission Policy** for the appropriate cumulative GPA necessary for maintaining admission eligibility. Failure to meet this requirement will result in the cancellation of

the university's original offer of admission and in the forfeiture of all related fees and privileges. Additionally, failure to forward an official final transcript before enrollment at the university or the first day of classes will prohibit future registration and the release of official TU transcripts.

Upon receipt of a final evaluation, the transfer student should review its contents carefully. If the student has any questions or feels there is an error, the Office of Admissions *must be advised within 30 days*.

Transfer students are subject to the Core Curriculum and major requirements that are currently in effect for the class (that is, the catalog year) in which they are admitted. These students have the option, however, of following the Core Curriculum and major requirements that were in effect at the time they were initially admitted as degree candidates at their original institution, provided that continuous enrollment has been maintained. Continuous enrollment has been defined as follows: must be, or have been, enrolled at an institution of higher education; must have had no more than two sequential years of non-enrollment; and must complete the baccalaureate degree in no more than 10 years from initial enrollment as a degree-seeking student at an institution of higher education. Students who have not completed graduation requirements within 10 years should meet with an academic adviser to determine the most appropriate set of requirements. If a change of catalog is desired, students should submit a Catalog Selection Petition Form to the Registrar's Customer Service Center, Enrollment Services room 223 (prior to the completion of their first term at TU).

Maryland community college transfer students whose first attendance at any institution of higher education occurred in the fall of 1990 or later will fall under the guidelines set forth by the Maryland Higher Education Commission on March 21, 1990. (See **Appendix B** for details.)

Placement Testing for Entering Students

The Developmental Education office within the Academic Advising Center administers the competency testing program. This program requires all entering students to demonstrate competence in the basic skills of reading, writing and mathematics.

All matriculating freshmen and all transfer students with fewer than 30 credits will be administered diagnostic placement tests, unless exempt based on the following information. Students not attaining the required minimum scores on the tests will be enrolled in developmental studies courses in the basic skills. These courses may not count toward the 120 units required for graduation. *Students who do not complete their developmental requirements by the end of their second term will be subject to a review of their academic records and mandatory advising.*

The following students are exempt from the competency testing program:

1. Transfer students with 30 or more credits.
- 2a. Transfer students with more than 9 credits and fewer than 30 credits who transfer a course equivalent to ENGL102 with a grade equivalent of 2.00 or higher will be exempt from the reading and writing tests.

- b. Transfer students with fewer than 30 credits who transfer a college-level mathematics course will be exempt from the mathematics tests.
- 3a. Freshmen with SAT (R) critical reading scores of 500 or above, or ACT Reading scores of 21 or above, will be exempt from the reading tests.
- b. Freshmen with SAT (R) mathematics scores of 500 or above, or ACT Math scores of 21 or above, will be exempt from the mathematics tests.
- c. Freshmen with SAT (R) writing scores of 500 or above, or ACT English scores of 21 or above, will be exempt from the writing tests.
4. AP, IB or TOEFL (ESL) information may also exempt students from some tests.

For additional information regarding exemptions from placement testing, please visit www.towson.edu/placementtesting and choose the "Exemptions from Testing" link.

GUIDELINES FOR SECOND BACHELOR'S DEGREE

The Second Bachelor's Degree Program is designed to meet the needs of college graduates who wish to attain proficiency in a different major field. To be eligible for admission, applicants must hold a baccalaureate degree from a regionally accredited institution and must have a 2.00 cumulative GPA from all previously attended institutions. The Office of Admissions will need to receive all prior transcripts and have confirmation of the completion of the Bachelor's degree, before an admissions decision will be rendered.

A maximum of 90 transferable credits of undergraduate course work will be applied toward the second bachelor's degree. In addition, students must complete a minimum of 30 units in residence at TU and meet all the requirements of the "new" major. At least one-half of the "new" major units must be completed at Towson *since the completion of the first degree*. Each student must complete an advanced writing course. All other General Education requirements are considered to have been met through the first degree.

Once the student accepts the university's offer of admission, copies of the academic transcripts (excluding TU transcripts) will be sent to the student's intended major for evaluation. Once the transfer credit evaluation is completed by the academic department, it is returned to the admissions office, and the courses relevant to the major are posted to the Towson transcript.

Second bachelor's degree candidates may qualify for Departmental Honors, the Dean's List, and/or graduation with honors. Please refer to the **Academic Regulations** section of this catalog for criteria.

U.S. PERMANENT RESIDENT APPLICANTS

Applicants who hold permanent resident or parole visa status must submit a regular application and list their alien registration number in the space indicated. They are processed for fee purposes as state residents if they have established legal domicile in Maryland for one year. Presentation of an applicant's alien registration card for verification

may be requested. Foreign academic records must be translated by an official, recognized evaluation service such as the World Education Service, and submitted to the Office of Admissions as part of the academic record. An application and all documentation must be submitted by November 15 for the spring term or February 15 for the fall term. If a permanent resident is a nonnative English speaker and has resided in the United States for less than five years, a TOEFL result is required.

SPECIAL ADMISSION PROGRAMS

Early Admission

Early admission enables a limited number of students to be admitted and to matriculate immediately following the completion of their junior year in high school. Students interested in early admission should apply through the normal application process. Their applications, however, must be accompanied by a letter of recommendation from either the high school counselor or principal. Additionally, a letter of recommendation from the student's parent(s) should be included. An official high school transcript should be submitted along with the results of the SAT. An interview with the director of Admissions is also suggested.

On-Campus Interviews

Personal interviews are not required and are not used as a criterion for admission. Prospective transfer students may request an interview to discuss questions or concerns they may have. Students are encouraged to call three weeks in advance of their visit to schedule an appointment with an admissions counselor.

NON-TRADITIONAL ADMISSION POLICIES

Veterans and G.E.D. Recipients

Some high school graduates may qualify for special admission consideration under the provisions of non-traditional admissions. In order to be considered under this policy, students must be classified into one of the categories described below. Once classified as non-traditional applicants, prospective students must apply and submit all credentials no later than November 15 for the spring term and no later than February 15 for the fall. Mature adult, veteran and GED applicants will be required to demonstrate that they have sufficient skills to be admitted to TU. Therefore, standardized test scores and recent transcripts will need to be submitted so that a student can be considered for admission. If a student does not have sufficient academic history, they may be recommended to attend a community college or other degree-granting institution to ensure adequate preparation before transferring to Towson.

Veterans: For admission purposes, a veteran may be defined as a current or former member of any branch of the U.S. Armed Services with 12 months (one year) or more of active duty served, and with no intervening college or university attendance since discharge from the service. In addition to the application form and academic credentials, veterans must also provide the Office of Admissions and the Veterans Office with a copy of the DD form 214 verifying military service.

G.E.D. Recipients: For admission purposes, the high school equivalence (General Education Development) examination standards established by the Maryland State Department of Education (or other similar agencies in other states) will be used as an alternative to high school graduation.

ADVANCED PLACEMENT

Freshmen who have had the opportunity for advanced-level work and would like academic credit as well as advanced placement are encouraged to take the Advanced Placement Tests of the College Entrance Examination Board in May of their senior year of secondary school. Arrangements to take the tests are made through the high school counselor or the College Entrance Examination Board, P.O. Box 592, Princeton, NJ 08540. The results of these tests are received by the university in mid-July. The following standards are used for determining advanced placement credit:

Advanced Placement Credit for Entering Students

Examination	A.P. Score	Policy
American History	1, 2, 3	No credit
	4, 5	6 units, HIST 145–146
Art History	All	No credit
Art Studio: Drawing	1–3	No credit
Art Studio: Drawing	4–5	3 units, ART 106
Art Studio: General	1–3	No credit
Art Studio: General	4–5	3 units, ART 102
Biology	1, 2	No credit
	3	4 units, BIOL 115
	4, 5	8 units, BIOL 201–202
Chemistry	1, 2	No credit
	3	4 units, CHEM 105
	4	4 units, CHEM 110
	5	8 units, CHEM 110–111
Computer Science A	1–3	No credit
	4, 5	4 units, COSC 236

Examination	A.P. Score	Policy
<i>Economics</i>		
Microeconomics	1, 2	No credit
	3, 4, 5	3 units, ECON 201
Macroeconomics	1, 2	No credit
	3, 4, 5	3 units, ECON 202
English Lit. Comp or		
English Lang. Comp	1, 2, 3	No credit
	4, 5	3 units, ENGL 102
Environmental	4, 5	3 units, BIOL 105
Science		
European History	1, 2, 3	No credit
	4, 5	6 units, HIST 102–103
French Language	1, 2	No credit
	3	3 units, FREN 201
	4, 5	6 units, FREN 202–301
French Literature	All	No credit
German Language	1, 2	No credit
	3	3 units, GERM 201
	4, 5	6 units, GERM 202–301
German Literature	All	No credit
Human Geography	3, 4, 5	3 units, GEOG 109
Italian Language	1, 2	No credit
	3	3 units, ITAL 201
	4, 5	6 units, ITAL 202–301
Latin: Vergil	All	No credit
Latin: Cat-Horace	All	No credit
<i>Mathematics</i>		
Calculus AB	1, 2	No credit
	3	4 units, MATH 119 or
		4 units,
		MATH 273 upon
		completion of
		MATH 274 with a grade
		equivalent of
		2.00 or higher.*†
	4, 5	4 units, MATH 273
<i>Mathematics</i>		
Calculus BC	1, 2	No credit
	3	4 units, MATH 273 and
		an additional 4 units,
		MATH 274 upon com-
		pletion of MATH 275
		with a grade equivalent
		of 2.00 or higher.*†
	4, 5	8 units, MATH 273–274
Statistics	3, 4, 5	3 units, MATH 231
Music Listening	1, 2	No credit
	3, 4, 5	3 units, MUSC 101
Music Theory	1, 2	No credit
	3, 4, 5	3 units, MUSC 105
Physics B	1, 2	No credit
	3, 4, 5	8 units, PHYS 211–212
Physics C Mechanics	1, 2	No credit
	3, 4, 5	4 units, PHYS 241
Physics C Elec/Mag	1, 2	No credit
	3, 4, 5	4 units, PHYS 242
Psychology	1, 2	No credit
	3, 4, 5	3 units, PSYC 101
Statistics	1, 2	No credit
	3, 4, 5	3 units, MATH 231
Spanish Language	1, 2	No credit
	3	3 units, SPAN 201
	4, 5	6 units, SPAN 202–301
Spanish Literature	All	No credit
United States	1, 2	No credit
Government and	3, 4, 5	Upon completion of an
		upper-level
Politics		POSC course with a
		grade equivalent of
		2.00 or higher; 3 units
		will be awarded for
		POSC 103.*

*It is the responsibility of the student to notify the Admissions Office when the next higher level course is completed to receive credit.

†Early Childhood, Elementary, Special Education and Integrated Elementary Education—Special Education majors should consult the policy on AP in the Department of Mathematics section.

Prior to the change of schedule period, students are notified about Advanced Placement and credit. Additional information may be obtained by contacting the director of Admissions or the appropriate departmental chair.

A bulletin of information about Advanced Placement Tests may be secured from the College Entrance Examination Board, P.O. Box 592, Princeton, N.J. 08540.

INTERNATIONAL BACCALAUREATE

Towson University recognizes that the International Baccalaureate (IB) program represents achievement beyond the standard American high school program and regularly awards advanced standing to students who successfully complete IB course work.

Diploma Holders

Students who earn an IB Diploma will be awarded 30 units toward the bachelor's degree and receive sophomore standing. Some of these units may be applied toward Towson's Core Curriculum requirements; each student's IB units will be individually evaluated for Core Curriculum applicability.

Certificate Holders

Students who earn an IB Certificate will be eligible to receive units based on the results of their higher level exams only. At least 6 and as many as 8 units will be awarded for each higher level exam completed with a score of 4 or above. A score of 5 or above is required to receive credit for the physics higher level exam.

Higher Level IB Course Equivalency

IB COURSE	EQUIVALENCY	CORE CURRICULUM	UNITS
Language A1	ENGL 240 ENGL Elective	Core 5	3 3
Language A2	FORL 101 FORL 102	Core 5 Core 12	4 4
Language B	FORL 101 FORL 102	Core 5 Core 12	4 4
Business and Organization	BEEL Elective BEEL Elective		3 3
Economics	ECON 201 ECON 202	Core 6 Core 6	3 3
Geography	GEOG 109 GEOG Elective	Core 12	3 3
History	HIST 151 HIST Elective	Core 12	3 3
History of Islamic World	HIST Elective HIST Elective		3 3
Philosophy	PHIL 101 PHIL Elective	Core 5	3 3
Psychology	PSYC 101 PSYC Elective	Core 6	3 3
Social Anthropology	ANTH 207 ANTH Elective	Core 12	3 3
Biology	BIOL 201 BIOL 202	Core 7 Core 8	4 4
Chemistry	CHEM 110 CHEM 111	Core 7 Core 8	4 4
Design Technology	IDNM Elective IDNM Elective		3 3
Physics	PHYS 211 PHYS 212	Core 7 Core 8	4 4
Mathematics HL	MATH 10T MATH Elective	Core 3	4 4
Art/Design	To Be Determined	To Be Determined	
Classical Languages	LATN 301 LATN 302	Core 5 Core 12	3 3
Computer Science	COSC 236 COSC 237		4 4
Music	MUSC 101 MUSC Elective	Core 5	3 3
Theatre Arts	THEA Elective		3 3

Standard Level IB Course Equivalency

(Students without the IB Diploma are NOT awarded credit for Standard Level subjects:)

IB COURSE	EQUIVALENCY	CORE CURRICULUM	UNITS
Language A1	ENGL 240	Core 5	3
Language A2	FORL 101	Core 5 or Core 12	3
Language B	FORL 101	Core 5 or Core 12	3
Language AB Initio	FORL 101	Core 5 or Core 12	3
Business and Organization	BEEL Elective		3
Economics	ECON Elective		3
Geography	GEOG 109	Core 12	3
History	HIST 10T	Core 12	3
History of the Islamic World	HIST Elective		3
Information Technology in a Global Society	COSC 111		3
Philosophy	PHIL 101	Core 5	3
Psychology	PSYC 101	Core 6	3
Social Anthropology	ANTH 207	Core 12	3
Biology	BIOL 110	Core 7	4
Chemistry	CHEM 110	Core 7	4
Design Technology	IDNM Elective		3
Environmental Systems	To Be Determined	To Be Determined	
Physics	PHYS 211	Core 7	4
Advanced Mathematics	MATH 10T	Core 3	4
Mathematical Methods	MATH 211	Core 3	3
Math Studies	MATH 111	Core 3	3
Art/Design	To Be Determined	To Be Determined	
Classical Languages	LATN 202	Core 5 or Core 12	3
Computer Science	COSC 236 COSC 237		4 4
Music	MUSC 101	Core 5	3
Theatre Arts	THEA Elective		3

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

Towson University recognizes that the University of Cambridge International Examinations represent achievement beyond the standard American high school program and awards advanced standing to students who successfully complete Cambridge exams.

International GCE Advanced and Advanced Subsidiary (A and AS) Level

A Level

Cambridge International A Levels are recognized for matriculation purposes. Advanced standing credit is awarded for A Level passes with a mark of D or better. Eight units are awarded for science/math A Level courses; six units are awarded for non-science/math A Level courses.

AS Level

Advanced standing credit is awarded for AS Level passes with a mark of D or better. Four units are awarded for science/math AS Level courses; three units are awarded for non-science/math AS Level courses.

CIE Mark for A or AS Level	Suggested U.S. Equivalent Grade
A	A+
B	A- or B+
C	B
D	C+
E	C
U	F

International Undergraduate Admissions

OFFICE

Administration Building 218-A

410-704-6069

Fax: 410-704-6070

www.towson.edu/intladm

Jeffrey M. Haas, *Director*

Katherine F. McDonald, *Administrative Assistant*

Requests for information or admission materials should be made far enough in advance to allow processing before deadline dates set by Towson University.

International applicants who are accepted for admission usually begin studies in the fall term (late August) or the spring term (late January). The deadline for submitting an application and all documentation is June 1 for the fall term and December 1 for the spring term. Early application is strongly encouraged.

Applicants who are accepted for admission will receive the Certificate of Eligibility (Form I-20). This document is used to apply for a student (F-1) visa at a U.S. Embassy or consulate overseas. It is also used for transferring from one institution in the United States to another. F-1 students are required to enroll each term as full-time degree candidates and take a minimum of 12 U.S. semester-hour units.

The following procedure should be completed by students applying for their American bachelor's degree:

1. Obtain an international student admissions packet.
Contact:
Office of International Admissions
Towson University
8000 York Road
Towson, MD 21252-0001, U.S.A.
Telephone: 410-704-6069
E-mail: intladm@towson.edu
2. To be considered for admission, applicants are required to complete the official international undergraduate application. A nonrefundable, \$30 USD application fee (personal credit card, check drawn at a U.S. bank or money order drafted in U.S. dollars) is required.
3. All international applicants must complete an admissions file, including:
 - a. official or notarized secondary school academic records, showing grades received, annual mark sheets, examination certificates and leaving certificates, as they apply to the educational system in the student's home country. Records must be received for the last three years of secondary school;
 - b. official or notarized records (transcripts) of all colleges, universities, post-secondary, or professional schools attended;
 - c. a notarized English translation of all documents. Translations must be as literal as possible with no attempt to translate information into the United States system of education. To evaluate post-secondary

course work, it is sometimes necessary for the university to use a professional evaluation service at the applicant's expense (approximately \$180 USD). The university will notify an applicant if this service is required;

- d. proof of English language proficiency for non-native English speakers by submitting either:
 - i. an official Test of English as a Foreign Language (TOEFL) results. All international students who do not speak English as their native language are required to take the TOEFL. A minimum score of 500 (paper-based), 173 (computer-based) or 61 (Internet-based) is required. The TOEFL Web site is www.toefl.org. The results will be reported to Towson if the university is indicated on the TOEFL application. The TU code number is 5404.
 - ii. an SAT verbal score of at least 470; or

iii. an International English Language Testing System (IELTS) minimum score of 5.5.

The IELTS website is www.ielts.org.

- e. financial certification. Applicants are required to provide official financial statements that show funds are available annually to cover their tuition, fees and living expenses. Acceptable methods of financial verification are described in the international student application.
4. International students are required to pay out-of-state tuition.
5. Non-native speakers of English admitted to the university are required to take Towson's English placement test to determine if preparatory college writing courses are needed.
6. Applicants holding other types of visas may also apply to Towson and should contact the Office of Admissions for more information.



Student Life and Campus Services

Whether you live on campus, near campus or commute from home, Towson offers many activities and services that will add to your enjoyment, increase your opportunities to meet other students, and maximize your chances for a successful Towson career. We encourage you to explore the listings below and take advantage of some of these excellent resources.

This section is arranged alphabetically. Detailed descriptions for each department below can be found following this list.

Athletics

Auxiliary Services Business Office

Campus Life

Campus Ministries

Campus Recreation Services

Career Center

Center for Student Diversity

African American Student Development

Lesbian, Gay, Bisexual and Transgender

(LGBT) Student Development

Students Achieve Goals through

Education (SAGE)

Community Enrichment and Enhancement

Program (CEEP)

Women's Resources

Counseling Center

Dining Services

Disability Support Services

Testing Services Center

Division of Student Affairs

Health Services—Dowell Health Center

Housing and Residence Life

International Student and Scholar Office

National Testing Office (GRE, LSAT, etc.)

New Student Programs

Non-Native Speakers of English

English Language Center

English for Speakers of Other Languages (ESOL)

Off-Campus Student Services

Office of Student Conduct and Civility Education

OneCard—TU I.D. Card

Parking and Transportation

Shuttle Bus Service

Post Office

Speech, Language and Hearing Center

Student Activities

Clubs and Organizations

Campus Activities Board

Student Government Association

Ticket Office

University Child Care Center

University Store

University Union

Veterans Center

ATHLETICS

Towson Center, 410-704-2759

Towson University is committed to a comprehensive intercollegiate athletics program as an integral part of the student's total educational experience. The program is a member of the National Collegiate Athletic Association's (NCAA) top level—Division I. In addition, TU enjoys membership in

the Colonial Athletic Association and the Eastern College Athletic Conference for Gymnastics. The Tigers field men's varsity teams in baseball, basketball, football, lacrosse, golf, soccer, and swimming and diving. Women's teams are fielded in basketball, cross country, field hockey, golf, gymnastics, indoor track, lacrosse, soccer, softball, swimming and diving, tennis, outdoor track and volleyball.

Student-athletes compete for conference, regional and national honors under the guidance of an excellent coaching staff. Towson's outstanding athletic facilities include Towson Center Sports Complex, Johnny Unitas Stadium, Burdick Hall pool and John B. Schuerholz Baseball Park, all of which make the home of the Tigers a showcase facility within the metropolitan Baltimore area.

The Department of Athletics is proud that its athletes are students first and foremost. This emphasis on academics is reflected in the excellent graduation rate of the TU student-athlete population. Student-athletes are active on campus and in the community.

Athletic scholarships are available for gifted student-athletes in all sports. Students are encouraged to participate according to their interests and abilities. Prospective student-athletes interested in competing on a varsity team should contact the head coach of that sport. Students are also encouraged to support TU teams as spectators.

Students receive one free admission to all home Tiger athletic events upon presentation of a valid OneCard.

For the latest news on Tiger athletics and schedules, visit www.towsontigers.com.

AUXILIARY SERVICES BUSINESS OFFICE

University Union 110, 410-704-2284

This is a one-stop business transactions office for OneCard Dining Points and Retail/Vending accounts, OneCard ID cards, parking permit purchases, parking citation payments, MVA nonresident permits, Ticketmaster outlet purchases and vending refunds.

CAMPUS LIFE

University Union 232, 410-704-2332

Fax: 410-704-4810

E-mail: parent@towson.edu

www.towson.edu/campuslife

Campus Life oversees three offices: Campus Recreation Services, Student Activities and New Student Programs as well as the fundamental areas of the Parents Association, and Fraternity and Sorority Life. Staff members and students plan daytime activities, concerts, trips, movies, and leadership development opportunities, and promote community services. Campus Life also administers the Notification of Absence from Class form for students representing TU at events, conferences or other official activities. Students are encouraged to notify faculty in advance, completing this form and notifying the instructor of the anticipated class absence as soon as they learn they will be missing a class.

Fraternity and Sorority Life

The Greek community at Towson University consists of over 31 chapters and four governing councils: the Interfraternity Council, National Pan-Hellenic Council, Panhellenic Association and Unified Greek

Council. Membership in a fraternity or sorority provides an on-campus support network for students. Leadership development, academics and service are the focus. Through chapter involvement, members learn about group dynamics, communication skills, time management, and serving others.

CAMPUS MINISTRIES

University Union 208B, 410-704-2268

www.towson.edu/campusministries

A variety of faith communities are represented on campus through the support of campus ministry staff assigned to the university. Our campus ministers advise student religious organizations as well as provide personal ministry in counseling, theological discussions and other supportive areas. In addition, campus ministers lead discussions in contemporary issues and sponsor guest speakers and social events.

CAMPUS RECREATION SERVICES

Burdick Hall 151, 410-704-2367

www.towson.edu/campusrec

Campus Recreation Services (CRS), located in Burdick Hall, is made up of seven program areas: Adventure Pursuits, Aquatics, Fitness & Wellness, Informal Recreation, Intramural Sports, Special Events, and Sport Clubs. Students are invited to participate in group exercise classes, lap swimming, indoor kayaking clinics, intramural flag football and many other activities. CRS strongly supports the university's mission of a healthy lifestyle and encourages students, faculty and staff to use our facilities and participate in CRS programs. Programs utilize the C.R.I.B. Fitness Center and 33-foot indoor climbing gym, three gymnasiums, playing fields, beach volleyball court, locker rooms, and the 25-yard swimming pool. For up-to-date facility hours and program information, visit www.towson.edu/campusrec.

THE CAREER CENTER AT TOWSON UNIVERSITY

7800 York Road, Suite 206, 410-704-2233

www.towson.edu/careercenter

The Career Center at Towson University helps students make decisions about majors and prepare and search for meaningful and satisfying careers. The center also provides services and information leading to academic internship opportunities and on- and off-campus full-time and part-time employment. To learn more about the programs and services offered by The Career Center, visit www.towson.edu/careercenter, or call the center for more information.

Career Center Services for Students

- Hire@TU (Web-based job/internship and career events/job fairs database)
- Career Assessments
- Career Fairs/Job Fairs
- Career Counseling
- Career Resource Library
- Graduate School Information
- On-campus Interviewing
- Internships
- Professional Development Seminars (Resume Writing, Interview Skills Training, Networking, Graduate School Application)
- Class visits and targeted workshops for student groups
- Job Shadow Program

CENTER FOR STUDENT DIVERSITY

University Union 313, 410-704-2051
www.towson.edu/diversity

The Center for Student Diversity (CSD) provides intellectual, social, personal, and cultural enrichment programs and services that build community and create civility. The center strives to create a learning community that recognizes and appreciates cultural differences, respects individual uniqueness, and engages in cross-cultural dialogue and interaction. Moreover, the center supports multicultural student organizations and offers diversity awareness seminars, workshops and presentations, along with advocacy and consultation. CSD serves all students, while paying particular attention to the needs of students of color and other under-served groups on campus. The purpose of the center is to develop an inclusive, supportive environment where students can attain their scholastic objectives in a seamless manner.

Currently, the CSD is made up of Women's Resources, Student Success Programs (SAGE and CEEP), African American Student Development, LGBT Student Development, and Latino and Asian Pacific Islander Student Development. The center also partners with and supports the Jewish Cultural Center-Hillel and Campus Ministries.

Additionally, the center administers the Community Enrichment and Enhancement Partnership (CEEP) award, Barnes-Harris Scholarship, and the Graduate Diversity Grant. These awards are designed to increase access and success of culturally diverse and traditionally underrepresented students.

African American Student Development

University Union 313, 410-704-2051
www.towson.edu/aasd

The African American Student Development (AASD) program sponsors activities that reflect the lifestyles, history, contributions and culture of people of African descent. The AASD program also seeks to stimulate scholarship at Towson in the areas of African American, African-Caribbean and African studies. The program sponsors several student organizations, hosts lectures and discussion groups, provides information and referrals, and educates the campus community about issues of diversity. The Distinguished Black Scholars Lecture series and the Martin Luther King, Jr. Celebration are two annual campus-wide programs hosted by the AASD.

In addition, AASD houses an ever-growing "special collections" library of popular and scholarly literature, provides a comfortable setting in which to study, network, relax and socialize.

Lesbian, Gay, Bisexual and Transgender (LGBT) Student Development

University Union 313, 410-704-2051
www.towson.edu/LGBT

The Center for Student Diversity (CSD) provides a variety of educational, social, and outreach programs that promote and support the life and culture of students who identify as Lesbian, Gay, Bisexual and Transgender (LGBT). The LGBT Student Development program exists to create a welcoming and nurturing environment for LGBT students so that they become engaged in leadership and mentorship opportunities on campus and in the wider community.

SAGE Program

University Union 313, 410-704-2051
www.towson.edu/sage

The Students Achieve Goals through Education (SAGE) program pairs new students from diverse backgrounds with peer mentors who assist them in attaining their academic goals. SAGE program participants are encouraged to excel in the classroom, as well as participate in the wide array of co-curricular activities offered campus-wide. To that end, a series of weekly activities and events are planned to address academic success, diversity, career development, stress management, financial planning, interpersonal development, course scheduling strategies and networking.

Women's Resources

University Union 313, 410-704-2051
www.towson.edu/womensresources

The Women's Resource program is located on the third floor of the University Union. The program houses a small interdisciplinary library of books related to a range of women's issues, both domestic and international.

Further, the center offers a wide range of services to women, including leadership development, support groups, empowerment circles, sexual assault prevention and response, etc. Innovative programs are commonplace—community service and service learning projects, speaker series, exhibitions and performing arts programs, etc. Outside referrals are made when necessary.

Women's Resources also offers scholarships and awards for both women and men. The Charlotte W. Newcombe Scholarships are the largest of the scholarships offered.

COUNSELING CENTER

Glen Esk, 410-704-2512
www.towson.edu/counseling

College life presents many stresses, life changes, and opportunities for personal growth. To meet these challenges, it is often necessary to resolve emotional problems, learn new personal and social skills, and work toward developing well-chosen career and personal goals. The Counseling Center provides a variety of professional services for students who are experiencing personal difficulty or who are seeking help toward a greater level of personal effectiveness or satisfaction.

Some of the areas which may be addressed by the Counseling Center include:

- Eliminating blocks to educational or career achievement and success
- Future planning and decision-making
- Adjusting to a new environment
- Coping with change and transition
- Indecision in choosing one's direction
- Relationships with friends, roommates, parents, romantic partner or spouse
- Family problems
- Grief and loss
- Sexual matters
- Self-esteem and self-confidence
- Anxiety, depression and anger
- Physical stress and tension
- Eating disorders/body image
- Physical or sexual mistreatment or abuse

- Alcohol and drug-related problems
- Suicidal or self-destructive behavior or thoughts
- Problems encountered in the university environment

Clinical Services

Most services at the Counseling Center are provided free of charge. The Counseling Center is staffed by psychologists, substance abuse specialists, consulting psychiatrists, and psychologists in training working under supervision. All services at the Counseling Center are confidential. For more information or to make an appointment, call or drop by Glen Esk, the big white house on the northeast corner of the campus.

Group, Individual and Couples Counseling

Several kinds of personal counseling are available at the Counseling Center. Your initial session can be of immediate assistance as your counselor offers a listening ear, helps you to resolve problems and informs you about what kinds of further help might be appropriate. A series of individual counseling sessions offers a private setting for resolving personal difficulty and achieving personal growth. Counseling groups are particularly helpful for many concerns, giving members an opportunity to share experiences, solve problems and practice new skills. Couples counseling provides a safe atmosphere for couples to examine and improve their relationships. Psychiatric evaluation and medication are also available when needed.

Alcohol and Drug Abuse Program

The Counseling Center offers alcohol and other drug treatment programs (both individual and group services) intended to meet various personal needs. Services can assist in achieving a greater awareness of a problem or correcting a problem through education and recovery.

Life Planning

The Counseling Center assists students in personal life and decision-making about one's future in a variety of ways. The Career Center is the place to go if you seek information about making potential career choices. The Counseling Center can help if you feel that your career decision-making is complicated by personal concerns.

Outreach and Consultation

The Counseling Center staff provides workshops and programs to the Towson University community on various topics, including time management, mindfulness meditation, suicide education and prevention, gambling, assertiveness training, stress management and communication skills. We can also work with you to help you create programs to meet your needs. Staff is also available to consult with students, faculty and staff on various topics, including identifying and assisting students in distress, improving the campus environment, diversity issues or other issues relating to the quality of life at Towson University.

Web Resources

Further information about the Counseling Center, self-help resources, web-based mental health self-assessments (for Anxiety and Depression, Alcohol, and Eating Disorders), and a Wellness Assessment can be found at www.towson.edu/counseling.

Referral

Students sometimes need services that are available only outside the Counseling Center, whether on campus or in the surrounding community. Counselors can advise students about a variety of resources and services that may be useful to students. In addition, a referrals assistance specialist is available to help students identify quality mental health providers in the outside community, and to understand and use their health insurance for these services.

Hours

The Counseling Center is open Monday–Friday, 8 a.m.–5 p.m.

Your Initial Contact

Call 410-704-2512 or stop by the Counseling Center to arrange your first appointment with a counselor. Initial appointments are usually available on the same day you contact us or very soon thereafter. If you wish, you may schedule an appointment in advance to fit your schedule more conveniently. Emergency appointments are also available. Your counselor will help you resolve your immediate concerns and determine what kinds of help will be the most useful.

Confidentiality

Counseling often deals with very personal and highly private issues. Successful outcome depends on a feeling of freedom on the part of clients to express feelings, attitudes and thoughts with people who respect them and their right to privacy. Interviews conducted are confidential and information is not released except with the client's written permission or as may be required by law. The importance of confidentiality is reflected in the Counseling Center's adherence to the Code of Ethics of the American Psychological Association.

DINING SERVICES

University Union, 410-704-2302
<http://dining.towson.edu>

Meal Plans

No matter where you go on campus, you can find something good to eat! We have 16 dining locations and offer a variety of meal plans (including vegetarian and kosher cuisine) as well as a-la-carte dining.

All students who live on campus must purchase a meal plan (except those who live in West Village). Additional meals and snacks can be purchased through a Dining Points debit account. Dining points can be used at any Dining Services outlet on campus. Dining Points carry over from term to term as long as you are a registered student. Dining Points are non-transferable, non-refundable. Students access their meal plan and Dining Points through their OneCard ID. For more information, visit our Web site <http://dining.towson.edu> or call Auxiliary Services, 410-704-2530. A student's meal plan status can be viewed at the OneCard Web site: <http://onecard.towson.edu>

Choosing a Meal Plan

Resident students can choose from various meal plans. Plans will range in size from 10 to 19 meals per week. Estimated cost will range from approximately \$1800 to \$2188 per term. Plans offer a choice of both kosher and standard menu items. Plans offer students the option of eating at any time of day and as often as they desire.

Students living off campus and at Millennium Hall, West Village or Towson Run Apartments are not required to have a meal plan but may choose one of the Block Meal Plans which offer a specific number of meals per week each term at a fixed price.

Prices are subject to change. For more information, visit www.towson.edu/dining.

Meal Plans for Students with Apartments

Students with their own apartments usually choose one of the Block meal plans. Eating with a Block meal plan is easier than shopping for food, fixing it, and cleaning up afterwards. When students use up one block, they can purchase another. Block plans are good for the entire academic year (Sept.–May).

DISABILITY SUPPORT SERVICES

Administration Building, Second Floor
 410-704-2638
 Fax: 410-704-4247
www.towson.edu/dss

Disability Support Services (DSS) is the office on campus that provides reasonable accommodations and services for students with disabilities. Students seeking accommodations must complete a DSS application, provide documentation of their disability that adheres to DSS guidelines, and meet with a DSS specialist for an intake appointment to discuss their needs and requests. See the DSS website for an application and specific documentation guidelines for each type of disability.

DSS determines eligibility for services and what accommodations are reasonable on a case-by-case basis, taking into account the student's disability, needs and requests, as well as the nature of the learning environment, course standards and/or essential requirements for the student's program of study.

Students are encouraged to register with DSS as soon as possible after admission to the university to ensure timely provision of services. Once a student is registered, he or she will be assigned to a DSS specialist for assistance. A DSS memo will be prepared for the student's instructors that specifies the approved classroom and testing accommodations. Students are required to obtain their memos from the DSS office and give them to their instructors as early as possible each term.

DSS offers guidance to students, faculty and staff for implementing accommodations and arranges for some accommodations directly. Some examples of accommodations include: note-taking assistance, interpreting services, books on CDs, para-transit registration, assistive technology, and use of the Testing Services Center for extended test time, reduced-distraction testing spaces, readers and scribes. Services offered include: learning and study skills assistance, disability consultation and help with self-advocacy.

Students who suspect they may have a disability but do not have documentation are encouraged to contact DSS for advice on obtaining an appropriate evaluation.

Testing Services Center

Administration Building 228, 410-704-2304
 Fax: 410-704-4699
www.towson.edu/testing

The Testing Services Center provides proctored testing accommodations, such as extended time, minimal distraction space, readers, scribes, and computer access for Towson University students registered with Disability Support Services. Contact the Testing Services Center for additional information.

DIVISION OF STUDENT AFFAIRS

Administration Building 236, 410-704-2055
 Fax: 410-704-3441
 E-mail: studentaffairs@towson.edu
www.towson.edu/studentaffairs

Students who take advantage of the wide variety of support services offered throughout the university and those who use co-curricular opportunities to supplement and complement formal classroom learning are likely to be more satisfied and more successful than their peers. The administrative responsibility for the supervision of many of Towson's support services, as well as for co-curricular programs and activities, rests with the vice president for Student Affairs and staff.

The Division of Student Affairs fosters and celebrates learning, respect, community and involvement by creating transformative learning experiences that are pivotal in students' education and identity development. The division's work is built around the values of: learning, inclusion, community, excellence, integrity, responsibility and safety. Staff throughout the division serve as advocates for students by helping them strengthen their university experience, find answers to questions, and identify support programs and services that can enhance learning and success.

While many of the opportunities are described throughout the catalog, the division offers the "Student LIFE Line" to assist with answering any question students may have about the university. By calling 410-704-LIFE (5433) or sending an e-mail to studentaffairs@towson.edu, requests will be responded to promptly. The phone line is answered Monday–Friday, 8 a.m.–5 p.m. After these hours, a voicemail can be recorded and will be responded to the next business day.

HEALTH SERVICES

Dowell Health Center, 410-704-2466
 TTY: 410-704-3101
 Fax: 410-704-3715
www.towson.edu/dowellhealthcenter

The Dowell Health Center offers primary care services to all registered students. The Health Center is open Monday–Friday throughout the year with the exception of university holidays. Office hours are 8 a.m.–5 p.m.

The Dowell Health Center has an experienced staff of physicians, nurse practitioners, physician assistants, nurses and health educators. Services include treatment of common illness and injuries, a full range of sexual health services, immunizations, allergy shot administration, HIV testing, office lab tests, a limited formulary of medications including birth control, and health

education programs such as nutrition counseling and smoking cessation services.

The Health Center operates by appointment. For non-emergencies call 410-704-2466. If you have a true medical emergency, dial 911 directly for transportation to one of several nearby hospitals. For simple medical problems (e.g., cold, sore throat, UTIs, etc.) students can be seen quickly and efficiently in our Fast Track Clinic. Bring your OneCard ID, insurance card and completed paperwork (download from the Health Center website) to ensure faster service. After hours and on weekends, you can call our Nurse Advice Line and speak to a nurse about a medical problem. Simply call the Health Center number: 410-704-2466. If you need urgent care after hours, there are several free-standing urgent care centers in the Towson area. See our website for contact information and hours of operation. Click on "After Hours Care."

All currently enrolled students are eligible to use our services. Although health insurance is not required to use the Dowell Health Center, we strongly recommend that all students carry health insurance to avoid large, unexpected medical bills. Towson sponsors an excellent student insurance plan at reasonable cost that covers most Health Center services as well as diagnostic X-rays, lab tests, specialty referrals and hospitalization. For more information about this plan see our Web site and click on "Student Health Insurance."

If you have private insurance, we can bill your insurance directly for office visits and other medical services provided in the Health Center. We are currently contracted as in-network ("preferred providers") with several of the large insurance plans. Students with these insurance plans will only be responsible for non-covered charges such as co-pays, deductibles or non-allowed services. Please be sure to bring your insurance card or policy information each time you come to the Health Center. (Note: we cannot bill Medicaid or Medicare as we are not certified providers for these government programs.)

For students who choose not to use their insurance or who are uninsured, we will bill you directly for services. All charges may be paid by check, billed to your TU tuition account through the bursar's office or charged as retail points to your TU OneCard. To learn more about the pros and cons of using your insurance in our facility and an updated list of plans we are contracted with as preferred providers, go to our Web site and click on "Using Private Insurance at DHC."

Immunization Requirements

Towson has a mandatory immunization policy. All undergraduate and graduate students taking courses on Towson's main campus or any of its satellite facilities (Shady Grove, Southern Maryland Higher Education Center, HEAT and Hagerstown) must comply with the immunization requirements to attend class. The list of requirements can be found on our Web site. Click on Pre-entrance Health Forms. Documentation should be mailed or faxed to the Health Center by June 1 for fall term, Dec. 1 for spring term or within four weeks after receiving your admission packet. Keep a copy for your own records.

Students taking all classes online, overseas, at their place of employment if employment is off-campus, or at any of the city/county schools, are exempt from this policy.

Immunizations are available at the Dowell Health Center for a fee. Maryland law now requires all students living in on-campus housing to be immunized against meningococcal disease (meningitis) or to sign a waiver stating they understand the risks of the disease and choose not to be immunized. Immunization/waiver forms for this vaccine will be sent with the Housing Contract and must be returned to the Department of Residence Life in order to move into residence halls.

Towson University Medical Excuse Policy

The Health Center does not give medical excuses for short-term absence (less than five days) due to illness or injury. Verification of care will be given for people treated at the Health Center which does not constitute a medical excuse. For students whose medical condition results in longer-term absence, the Health Center notifies the vice president of Student Affairs, who then notifies the student's professors. However, this notification does not excuse the absence. Students must also contact their professors and make arrangements for makeup work. Letters of support for students requesting a medical withdrawal from all classes or a selective medical withdrawal from a single class are given at the discretion of the treating provider, and only if the student was treated at the Health Center for the condition. No medical information will be given to any professor or administrative office without written consent of the student.

Treatment of athletic injuries is provided to intercollegiate athletes at the Towson Center Training Room by a staff of athletic trainers under the supervision of a board-certified orthopedic surgeon and a sports medicine physician.

HEALTH INSURANCE

Dowell Health Center, 410-704-2466
TTY: 410-704-3101
www.towson.edu/dowellhealthcenter

Although the Dowell Health Center offers high quality primary health care to any registered student, regardless of insurance status, there are times when students need medical services not available at the Health Center. For this reason, all students are strongly encouraged to have health insurance coverage. International students, intercollegiate athletes and health professional students in the Nursing, Occupational Therapy and Physician Assistant programs are required to have insurance.

The university offers students an excellent 12-month health insurance policy at a very reasonable cost for the coverage. To see the current brochure go to our Web site and click on Student Health Insurance. The plan uses the Dowell Health Center as the primary care provider while school is in session and covers services such as specialty referrals, diagnostic tests, surgical procedures, and hospital care not available at the Health Center. It will cover urgent care and emergency services at other facilities when the Health Center is closed or the student is away from school. Coverage for spouses and children of enrolled students is available. Policies can be purchased for the entire year (August 15 through August 14), for one term, or for summer only.

International Student Insurance Requirement

All international students on F, J and other non-employment related visa status are required to have health insurance that meets the university's

minimum standards. These students are automatically enrolled in the university-sponsored insurance plan and the cost is billed to their financial account. Students with their own comparable insurance may submit an online waiver application. If the waiver is submitted by the deadline and is approved, the insurance charge will be refunded.

NOTE: Waiver deadlines for international students are September 15 (fall term), February 15 (spring term), and June 15 (summer sessions). Waiver applications submitted after the deadline will not be considered and no refunds of insurance premiums will be possible. **Waiver applications must be re-submitted every fall term.** See the Health Center Web site for waiver standards and a link to the online waiver application process: www.towson.edu/dowellhealthcenter. For additional information, contact the Dowell Health Center Insurance and Billing Coordinator at 410-704-3703.

HOUSING AND RESIDENCE LIFE

West Village Commons 309, 410-704-2516

The Residence Life program provides living facilities for students and promotes educational programs and activities which support the academic mission of the university. The Residence Life staff and the University Residence Government strive to maintain an environment conducive to the individual's achievement of academic goals and development of life skills.

Housing and Residence Life offers a variety of living options to accommodate the diverse needs and interests of students. Additionally, the off-campus housing listing service is available for students looking for off-campus housing at www.towson.edu/housing.

INTERNATIONAL STUDENT AND SCHOLAR OFFICE

Administration Building 246, 410-704-2421
www.towson.edu/isso

The ISSO provides services and programs for more than 900 international students and international scholars from about 100 nations. Approximately 75 percent of international students are here for two to five years, working on undergraduate or graduate degrees. The ISSO provides the following programs and services:

- Issuance of documents and guidance on legal matters which make possible the enrollment of non-immigrant students
- Advising services necessary for international students to maintain legal status while in the United States, ensuring they understand applicable federal government regulations and university policies
- Design and presentation of programs to assist international students in their transition to life in the United States and the American academic environment
- Advising for students regarding personal, academic, legal, career, intercultural communication, and cross-cultural adjustment issues
- Serving as liaison to government agencies and university offices
- Coordination of programs and ongoing services to enhance international students' social lives, encourage their interaction with Americans, and promote ways for them to become involved and appreciated for their unique cultural perspectives

- Coordination of appropriate services for international students in legal, medical and family emergency situations, when appropriate

New Student Assistance

During the week prior to the beginning of each term, the ISSO holds orientation programs designed to assist students in their initial adjustment to a new culture. The International Ambassador Program recruits experienced international and U.S. students to serve as peer mentors during ISSO orientation events.

Ongoing Services and Publications

The ISSO assists students through individual appointments, walk-in meetings, group advising sessions, workshops, and informational hand-outs. The office maintains an e-mail distribution list for all international students, used to communicate pertinent immigration information, recreational offerings, job and travel opportunities, ISSO events and services, and other news for or about the international population on campus.

Social and Cultural Program Offerings

The ISSO offers day trips during spring break, and a variety of activities and programs in conjunction with the International Student Association (ISA). The ISSO and ISA collaborate each year to produce the International Festival—an evening of international food, fashion, song, dance and other performances—which always draws a large crowd of U.S. and international students as well as members of the faculty and community.

Summary of Special Immigration Regulations for Students in F-1 Visa Status

- Report any change of local or foreign address to the U.S. government's SEVIS (electronic information system) by editing addresses in university's Online Services within 10 days of any move.
- Enroll at the school which issued the active SEVIS record Form I-20.
- Attend a full course of study each semester during the entire academic year. At Towson University this means:
 - a minimum of 12 units for undergraduate students
 - a minimum of 9 graduate-level units for graduate students, or a full course of study as defined by the Graduate School's "weighted units" system
 - a minimum of 18 contact hours for English Language Center students
 - credits received from CLEP, Foreign Language Department Credit for Prior Learning Exams, or other proficiency exams do not count toward the full-time attendance requirement minimum
 - students must both register for and attend class for the entire term
 - a W (withdrawal) for a course means that course cannot count toward the minimum
 - receiving a grade of FX means that the student never attended class, or stopped attending during the term without officially withdrawing; therefore, an FX grade cannot count toward the minimum
 - units taken on an Audit basis do not count toward the minimum

- Under extremely limited circumstances, an international student may obtain an exception to the Full Course of Study requirement. Any possible exception must be discussed and approved in advance by a Designated School Official (DSO), per federal Immigration regulations. Towson's DSOs are the international student advisors at the ISSO.
- Make satisfactory academic progress.
- Complete the degree or program by the date in line 5 of the Form I-20. If a student is not able to complete the program by that date due to valid academic or medical reasons, s/he must apply at the ISSO for an F-1 Program Extension before the I-20 expires.
- For a transfer to another academic institution, special immigration status transfer regulations must be followed.
- Have an unexpired passport at all times, valid for at least 6 months into the future.
- Limit employment to a total (all jobs) of 20 hours per week while school is in session. F-1 students are allowed to work full-time in authorized employment at times when school is not in session, i.e., during the summer, and winter and spring breaks.
- Receive written authorization for any and all off-campus employment, via the ISSO.
- Complete special U.S. tax forms each year, even if no U.S. income was received.
- When nearing the end of the degree or program, or within 60 days of completion, these are the only options:
 - (a) obtain a new Form I-20 for a new institution or program, and attend the new school/program's next available term within 5 months of the current program completion date
 - (b) apply to change to another immigration status
 - (c) apply for optional practical training work permission
 - (d) depart the U.S.
- Depart the U.S. within 15 days if student withdraws or takes a leave of absence before degree completion.

The ISSO provides the necessary immigration-related information and assistance to students, but it is the student, not the university, who is ultimately responsible for maintaining legal F-1 student status. F-1 students should contact an ISSO advisor if they have difficulty meeting any of these requirements before they have a problem. The ISSO is here to assist students in reviewing options and making wise decisions. The ISSO staff do not work for the Department of Homeland Security or the federal government, but are employees of the university who want international students to be successful.

The ISSO staff is available Monday through Friday from 8:30 a.m. to 5:30 p.m. Some scheduled in-person and phone appointments are available after 5 p.m. to students with urgent needs. Any student who has an emergency outside of normal business hours may contact the University Police at 410-704-2133. The police may assist or may contact an ISSO staff member at home.

NATIONAL TESTING OFFICE

Administration Building 228, 410-704-2304

Fax: 410-704-4699

www.towson.edu/testing

The National Testing Office provides a convenient testing site for Towson University students and individuals in the community who are required to take standardized exams. Examples of tests offered on an ongoing basis are:

- GRE Graduate Record Examination
- LSAT Law School Admission Test
- PRAXIS Professional assessment for beginning teachers

NEW STUDENT PROGRAMS

University Union 217, 410-704-2309

www.towson.edu/orientation

After an undergraduate student is admitted to Towson, the Office of New Student Programs (NSP) serves as their point of contact during their transition to the university. NSP coordinates orientation programs for all new freshmen and students transferring to Towson from another institution. Beginning with an official orientation to the university and extending throughout the student's first year, NSP connects students with academic advisers, other new students and student leaders to help them learn about academic and student life.

Transfer students complete a one-day orientation session held in July (for the fall term) or January (for the spring term). This program includes the components above as well as academic advising and registration. First-year students beginning at Towson during the spring term also participate in the January program.

First-year students entering in the fall term attend a four-day program that takes place in late August, just before the start of classes. During this time, students learn about the university through a variety of activities, conversations and meetings with their First-Year Experience (FYE) group, led by an academic adviser and an Orientation Leader.

All new students are encouraged to see their transition as an ongoing process of adjustment to a new environment. New Student Programs staff is available at any time to answer questions and offer advice.

NON-NATIVE SPEAKERS OF ENGLISH

English Language Center

Enrollment Services 331, 410-704-2552

Fax: 410-704-2090

The English Language Center offers intensive English instruction to students who are preparing for admission to the university or for international and permanent resident students who want to further develop their English skills. The center also welcomes individuals who are not preparing for university study but who wish to improve their language skills for employment purposes. Courses are designed to develop a student's speaking, listening, reading and writing skills. A TOEFL preparation course and additional courses on pronunciation, vocabulary development and American culture are also offered.* A computer resource laboratory and a listening area are available for students who want to work on specific language areas, such as grammar, listening, reading or vocabulary development.

**An accent reduction program is available as well as short-term summer programs that focus on language and culture.*

English for Speakers of Other Languages (ESOL)

English Department, Linthicum Hall 218E,
410-704-2110

The English for Speakers of Other Languages (ESOL) testing coordinator tests and places non-native speakers of English admitted to the university in preparatory college writing courses. When necessary, students are placed in ESOL classes or special sections of Writing for a Liberal Education.

OFF-CAMPUS STUDENT SERVICES

University Union 217, 410-704-3307
www.towson.edu/commuters

Off-Campus Student Services provides a wide range of resources, services, and programs designed to enrich the educational experience of off-campus students. Our goal is to engage off-campus students in co-curricular activities thereby enhancing their overall development.

Students living off campus can find MTA information and schedules, area maps, off-campus housing options, and commuter-friendly programs such as Commuter Appreciation Day, Good Morning Commuters and Good Evening Commuters. We will also assist in addressing questions and concerns regarding off-campus living situations.

OFFICE OF STUDENT CONDUCT AND CIVILITY EDUCATION

Administration Building 236, 410-704-2057

When a student is alleged to have violated the Code of Student Conduct (*see Appendix F*), this office interviews and counsels students in the discipline process and facilitates the student appeal process. The office also serves as a resource to faculty and administrators.

ONECARD – TU ID CARD

University Union 118, 410-704-2284
<http://onecard.towson.edu>

The university issues a photo I.D. card to students, faculty and staff called the OneCard. The initial OneCard is free and does not have to be renewed. Students should keep the OneCard with them since it is necessary for using services at Cook Library, the Burdick Fitness Center and athletic facilities. The OneCard can also be used as a debit card. A Retail Points account, accessed through the OneCard can be used to purchase books, supplies and gift items at the University Store. A student can use the same Retail Points account on vending machines, washers and dryers, Copies Plus, Health Center, various off-campus merchants, and the Auxiliary Services Business Office. Additionally, the OneCard can be used for discount food purchases through use of a Dining Points account. Students save 6 percent sales tax on food purchased using Dining Points at all Dining Services locations. Students with a meal plan will use the card for access to the dining halls. A student's Meal Plan account information can be accessed through the OneCard website. The OneCard provides access to some residence halls and academic labs. Students may also use the OneCard for compli-

mentary access to many athletic and entertainment events. Manage your OneCard account online at <http://onecard.towson.edu>.

PARKING AND TRANSPORTATION

General Parking Information

- Information regarding permit sales for the coming academic year will be available on the parking website by mid-May.
- All vehicles parked on campus from 6 a.m.–8 p.m., Monday–Thursday, and 6 a.m.–3 p.m. on Friday must have a valid parking permit, or must use a designated visitor or metered parking space and pay the applicable fee.
- Parking regulations are in effect to help ensure safe and adequate parking for the entire campus community. Vehicles parked in violation of regulations may be issued a citation and/or towed at driver's expense.
- Parking regulations are subject to change. To view the current regulations, visit www.towson.edu/parking.
- Permits are not required in most lots on weekends or on official university holidays when the campus is closed. Signs at each lot will indicate restrictions.
- If your vehicle is not registered in the state of Maryland, the Maryland Motor Vehicle Administration requires the purchase of a Nonresident Permit for vehicles registered in other states when the driver of the vehicle is a student attending a school in Maryland for a period in excess of 30 days. As a convenience, students can purchase Nonresident Permits at the Auxiliary Services Business Office in the University Union. Students must bring a photocopy of their driver's license, student ID and vehicle registration card.

On-Campus Resident Student Parking

A limited number of resident permits will be available for freshman on-campus residents (resident students with less than 30 completed units). Parking Services will designate the parking area.

Resident students with 30 or more units will be eligible to purchase parking permits. A limited number of parking spaces will be available in the resident lots near housing locations. Once permits for these spaces are sold out, eligible residents will be assigned parking at another designated lot.

On-campus residents who were unable or ineligible to obtain a permit, MAY NOT have a vehicle on campus at any time. Vehicles without a valid permit will be issued a citation and/or be towed at the driver's expense.

Off-Campus/Commuter Student Parking

If you are planning to live off campus, visit www.towson.edu/parking and click on **Buy Permit Now** to purchase a permit as soon as they go on sale. Permit sales are expected to begin in May. Permits will be available for purchase online only. No physical permit will be issued. Your license plate will be checked to verify you have a valid permit.

Transportation Services

- The university operates off-campus shuttles during the fall and spring terms that serve several apartment complexes, and residential areas close to the campus.

- The university also operates an on-campus shuttle service during the fall and spring terms that serves all locations on campus. Please see the Parking and Transportation website for hours and schedules.
- The university provides point-to-point Safe Ride service to areas accessible by a bus between the hours of 2 a.m. and 6 a.m., seven days a week. To request service, please call 410-704-SAFE (7233)
- Para-transit service is available for individuals with mobility issues who have been pre-certified to use the service. Please see the Web site for requirements and to obtain an application.
- The University Police provide a walking escort service to areas not served by the shuttle service from dusk to dawn. To request this service, please call 410-704-SAFE (7233).
- The Maryland Transit Administration provides bus service between Towson, downtown Baltimore and elsewhere. Visit www.mtmaryland.com/services/bus.
- A number of local cab companies cater to the Towson area.

For more information on Parking and Transportation Services, visit www.towson.edu/parking, call 410-704-PARK (7275) or stop by Parking and Transportation Services located in the Union garage.

POST OFFICE

University Union Ground Floor, 410-704-2260

The Post Office provides window service from 9 a.m.–4 p.m., Monday–Friday. Most residents' mailboxes are located at the Post Office in the University Union, so they should visit when they move in to get their combination. Students residing in Towson Run Millennium, Paca and Tubman will be assigned mailboxes at their residence buildings.

SPEECH, LANGUAGE AND HEARING CENTER

Van Bokkelen Hall 001, 410-704-3095

Diagnostic and therapeutic services of the Speech, Language and Hearing Center are available to all members of the Towson faculty, staff and student body. Speech, language, and hearing evaluations for all ages and all types of communicative disorders and differences are available. Audiological services include complete hearing testing, auditory processing testing balance assessment, hearing aid evaluations and hearing aid dispensing. Audiologists evaluate and fit conventional, programmable, and digital hearing aids and assistive listening devices, which can be purchased from the center.

Therapeutic services are provided for children and adults experiencing difficulty in comprehending and using oral communication. Treatment is provided for the following types of communication disorders and differences: language, articulation, stuttering, hard of hearing, auditory processing, voice and aphasia. Services are also available to improve comprehension and use of Standard American English. Appointments can be made by phoning 410-704-3095.

STUDENT ACTIVITIES

University Union 217, 410-704-3307
www.towson.edu/studentactivities

The Office of Student Activities complements the mission of the university by creating opportunities and environments that inspire students to become active members of the campus and community. Working in collaboration with university faculty and staff, the Office of Student Activities offers a wide array of educational, cultural, social and recreational programming that fosters student learning and development. Students representing TU at events, conferences, or other official activities should obtain a Notification of Absence from Class Form from Campus Life, University Union 232.

Academic Criteria for Student Leaders

Involvement in campus clubs and organizations offers many opportunities for developing leadership skills; however, certain academic criteria are required of leaders. Therefore, student officers, senators and directors of any university-sanctioned activity must have and maintain through their term of office a minimum 2.00 cumulative GPA. (This excludes first-term students who do not have a Towson University GPA.) Students who do not have a cumulative 2.00 GPA will not be allowed to assume office; students whose cumulative GPA falls below 2.00 during their term of office must resign. In addition, students not regularly attending classes may be asked to relinquish their leadership positions.

Clubs and Organizations

One of the best ways to experience college life is to get involved. At Towson University, you have countless opportunities to interact with people who have the same interests and passions. Over 200 student organizations exist on campus and range from academic and professional, arts, cultural, fraternities and sororities, honor and recognition, political, religious, media and a variety of special interest groups. Each term, involvement fairs are held to promote student organizations to prospective members. A complete list of student organizations can be found on the Involved @ TU Web site, www.towson.edu/involvedtu.

- **Campus Activities Board (CAB)** – www.towson.edu/cab
 CAB serves as the primary programming unit for the Towson University student population. The organization, which is part of the Student Government Association, provides the campus community with a variety of recreational, educational and social activities. CAB offers events each term, including dances, live music, comedy shows, lectures, leadership programs, cultural programs, bus trips and discounted tickets to area attractions. In addition, CAB is the driving force behind Tigerfest, one of the most popular events at TU.
- **Student Government Association (SGA)** – www.towson.edu/sga
 The SGA is dedicated to improving students' academic, social and cultural environments while hearing students concerns. Upon enrolling at Towson University, all students become members of the Student Government Association. This is the primary organization which represents all students in planning, organizing and directing student organizations and programs on campus. The SGA recognizes and

helps fund eligible student organizations that provide students with a variety of experiences while on campus. The Student Government Association also works jointly with the faculty and administration in certain designated areas of governance of the university.

Community Service Opportunities

The Community Service Program provides a number of services that assist students in finding meaningful volunteer opportunities on and off campus. Opportunities exist year round for students to give back to the community.

Leadership Development (LEAD TU)

LEAD TU provides students a wide variety of programs, services and experiences that assist in the exploration and refinement of their leadership abilities. LEAD TU encourages growth and development through workshops, guest speakers, retreats and conferences.

STUDENT DAY CARE CENTER

University Child Care, 410-704-2652
www.towson.edu/daycare

The Student Day Care Center provides developmental programming as well as good care for children ages 2 through 5. The center is open from 7:30 a.m.–5:30 p.m. and offers children opportunities for physical, emotional and cognitive growth.

Due to licensing restrictions, space is limited. The center accepts applications to its waiting list whenever parents are ready to submit them, accepting children on a first-come, first-served basis, giving priority to the children of full-time university students. Contact the center for further information.

TICKET OFFICE

University Union Ground Floor, 410-704-2244

The Ticket Office provides the university community with a variety of ticket services for both on-campus and area events. Tickets for student-sponsored events, including those offered by the Campus Activities Board (CAB) and Student Government Association (SGA), are sold through the Ticket Office, which is located on the first floor of the University Union. The Ticket Office is an outlet for Ticketmaster, selling tickets for attractions at the 1st Mariner Arena, Oriole Park at Camden Yards, and other venues. The Ticket Office also sells discounted movie passes and Mass Transit (bus and Light Rail) passes.

UNIVERSITY STORE

University Union, Ground Floor, 410-704-BOOK (2665)
<http://store.towson.edu>

The University Store carries all required and recommended textbooks as well as a selection of general reading material including reference/study aids, current fiction and nonfiction, children's books, newspapers and magazines. Other products sold in the University Store include basic school/art supplies, computer supplies and software, health and beauty aids, snacks and beverages, gifts and greeting cards, music CDs and DVD movies. Official Towson University emblem-

atic merchandise such as imprinted adult and children's apparel, stationery and giftware distinguish the University Store from other general retail outlets. The approved Towson University class ring is also available through the University Store. The store accepts VISA, MasterCard, Discover, OneCard Retail/Vending Points, personal checks with appropriate picture I.D., and cash. Visit the University Store Web site at <http://store.towson.edu> for information about textbooks, the Used Book Buy-back, refund policy, hours, caps and gowns, to order textbooks and TU merchandise, and to order textbooks online.

UNIVERSITY UNION

Information Desk, 410-704-4636

The University Union is the hub of co-curricular activities and programs for the campus, as well as home to a multitude of student services. Generally, the educational, cultural and social programs held in the Union are intended for the entire academic community. The Union is a place where students, faculty, staff and alumni can relax, interact, and share common interests and experiences. The following offices and services are located in the University Union:

First floor—A full-service post office; a full-service Capital One bank branch; the University Store; Paws café featuring billiards, food, entertainment, music, and a cyber café with made-to-order deli and grill items, Starbucks coffee and pastries; the Auxiliary Services Business Office; Art Services; Ticket Office; and Event and Conference Services.

Second floor — The University Union Information Desk; the Susquehanna Food Court, a mall style eatery; the Patuxent Grill, which offers high-quality dining at reasonable prices; the Auxiliary Services administration suite; the offices of the Student Government Association (SGA); the Office of Student Activities, which includes Commuter Affairs, Greek Life (fraternities and sororities), the Student Leadership Programs, and Off-Campus Housing Programs; the office of the Black Student Union; the Campus Ministries Office; New Student Programs; the Office of Diversity Resources; the Potomac Lounge, a comfortable study and lounging spot; the offices of Event and Conference Services, where reservations for rooms and other campus facilities may be made and audiovisual/technical services requested; and the University Union office suite.

Third floor — *The Towerlight*, Towson University's student newspaper; the African American Cultural Center; the Women's Center; the offices of the Students Achieve Goals through Education (SAGE) Program; the Queer Student Union; several multipurpose conference rooms; and a number of nooks and crannies for contemplation and conversation.

VETERANS CENTER

Psychology Building 107, 410-704-2991
www.towson.edu/veterans/index.asp

The Veterans Center provides educational, social and personal enrichment opportunities for the veteran community of Towson University. The center seeks to create an enhanced learning environment by providing veteran students with support and resources in a veteran-friendly atmosphere, and by addressing the unique issues and challenges

that veteran students face when entering into the university environment. Staff at the center will assist veterans with information regarding the G.I. Bill, VA services, financial aid and guidance through the university application and enrollment processes. Staffed by the Coordinator of Veterans Services and veteran student assistants, the Veterans Center is the one-stop-shop for securing information necessary to successfully make the transition to college life.

Key services offered by the Veterans Center:

- Assistance with Montgomery G.I. Bill and associated financial aid issues
- Coping with the transition from military to collegiate life
- Fostering friendships through extracurricular activities, sports and camaraderie
- Assistance with problems and issues encountered on campus

Thank You Grant

Towson University offers Thank You Grants to qualified U.S. military personnel and recent veterans. As the name suggests, Thank You Grants reward active-duty personnel and veterans for their service by helping to defray the cost of attending the university.

The grants are intended to supplement Veterans Administration (VA) education benefits, which

no longer cover full tuition for many veterans. In implementing the Thank You Grant program, TU seeks to reduce the financial strain these men and women often face while pursuing their degrees.

The Thank You Grant program awards up to \$500 per term for eight terms for eligible students: newly admitted, currently enrolled and readmitted veterans or active-duty service members. Full-time students who meet all criteria receive \$500 per term; with part-time students receiving \$250 per term. Recipients must have degree-seeking status at TU. Applicants are also required to have been on active-duty status for no fewer than 12 months; veterans must have been released from service after October 24, 2001. Those on release status must be eligible for VA benefits.

VETERANS OFFICE

Enrollment Services 233, 410-704-3094

The office provides coordination between veteran/dependent students and the regional office of the Department of Veterans Affairs. The coordinator establishes procedures and prepares forms and correspondence for eligible students to receive educational benefits. Additionally, the officer monitors class attendance and evaluates academic progress to ensure that those receiving benefits maintain satisfactory progress. This officer also supervises the employment of VA work/study students.

Students may visit the office daily from 8:30 a.m. to 4 p.m. but may wish to call for an appointment. The minimum time for the Regional Office of the Veterans Administration to process an enrollment certification is six weeks. Certification is not automatic.

The proper VA forms must be completed each term.

NOTE: Students cannot be certified for courses until they register.

Withdrawals

When students decrease unit load during the course of the term, they must notify the TU Veterans Office. Failure to do so could result in termination of benefits and a financial debt to the U.S. Department of Veterans Affairs.

FX Grades

Students who receive an FX at the end of a term should contact the university office immediately.

Change of Program

Veterans may change their academic program once without VA approval. For more than one change of program, however, veterans may be required to undergo counseling by the Veterans Administration. A Change of Program Form must be filed whenever veterans make a curriculum change in which any of the courses for which VA benefits were previously received do not transfer into the new program or whenever students declare a new major or matriculate at a different institution.

Independent Study

Payment for independent study courses will generally be made on a tuition and fees basis only. Monthly rates may be paid for such courses, provided that more than half of the total number of units for that term are in courses requiring class attendance. Check with the office to determine eligibility to pay for independent study courses.

Advance Payment

Advance payment is the allowance for the first two months of an enrollment period. All tuition and fees are due according to regular university deadlines and cannot be deferred pending receipt of advance payment. Students may apply for advance pay only if they will be enrolling at the university on at least a half-time basis and meet established deadlines. There must be one full calendar month break between terms to apply for the advance.

Students may request advance pay for the regular academic terms in writing on the Declaration of Intent Form. The student must be registered one month before the term commences to qualify for advance payment.

Approved Program

The VA will pay veterans only for the courses listed in the *Undergraduate Catalog* that are required for a degree and for programs that have been approved for study by the Veterans Administration. If students take courses in addition to those listed for their approved program, they will not be entitled to receive VA benefits for them.



Academic Resources

Towson offers its students many opportunities to enhance their lives with academic support and extracurricular activities. Some of these programs will help students with their studies, while others will provide cultural enrichment.

ACADEMIC ACHIEVEMENT CENTER

Cook Library 524
E-mail: achieve@towson.edu
www.towson.edu/aac
Phone: 410-704-2291
Fax: 410-704-3216
Director: Terri Massie-Burrell, Ph. D

The Academic Achievement Center (AAC) coordinates tutorial services, academic coaching, study skills assessment and workshops at Towson University. The AAC is a comprehensive undergraduate academic support program and university-wide resource serving the undergraduate student population. Its mission is to support the university's retention efforts by teaching the necessary skills and strategies to help students become successful and independent learners. We provide student-centered tutoring services, structured study groups and workshops for improving academic performance, as well as other supplemental educational opportunities. All services are free of charge.

Tutoring Services

Peer tutoring support and strategic study skills are provided for Towson undergraduates. Tutoring is available mainly in small group sessions, for most lower-division and a select number of upper-division courses. Services are available on a first-come, first-served basis and depend upon the availability of a qualified tutor. Students can request up to one hour of tutoring weekly per course. The tutor training program is internationally certified by the College Reading and Learning Association (CRLA) through level-3/Master tutor.

Tutorial Support Network Services

Tutoring at the AAC, Cook Library 524
Coordinator: Frank Mullen, 410-704-2291

Provides drop-in or appointment-based tutoring for students enrolled in lower-division business, economics, foreign language, and behavioral and social science courses.

Computer Science Lab, 7800 York Road, Room 407

Coordinator: Richard Webster, 410-704-2424
Utilizes drop-in tutoring model to assist students enrolled in computer science courses.

Mathematics Lab, 7800 York Road, Room 105

Coordinator: Liz Scarbrough
410-704-2291
Assists students who are enrolled in developmental and lower-division mathematics courses.

Natural Sciences Lab, Smith Hall 538

Coordinator: Liina Ladon, 410-704-3054
Assists students who are enrolled in biology, chemistry, physical science and physics courses through drop-in tutoring, as well as computer-assisted instruction.

Music Tutoring Lab, Center for the Arts 3088
Coordinator: Dr. Kalin Kirilov, 410-704-2819

Provides tutoring for students enrolled in undergraduate music literature, theory and musicianship courses. Tutors are matched with students to work individually on select, pre-determined topics.

Study Skills

Academic Success Strategies Workshops are offered each term and address the following topics: learning style preferences, goal setting, time management, listening, note-taking, textbook skills, memorization, testing strategies, math anxiety, assessment of academic performance and preparation for finals. Individual appointments can be scheduled for informal diagnostics and academic coaching upon request. Students are encouraged to observe their own learning process to adapt their personal learning strategies.

The AAC also provides supplemental computer-assisted instruction in study skills. CASSI, a learning and study strategies inventory, allows students to evaluate their study habits and attitudes in several areas including motivation, anxiety, information processing, selecting main ideas and test-taking. Enrichment strategies are recommended after students complete CASSI.

We administer the Strengths Quest Inventory by Gallup, which is designed for college-age students to assess their top five talents, and the Learning and Study Strategies Inventory (LASSI). Increased proficiency in fundamental skills is provided through technical strategies that facilitate success in college, based on informal assessments and student achievement.

Study Groups/Success Teams

The AAC offers customized Study Groups/Success Teams to provide academic support for various Core Curriculum courses, and developmental reading and math. Study Groups/Success Teams can be organized upon request. Teams are designed to improve out-of-class study habits and academic behavior. The group is a task-oriented study system that requires students to employ active learning skills in a small group setting. Students who participate in this group setting are sometimes recommended by faculty while some students may contact the AAC for placement into a group. This program is unlike tutoring in that students are expected to complete out-of-class assignments and group practice items for the purpose of mastery. Students are aware that class attendance combined with commitment to regularly attend group meetings is expected. The Study Group/Success Teams are designed to encourage collaborative and active learning while supporting peers in similar or same subject areas. Our role is to model active student learning, which is demonstrated through these groups. The AAC employs various learning techniques to foster competency within each group and encourages participants to share feedback. For more information, visit www.towson.edu/aac.

OTHER TUTORING SERVICES

Writing Lab
Linthicum 308
410-704-3426

Assists with writing, brainstorming ideas and outlining the structure of papers and essays at the graduate and undergraduate level.

Writing Support Program
Linthicum 201B
410-704-2857

Assists students with sentence-level and grammar skills (ENGL 251/ENGL 350). This service is for native English speakers.

ESOL Writing Services
Administration Building 216
410-704-5016

Assists students, for whom English is a second language, with sentence-level and paragraph/essay-level skills.

Online Writing Support
www.towson.edu/ows
Linthicum 201B
410-704-2857
Provides online assistance and interactive exercises for grammar and punctuation skills.

DEVELOPMENTAL EDUCATION

Coordinator: Stephanie Hunt
410-704-2291

The Developmental Education Office within the Academic Achievement Center administers competency testing in the basic skills of reading, writing and mathematics. All entering freshmen, both first-year and transfers, are required to demonstrate competence in the basic skills.

Minimum scores of 500 on the Math, Critical Reading and/or Writing sections of the SAT I Reasoning Test, minimum scores of 21 on the Math, Reading and/or English sections of the ACT, and some transfer courses may verify student competence in these skills. If students do not meet these requirements, the appropriate sections of the Accuplacer test, published by the College Board, will be administered. The SAT and ACT scores must be officially submitted to Towson University's Office of Admissions. Please check for additional exemptions at www.towson.edu/placementtesting.

Only those who need to be tested will be contacted. For those students who are not exempt based on the above criteria, placement testing must be completed before the student is registered for relevant classes. Based on test results, the student may be placed into developmental courses that may not count toward graduation credit. Developmental course work must be completed by student's second term. Matriculating students who do not achieve minimum proficiency (i.e., fail to achieve a minimum grade of S or C) in any developmental course requirement are subject to a review of academic records and/or intentional advising prior to course registration for subsequent term.

ACADEMIC ADVISING

Lecture Hall, 410-704-2472

This office coordinates undergraduate academic advising, including services offered by the Academic Advising Center, First-Year Experience and New Student Registration. Towson University is committed to providing comprehensive advising designed to enrich the educational experiences of every student. Towson offers a distinctive advising program called the First-Year Experience for students. All students are encouraged to seek advising at any time during their academic career. Sophomores, juniors and seniors who have chosen

a major are assigned a major adviser by the appropriate department.

Academic Advising Center

Lecture Hall, 410-704-2472

John McKusick, *Director*

The Academic Advising Center supports the advising needs of the university's students and faculty. This center serves as a clearinghouse for information about the university's policies, procedures and requirements. Professional advisers help freshmen and students without declared majors review their progress toward the fulfillment of degree requirements and advise these students about developing academic goals, planning programs, selecting courses, investigating majors and minors, clarifying catalog year choices, and meeting standards. In addition the center's advisers conduct special advising for students who have received academic warnings or who are on academic probation. Students who have questions or concerns prior to meeting with their major advisers can meet with trained peers through the Student Academic Advising Program, Lecture Hall, 410-704-3497.

New Student Registration

As new freshmen matriculate to Towson University, they communicate with the Academic Advising Center to select courses that meet their goals and interests. Professional advisers prepare the student's first-term course schedule with information supplied by the student. New transfer students meet with professional and faculty advisers during a one-day advising and orientation program to choose their first-term schedules.

First-Year Experience

The First-Year Experience (FYE) is a unique advising program for freshmen which pairs each incoming student with a faculty member or professional adviser who has received special training. Together, advisers and students work throughout the first year to orient the new college student to the university and to identify and use resources that will enhance the student's educational experience and transition to the university. The relationship between the FYE adviser and the new student helps develop successful, active members of the university community who are able to make effective educational decisions.

Following FYE, students who have chosen a major are advised by faculty advisers within the major departments.

Intentional Academic Advising

Intentional academic advising is a systematic process that supports the student in his/her exploration and clarification of academic and professional goals. Academic advising is an integral part of the teaching/learning experience, which allows the student to work progressively with advisers in a strategic planning process across all years at the university.

All second-year or higher students who have declared a major are subject to major-based intentional academic advising. Upon a student's declaration of a major, the appropriate departments will assign a faculty adviser. Students who have not yet declared a major will be advised by a professional adviser in the Academic Advising Center.

First-term transfer students with a declared major are assigned to departmental advisers. Transfer students who have not declared a major are assigned to advisers in the Academic Advising Center.

OFFICE OF TECHNOLOGY SERVICES

Towson University's Office of Technology Services (OTS), through the cooperative effort of several departments, including the Center for Instructional Advancement and Technology, OTS Training and Student Computing Services, provides computing support for all university students, faculty, and staff.

Please note that it is essential for you to activate your TU-based NetID and check your e-mail on a regular basis. The university uses your NetID to communicate with you on all official matters.

The university upholds copyright law and does not tolerate illegal file sharing or other forms of copyright infringement. Any violation is considered a serious offense and may result in administrative, disciplinary or legal action. If you have peer-to-peer (P2P) file-sharing software on your PC, our best advice is to remove it before you come to campus. P2P programs are notoriously exploited to fill your computer with malware. Even worse, a slightly misconfigured program can cause the contents of your computer to be shared across the P2P network. Additional information regarding the law, the consequences for violators, and legal sources for online media is available at www.towson.edu/filessharing.

Center for Instructional Advancement and Technology (CIAT)

Cook Library 405, 410-704-2005

E-mail: ciat@towson.edu

www.towson.edu/ciat

The Center for Instructional Advancement and Technology (CIAT) supports excellence in teaching and learning by providing Towson University faculty the opportunity to investigate and apply sound learning theory and technology to instruction. The CIAT staff works with faculty to design curriculum and courses; develop course materials; implement teaching and learning strategies; and to identify and use appropriate technology applications that apply to teaching and learning. The three supporting functions of CIAT are instructional design, technology support, and multimedia applications.

OTS Training

Cook Library 408, 410-704-4070

E-mail: otstraining@towson.edu

www.towson.edu/otstraining

OTS Training offers self-help documents, movie tutorials and workshops to support students' interest in technology and its application to their academic work. These resources address both general topics (e.g., operating systems and applications) as well as some specific to the Towson University environment (e.g., configuring your computer for our wireless networks). For more information, visit <http://www.towson.edu/otstraining>.

Student Computing Services

Cook Library 35, 410-704-5151

E-mail: scs@towson.edu

www.towson.edu/scs

Student Computing Services (SCS) is a collection of integrated support services available to students in a single, convenient location. The SCS

Service Desk provides students a point of contact for their technology-related issues, supporting access and use of all the major student systems at Towson University, including Tiger (Web host and file storage), Towson Online Services (advising, schedules, course registration, bill payment), Learn Online (course management system) and Webmail Powered by Google. The Service Desk also provides assistance with connectivity issues, wireless network configuration, virus and spyware removal, and general application questions.

Additionally, SCS operates a computer lab, a learning center and a multimedia studio where students have access to standard and course-based software applications; black and white, color, and large-format printing; collaborative workstations; consultations with SCS staff; rehearsal space for presentations; studio space for audio/video production and short-term loans of digital cameras and camcorders. These facilities and resources are available to all students regardless of major. Current SCS hours of operation and additional information are available at www.towson.edu/scs.

If the best solution to a problem involves training, SCS may refer students to OTS Training. For students whose needs exceed the workshop solution, individual consulting is available.

The Towson University Residential Network, or ResNet, is managed by the Office of Technology Services (OTS) and supported by SCS. ResNet service and support are only available to students living in university-managed residence halls.

Finally, SCS supports Towson University's Student Laptop Purchase Program, which offers incoming and current students the opportunity to buy systems selected to provide optimal performance and compatibility with the on-campus environment. Dell systems covered under warranty and purchased through the program can receive hardware support by vendor-certified technicians at the SCS Service Desk.

Faculty and staff support is handled by the OTS Help Center, Cook Library 29. The OTS Help Center can be reached at 410-704-5151 or help-center@towson.edu.

FINE ARTS

Towson University, a center for the fine and performing arts in the Baltimore area, offers students a host of programs and concerts, many free of charge and others which offer discounts to students. In addition, Towson is home to an array of live theater, concerts, films, lectures, debates, musicals and arts galleries.

Dance

The TU Dance Company is considered one of the premier university dance companies in the mid-Atlantic region. The company presents annual concerts and regularly performs works by internationally and nationally recognized choreographers. The Department of Dance produces the Inertia faculty-alumni concert, dance majors performance project, and Sigma Rho annual dance showcase.

Electronic Media and Film

The Department of Electronic Media and Film (EMF) sponsors a film series each fall. The films are screened on Mondays at 7:30 p.m. in Van Bokkelen Hall Auditorium. EMF also hosts the student-run Halfway There Film Festival each December. During the spring term, EMF sponsors an anime

series, an international film festival, the Media Active film festival, WAMM Fest and a Media Arts Festival showcasing student work. Alumni screenings are scheduled throughout the year.

Music

The Department of Music's instrumental and vocal ensembles—including University Chorale, Vocal Jazz Ensemble, Choral Society, Orchestra, Symphonic Band, Percussion Ensemble, Woodwind Ensemble, Brass Ensemble, Guitar Ensemble, Jazz Ensembles (large and small), Commercial Ensemble, Chamber Ensembles and Early Music Ensemble—present more than 50 concerts each year in the Harold J. Kaplan Concert Hall and Recital Hall at Towson's Center for the Arts.

Theatre

Towson presents many productions each year in one of four campus theatres and other local venues. Occasionally our M.F.A. program performs at the Baltimore Theatre Project. The productions range from Shakespeare to musicals to new experimental performances, featuring Towson theatre majors, and talented students from other disciplines.

ART GALLERIES

Asian Arts & Culture Center

Center for the Arts 2038

410-704-2807

www.towson.edu/asianarts

The Asian Arts & Culture Center at Towson University promotes the art and culture of Asia through outstanding programming designed to benefit students, faculty, artists, the local community, and the state of Maryland.

To make art and culture an integral part of every student's education, the Asian Arts & Culture Center's activities include art exhibitions, concerts, lectures, films, workshops and demonstrations that are available to students and the public throughout the year.

The Asian Arts Gallery exhibits are used by many faculty members as part of their teaching programs. To students of Asian art history, philosophy, history and language, a visit to the gallery provides an opportunity to gain direct contact with art objects and a deeper understanding of the culture they are studying. For those taking studio art courses, the gallery is a place to explore different techniques and develop aesthetic sensibilities. Local schools, libraries and service organizations may borrow selected items from the collections for their educational programs.

Center for the Arts Gallery

Holtzman M.F.A. Gallery, Center for the Arts
Towson Commons Gallery, York Road

The galleries present a variety of exhibitions to the Towson community and metropolitan region, including student and faculty exhibitions as well as national and international exhibitions. The Center for the Arts Gallery emphasizes contemporary art by regional, national and international artists; the Holtzman M.F.A. Gallery focuses on thesis exhibitions and exhibitions that pertain to the M.F.A. program; the Towson Commons Gallery hosts student and faculty exhibitions.

Lieberman Collection, Honors College

Stephens Hall, Lieberman Room

The Lieberman Collection of oil paintings, sculptures, ink drawings, lithographs, photographs and art books was donated to Towson University by Dr. and Mrs. Sidney Lieberman in memory of their sons. The collection is on display in the Honors College, located in Stephens Hall.

INTERNATIONAL EDUCATION

Specific information about any of the international programs and services is available by contacting the offices listed below.

Asian Arts & Culture Center

Location: Center for the Arts

Contact: Suewhei Shieh, Director

Phone: 410-704-2807

E-mail: sshieh@towson.edu

www.towson.edu/asianarts

English Language Center

Location: ES331

Contact: Lynda Mermell, Director

Phone: 410-704-2552, Fax: 410-704-2090

E-mail: medwards@towson.edu

www.towson.edu/elc

English for Speakers of Other Languages (ESOL)

Location: English Department, Linthicum Hall 218E

Contact: Jennifer Mott-Smith, Director

Phone: 410-704-2110, Fax: 410-704-3999

E-mail: jmottsmith@towson.edu

ESOL Writing Services

Location: Administration Building, Second Floor

Contact: Carol Phippen, Ph.D., Director

Phone: 410-704-5016

E-mail: cpippen@towson.edu

Institute for Korean-U.S. Business Relations

Location: Administration Building, Second Floor

Contact: Bong Shin, Director

Phone: 410-704-5266, Fax: 410-704-4646

E-mail: bshin@towson.edu

International Student Exchange Program

Location: Administration Building, Second Floor

Contact: Study Abroad Office

Phone: 410-704-2451, Fax: 410-704-4703

E-mail: studyabroad@towson.edu

www.towson.edu/studentexch

International Student and Scholar Office

Location: Administration Building 246

Contact: Janene Oettel, Director

Phone: 410-704-2421, Fax: 410-704-6040

E-mail: isso@towson.edu

www.towson.edu/isso

International Studies Program

Location: Linthicum Hall 118G

Contact: Alison McCartney, Director

Phone: 410-704-5284, Fax: 410-704-2960

E-mail: inst@towson.edu

www.towson.edu/polsci/internationalstudies

International Undergraduate Admissions

Location: Administration Building, 218

Contact: Jeffrey Haas, Director

Phone: 410-704-6069, Fax: 410-704-6070

E-mail: intladm@towson.edu

www.towson.edu/intladm

Study Abroad Office

Location: Administration Building, Second Floor

Contact: Rebecca Pisano, Director

Study Abroad Office

Phone: 410-704-2451, Fax: 410-704-4703

E-mail: studyabroad@towson.edu

www.towson.edu/studyabroad



Summer in Maryland Program (for international students)

Location: Administration Building 234
 Contact: Arlene Prince, Coordinator
 Phone: 410-704-2239, Fax: 410-704-4646
 E-mail: aprince@towson.edu
www.towson.edu/sim

Towson-Oldenburg Exchange Program

Location: Administration Building, Second Floor
 Contact: Armin Mruck, Adviser
 Phone: 410-704-5267, Fax: 410-704-4646
 E-mail: amruck@towson.edu

LIBRARY

Albert S. Cook Library
 410-704-2456 Circulation Services
 410-704-2462 Reference and Instruction Services
<http://cooklibrary.towson.edu>

Centrally located on campus, the Albert S. Cook Library supports student scholarship by providing a wide array of resources, services and learning opportunities.

Cook Library serves as an information hub with more than 270 computer workstations available to connect users to library catalogs, electronic databases, electronic books, online journals, and the Internet. The library has two electronic classrooms and a multimedia lab with video editing software and nearly 18,000 CDs, films, videos and DVDs. Wireless Internet, networked printers, and photocopy machines are located throughout the building as well. Students have access to group study and individual quiet study space across the library: Nine group study cubicles are available on the third floor, while the fourth floor and room 200C of the library are dedicated to quiet study. In addition, the library provides a leisure reading collection on the third floor and hosts events throughout the year, such as book discussions and noontime jazz concerts in the lobby. Starbucks™ also is located conveniently in the library lobby.

Individualized research and reference help are available to students in person and virtually via text messaging, instant messaging, e-mail and telephone. Reference librarians also teach students how to find, obtain, use and analyze print and digital information through scheduled classes and research consultations by appointment.

Cook Library's online catalog and electronic resources are accessible to TU students any time, anywhere through the library's web page: <http://cooklibrary.towson.edu/>. The library's collection includes more than 600,000 books, and 190,000-plus electronic books. Students also have access to more than 250 electronic databases and approximately 40,000 electronic and print journals. The University Archives and Special Collections give students an opportunity to experience history at their fingertips through collections of rare books and historical Towson University documents and photographs. In addition, Towson students can utilize other area library collections. They may request books from the University System of Maryland and Affiliated Institutions (USMAI) libraries, and they have access to many private college and university libraries in the Baltimore area. Materials needed for academic research may be obtained from around the world via interlibrary loan as well.

Housing and Residence Life

OFFICE

West Village Commons 309, 410-704-2516
 Jerry Dieringer, *Assistant Vice President*
www.towson.edu/housing

HOUSING AND RESIDENCE LIFE

Housing and Residence Life provides living facilities for full-time degree candidates and promotes educational programs and activities that support the university's academic mission. The Housing and Residence Life staff and the University Residence Government strive to maintain an environment that encourages academic excellence, community responsibility and individual development.

Towson University offers on-campus housing for approximately 4,700 students.

- Resident students must sign a contract for university housing, renewable at the option of the university, and must carry a minimum of 12 units. Priority is given to undergraduate students.
- Housing facilities are available to students only when classes are in session. Some special interest programs are open year-round.
- The Housing and Residence Life staff offers assistance and programs for resident students.
- A number of special living options are available, including alcohol-free areas, honors housing and the International House. All buildings are non-smoking.
- The off-campus housing listing service is available for students looking for off-campus housing at www.towson.edu/housing. For more information or assistance, contact the main office.
- Residents must vacate the residence halls after they complete their final term examination.
- Please contact Housing and Residence Life concerning housing eligibility and availability.

University Housing**Glen Complex**

Connected to the rest of the campus by a bridge that crosses over the Glen, this complex includes four high-rise buildings housing about 425 students each. All student accommodations are suites, with two rooms sharing a bath. There is a lounge area on each floor and a centrally located dining hall in the complex.

Prettyman and Scarborough Halls

These low-rise residence halls enclose a garden courtyard and house approximately 160 students each.

Residence Tower

This 13-story, high-rise residence hall accommodates approximately 500 students in double and single rooms. There is a lounge area, study room and kitchen on each floor, and a recreation room and laundry facility on the lower level of the building. The Residence Tower accommodates students requesting the International House. Both nine- and 12-month housing options are available for international students.

Towson Run Apartments

These one-, two-, and four-bedroom apartments for upper-level undergraduate students are fully furnished. In addition to double bedrooms, each apartment has a full kitchen and living/dining room. Approximately 420 students are housed at Towson Run. Nine-month housing is available. For students electing this option, the apartments are open during term breaks.

Barton and Douglass Houses

These two new residence halls house 650 students and are located in West Village. Each building contains premium double-occupancy rooms with private bathrooms and many lounge spaces. Douglass House is designated as the Honors College residence hall.

Paca and Tubman Houses

443-275-4060
www.pacatubman.com

The two five-story buildings, built in 2008, that comprise the facility house a combined 668 beds and contain all double-occupancy rooms with a private bathroom. As the buildings are co-managed by Capstone Properties and the Towson University Department of Housing and Residence Life, leasing/assignments and facilities will be managed by Capstone, while Residence Life functions such as staffing and programming will be managed by TU Housing and Residence Life staff. Residence hall staff members will live in each building and work with students to create a community atmosphere. For more information about Paca and Tubman houses go to www.pacatubman.com.

Millennium Hall

Capstone Properties
 8000 York Road, 443-275-4000
www.millenniumhall.com

Millennium Hall, Towson University's five-story residence building, offers housing for 412 sophomores, juniors and seniors in four-bedroom furnished apartments. Co-managed by Capstone Properties and Housing and Residence Life, the building is Towson's first privatized residence hall. Each four-bedroom apartment accommodates four students and is fully furnished, with a living/dining room and full kitchen. Each bedroom has a telephone jack, cable TV, and computer connection. The building is air-conditioned and has a laundry room on the first floor. All inquiries should be directed to Millennium Hall.

Expenses

Expenses are estimates at the time of printing this catalog and are subject to revision. NOTE: Notwithstanding any other provision of this or any other university publication, the university reserves the right to make changes in tuition, fees, housing and boarding costs, and other charges at any time such changes are deemed necessary by the university and the University System of Maryland Board of Regents.

APPLICATION AND ENROLLMENT FEES

Each applicant must pay a nonrefundable application fee of \$45 for fall 2011 for domestic students and \$30 for international students. No application will be processed without this fee or a valid waiver.

Once students are admitted for fall 2011, a nonrefundable \$300 enrollment fee must be forwarded to the Office of Admissions to reserve a place in the class.

TUITION

The University System of Maryland Tuition Policy, approved by the Board of Regents on June 11, 1993, established *non-resident tuition* at the calculated actual educational cost at each institution within the system and based the increase in the non-resident tuition and fees on that cost. Additionally, the policy recommends each institution to provide a four-year plan of tuition and fees for both resident and non-Maryland resident students. The two charges — Maryland resident and non-Maryland resident — shown below, provide the projected, per term rates for fall 2011 through fall 2014.

The tuition and fee increases for the next three years are based on fall 2011 rates. They do not include increases related to inflation and other cost factors not known at this time.

The tuition policy is available for review in the following offices:

- All academic departments
- Office of the Bursar
- English Language Center
- College of Graduate Studies and Research
- International Student and Scholar Office
- Office of the Registrar

MARYLAND RESIDENTS				
Tuition and Mandatory Univ. Fees (Per Term)	Projected (Subject to Change)			
	Proposed Fall 2011	Fall 2012	Fall 2013	Fall 2014
Full-Time Undergraduate (12 units or greater) Tuition and Mandatory Univ. Fees	\$3,953/term	\$4,223/term	\$4,505/term	\$4,686/term
Part-Time Undergraduate (Fewer than 12 units) Tuition and Mandatory Univ. Fees	\$339/unit	\$353/unit	\$367/unit	\$381/unit
Graduate (Fewer than 12 units) Tuition and Mandatory Univ. Fees	\$436/unit	\$453/unit	\$472/unit	\$490/unit

NON-MARYLAND RESIDENTS				
Tuition and Mandatory Univ. Fees (Per Term)	Projected (Subject to Change)			
	Proposed Fall 2011	Fall 2012	Fall 2013	Fall 2014
Full-Time Undergraduate (12 units or greater) Tuition and Mandatory Univ. Fees	\$9,709/term	\$9,979/term	\$10,261/term	\$10,672/term
Part-Time Undergraduate (Fewer than 12 units) Tuition and Mandatory Univ. Fees	\$809/unit	\$841/unit	\$875/unit	\$910/unit
Graduate (Fewer than 12 units) Tuition and Mandatory Univ. Fees	\$808/unit	\$840/unit	\$874/unit	\$909/unit

MANDATORY UNIVERSITY FEES

Athletics Fee

The Athletics Fee supports 20 intercollegiate sports competing at the NCAA Division I level. Towson Athletics belongs to the Colonial Athletic Association (CAA) and is affiliated with the Eastern Collegiate Athletic Conference (ECAC). All students are admitted free to all TU sporting events.

Auxiliary Services Fees

The Auxiliary Services Fees support a variety of student services and operational functions provided by the university. The fees include funds for support services including University Child Care, OneCard and SGA financial support. The fees also support the building and operational requirements of the University Union and West Village Commons.

Student Government Association Fee

A \$40 per term Student Government Association Fee is assessed to all full-time undergraduate students taking 12 or more units. Undergraduate students taking less than 12 units are assessed \$3 per unit for the Student Government Association Fee. Graduate students are assessed \$2 per unit for the Student Government Association Fee.

Technology Fee

It is the university's goal to create a student-centered learning infrastructure that recognizes how technology is changing the methods for organizing and disseminating information, delivering student services and administering the educational enterprise. Undergraduate students taking 12 or more units are assessed an \$80 per term Technology Fee. Undergraduate students taking less than 12 units, as well as graduate students, are assessed a \$7 per unit Technology Fee, up to a maximum of \$80 per term.

Overload Surcharge Fee

A \$40 Overload Surcharge Fee is assessed per unit for all units over 15 per term.

Lab/Class Fees

Departmental courses may assess a lab/class fee that is used to purchase essential supplies and equipment for the course. These fees range from \$10 to \$50 and are allocated specifically to the department by which they are charged. A course's lab/class fee is noted in its course description at the back of this catalog.

TUITION AND FEES PER TERM—Proposed Fall 2011 Rates—Subject to Change

NOTE: Notwithstanding any other provision of this or any other university publication, the university reserves the right to make changes in tuition, fees, and other charges at any time such changes are deemed necessary by the university and the University System of Maryland Board of Regents.

Registration	Residence Status	Tuition ¹	Athletics Fee ²	Auxiliary Services Fees ²	Student Gov't Assoc Fee	Technology Fee	Overload Surcharge Fee ³
Undergraduate Full-time 12 or more units	In-State	\$2,748/term	\$399/term	\$686/term	\$40/term	\$80/term	\$40/unit
	Out-of-State	\$8,504/term	\$399/term	\$686/term	\$40/term	\$80/term	\$40/unit
Undergraduate Part-time Fewer than 12 units	In-State	\$239/unit	\$32/unit	\$58/unit	\$3/unit	\$7/unit, up to \$80/term	
	Out-of-State	\$709/unit	\$32/unit	\$58/unit	\$3/unit	\$7/unit, up to \$80/term	
Graduate	In-State	\$337/unit	\$32/unit	\$58/unit	\$2/unit	\$7/unit, up to \$80/term	
	Out-of-State	\$709/unit	\$32/unit	\$58/unit	\$2/unit	\$7/unit, up to \$80/term	

¹Refer to Appendix C for tuition residency qualifications.

²Mandatory University Fee is now displayed as two fees — Athletics Fee and Auxiliary Services Fees.

³An Overload Surcharge Fee is assessed per unit for all units over 15 per term.

Student Classification Fee

A Student Classification Fee of \$200 is assessed one time to all degree candidates who have attained junior standing (60 units). The revenues from this fee are collected centrally and utilized to enhance resources available for instructional equipment and facilities.

SATELLITE CAMPUS RATE STRUCTURE

Satellite Locations 25 Miles or More from Towson University

Towson University offers reduced Auxiliary Services Fees, and excludes the Athletics Fee and the Student Government Association Fee, for classes taken at satellite locations 25 miles or more from the TU campus. Regular tuition rates apply.

Note: Regular fees are assessed for classes that do not qualify for the satellite location rate reduction.

- For 11 or fewer units taken at satellite locations 25 miles or more from campus, undergraduate classes are assessed a \$40-per-unit Auxiliary Services Fee and a \$7-per-unit Technology Fee, and are excluded from the Athletics Fee and the Student Government Association Fee.
- For 12 or more units taken at satellite locations 25 miles or more from campus, undergraduate classes are assessed a \$474-per-term Auxiliary Services Fee and an \$80-per-term Technology Fee, and are excluded from the Athletics Fee and the Student Government Association Fee.
- Graduate-level classes taken at satellite locations 25 miles or more from campus are assessed a \$40-per-unit Auxiliary Services Fee and a \$7-per-unit Technology Fee, and are excluded from the Athletics Fee and the Student Government Association Fee.

OTHER FEES AND EXPENSES

CENTER FOR APPLIED INFORMATION TECHNOLOGY (AIT COURSES)

AIT rates differ from university rates. For details see the CAIT website, www.towson.edu/cait.

HEALTH INSURANCE POLICY MANDATORY FOR INTERNATIONAL STUDENTS

All international students on F, J or any other non-employment-related visa status are required to have health insurance that meets the university's minimum standards. These students are automatically enrolled in the university-sponsored health insurance plan. The insurance charge will be reflected on your financial account. Although this insurance is mandatory, students with their own insurance who want an exemption (waiver) from the school plan must submit an online waiver application as soon as they arrive at Towson, which verifies that their insurance coverage meets the university's minimum standards. Applications for a waiver must be completed online by the waiver deadline of the student's first term at Towson and each fall term thereafter. Waiver deadlines are September 15 for fall term, February 15 for spring term and June 15 for summer term. For information about school-sponsored insurance, Towson's mandatory insurance policy for international students and the waiver process, call Dowell

Health Center at 410-704-3703 or visit www.towson.edu/dowellhealthcenter and click on International Students.

HEALTH INSURANCE PLAN FOR U.S. CITIZENS

A voluntary health insurance plan designed especially for Towson University students is offered at a very reasonable cost. All students on intercollegiate athletic teams and health professions students (nursing, occupational therapy and physician assistant programs) are required to have health insurance. However, we strongly recommend that all students have health insurance to avoid the expense of large, unexpected medical bills. The school-sponsored plan is an excellent value that should be considered by any student needing insurance. It provides primary care services through the university's Dowell Health Center as well as coverage for hospitalization, emergency care, diagnostic tests and referrals to a large network of participating specialists. Billing statements will not reflect the cost of the insurance. Enrollment is handled directly through the insurance company and can be done online (see Student Health Insurance link on the Dowell Health Center website). Should a student withdraw from the university after 31 days or more of active class attendance, coverage will remain intact for the policy year. Any questions regarding coverage should be directed to the Dowell Health Center, 410-704-3703. See Health Insurance under Health Services, Student Life and Campus Services or visit the Health Center website, www.towson.edu/dowellhealthcenter.

HOUSING AND DINING FEES

Students interested in living in university housing must make a \$350 non-refundable housing deposit by the established procedures and meet all deadlines. Failure to pay all room and meal plan charges may result in forfeiture of residence hall space. Note: Students living in Millennium Hall, Paca House or Tubman House have a separate application, deposit and payment process with Capstone Management.

Depending upon the room and meal plan selected, students living on campus pay approximately \$4,700 per term for room and meal plan. For those students who enter university housing after the beginning of a term, the charge will be prorated for the remainder of the term. (For exact rates, contact Housing and Residence Life, or visit www.towson.edu/housing for more information.)

Choosing a Meal Plan

Students can choose from a variety of flexible dining plans. Resident students can choose from one of our "Flex" weekly plans, offering anywhere from 10 to 19 meals per week. A meal week consists of 19 meal periods: three meals served Monday through Friday, and brunch and dinner served on Saturday and Sunday. The estimated cost of a dining plan for resident students will range from approximately \$1,875 to \$2,275 per term (prices are subject to change). Most resident students select the 14-meal-per-week plan, as it provides enough meals to eat at least two times per day for seven days a week. Dining plans also come with dining points which can be used for a-la-cart purchases at all on-campus dining locations. There are over a dozen dining venues on campus including all-you-care-to-eat dining facilities, a-la-carte locations such as Chick-

fil-a, and convenience stores. Menu options range from traditional favorites to vegetarian, kosher and halal cuisine. Students living at Millennium, Paca, Tubman, Barton, Douglass, Towson Run Apartments, or in nearby apartments, as well as commuter students, are not required to have a dining plan. However, these students may choose to purchase any of our dining plans, including one of the very popular Block Meal Plans. Please visit www.towson.edu/dining for more information.

Millennium Hall, and Paca and Tubman Houses

These student housing facilities are privately operated and rents are not included as part of the university's term billing statement. Rents for Millennium Hall, Paca House and Tubman House are to be paid to Capstone Management.

NURSING EDUCATIONAL TESTING FEES

Students accepted to and enrolled in the Nursing major are charged a fee of \$100 per term to cover the costs of Educational Testing Examinations which are administered at the end of each term. The fees will be attached to clinical courses at the junior level and clinical courses at the senior level. If a clinical course is repeated, the student will be charged an additional \$100. Educational Testing Fees are non-refundable after the change of schedule period. Please note the Educational Testing Fees do not apply to the RN to B.S. completion students.

PARKING FEES

All students are required to register their automobiles with the university in order to obtain a parking permit. Parking permits are required 6 a.m.–8 p.m. Monday-Thursday, and 6 a.m.–3 p.m. on Friday. Spaces will be available for those with a parking permit. However, depending on your arrival time, spaces may only be available at the Towson Center. Resident freshmen are not permitted to purchase parking permits or have a vehicle on campus. There are limited exceptions to this policy. Information about parking policies is available on the Parking and Transportation website.

Parking permits must be purchased online at www.towson.edu/parking. Campus maps and other parking-related information are also available at this website. Parking permits may be mailed to students or picked up from the Auxiliary Services Business Office, in the University Union, across from the University Store. Student parking permits go on sale in early August 2011 and will be available throughout the year. For permit fees, questions or additional information, visit www.towson.edu/parking.

PDS/STUDENT TEACHING/CLINICAL PRACTICUM FEES

Students enrolled in PDS internship, student teaching or a clinical practicum are charged a fee ranging from \$60 to \$700 per experience. Students must confer with their department chair or with the director of the CPP office in the College of Education to determine the exact fee. These courses are designated PRC, STT and CIN.

PRIVATE MUSIC LESSON FEES

Students enrolled in private music lessons are charged a fee of \$100 or \$260 per unit, depending upon course registration.

STUDY ABROAD FEES

A fee of \$300 for the fall and spring terms, \$150 for short-term programs is assessed for study abroad.

TEXTBOOKS

Students are expected to obtain the required textbooks for their courses. The average cost for textbooks ranges from \$400 to \$600 per term. Books and other supplies may be purchased at the University Store, located in the University Union, first floor. Books may also be purchased online by visiting <http://store.towson.edu>.

BURSAR FEES

A \$75 late fee is assessed to any student who does not pay in full or establish a payment plan with the university by the bill payment deadline found on their eBill or at www.towson.edu/bursar. Payment of a student's term bill secures their class schedule for a term; otherwise, cancellation of class schedule may occur.

A \$10 Archived Records Research Fee will be assessed when financial detail involving archived records is requested.

A \$50 penalty fee is assessed when a check or eCheck/ACH payment for fees, fines or services is returned unpaid by the bank for any reason. Failure to reimburse the university for an uncollectable check or eCheck/ACH may result in class schedules being cancelled.

A \$25 late collection fee will be assessed should an account become delinquent and deemed uncollectable, thus requiring referral to the Central Collection Unit of the state of Maryland. This fee is in addition to the collection fee assessed by the Central Collection Unit of the state of Maryland. See **Payment of Fees** below.

A \$25 reissue check fee will be assessed to process a stop payment for a check the Bursar's Office has to reissue.

GRADUATE CHARGES

The following policies apply to graduate students taking a mix of undergraduate and graduate courses and TU seniors taking a graduate course (with special permission):

- If a graduate student takes a mix of graduate and undergraduate courses and the undergraduate unit load is fewer than 12 units, the individual is to be billed per unit in each category, plus part-time university fees.
- If the undergraduate unit load is 12 or more units, the flat undergraduate tuition rate and full-time university fees are billed, with the graduate units billed at the per unit graduate tuition rate.

The following policy applies to graduate students taking all undergraduate courses: If the unit load of undergraduate courses is 12 units or more, the individual is to be billed the flat undergraduate tuition and the flat full-time university fees.

PAYMENT OF FEES

The Bursar's Office distributes all tuition bills electronically. The electronic bill, or eBill, process works as follows:

- When tuition bills are ready each term, students receive an e-mail on their TU account

instructing them to view their bill at the eBill website. Students access this website via their Student Center on Towson Online Services. For further information on how to view an eBill, visit www.towson.edu/bursar and click eBill & Online Payment.

- Students can grant restricted access to parents, guardians, employers or other third parties to view and/or pay tuition bills. Go to www.towson.edu/bursar and click eBill and Online Payment for instructions on how to establish this access.

Students and/or third parties have the following options for making a payment:

- Cash: The Bursar's Office Payment and Rebate Check Disbursement Center is open 8:30 a.m. – 4 p.m., Monday-Friday, and is located on the third floor of the Enrollment Services Center.
- Check or money order: Please make checks or money orders payable to Towson University and include the student's TU ID number on the front of the check. Checks or money orders may be mailed or brought directly to the Bursar's Office Payment and Rebate Check Disbursement Center. For mailing information, please see the Payment Options page at www.towson.edu/bursar.
- eCheck/ACH: Payments may be made online by eCheck/ACH through TU's eBill and Payment System. Instructions on how to do so may be found on the Payment Options page at www.towson.edu/bursar.
- Credit card: *The Bursar's Office does not accept in-person or mailed credit card payments.* However, credit card payments may be made online via TU's eBill and Payment System. Instructions on how to do so may be found on the Payment Options page at www.towson.edu/bursar. All bill payments made with a credit card are processed by a third-party vendor, and are assessed a 2.75 percent convenience fee (minimum \$3) on the payment amount. Discover, MasterCard and American Express credit cards can be used for tuition, fees, room, dining plans and other charges. Due to Visa's restriction on assessing a convenience fee, Visa is not accepted.
- Deferred Payment Plan: The university offers a deferred payment plan that extends to students or third parties a monthly budget plan for meeting the cost of tuition, university fees, and on-campus housing and meals each term. Some student housing facilities (listed below) are privately operated, and rent is not included as part of the university's term billing. Rent payments for these facilities—Millennium Hall, and Paca and Tubman Houses—are to be paid to Capstone Management and therefore **cannot** be included in a deferred payment plan. For more information about the university's deferred payment plan options, visit www.towson.edu/bursar or call the Bursar's Office at 410-704-2100 or 1-888-5-BURSAR.

It is imperative that students adhere to the payment deadlines. To avoid the cancellation of their class schedule, payment in full must be received, or a payment plan must be established, by the bill payment due date found on their eBill or at www.towson.edu/bursar. Completing the bill payment requirement will secure a student's class schedule for the term.

If a student's account reflects a credit or zero balance and they choose NOT to attend the upcoming term, they **MUST** drop all of their classes by the end of the Change of Schedule period in order to receive a 100 percent refund of tuition and fees. Students must withdraw online through Self Service. To withdraw online, login to Towson Online Services and click on Self Service; Student Center; Enroll/Drop. Notification to the instructor does not constitute a proper withdrawal.

Regardless of their account balance, if a student fails to withdraw in the proper manner and time-frame, they will be financially responsible for all term charges. A \$75 late fee is assessed to any student who does not pay in full or establish a payment plan with the university by their bill payment deadline.

WARNING: Payment of an electronic tuition bill (eBill) is the responsibility of the student and is due as outlined at www.towson.edu/bursar. The eBill notice is communicated to each student via their TU campus e-mail. Failure to satisfy the eBill statement balance does not discharge the financial obligation or late payment assessments. **If a student does not receive an eBill notification at least one week prior to their payment due date, they should call the Bursar's Office at 410-704-2100 or 1-888-5BURSAR.**

Towson University's policy, which is supported by the legislative auditors of the state of Maryland, is that *all previous balances must be paid prior to registration for the following academic term.* All payments are used to satisfy the oldest outstanding charge prior to applying any portion of a payment to current or more recent charges. Should the account of any student become delinquent and be sent to the Central Collection Unit of the state of Maryland, a late collection fee of \$25 will be imposed by the university and a collection fee not to exceed 20 percent of the outstanding balance will be charged to the student by the Central Collection Unit of the state of Maryland. In accordance with COMAR Title 17, Subtitle 01, Chapter 02, Section 01 through 05, the Central Collection Unit of the state of Maryland may report debt to a credit bureau and begin intercepting Maryland income tax refunds of individuals indebted to the state colleges, universities and state agencies. Students with outstanding balances should contact the Bursar's Office. Future registration, as well as transcript and diploma requests, will not be honored if a student has a financial obligation to the university. Payments made by check will be subjected to a waiting period of 10 to 30 working days prior to transcripts or diplomas being released or refunds being processed.

PLEASE NOTE: The university will retroactively bill when coding errors are identified.

REFUND POLICIES

If a student chooses not to attend Towson University, they must drop all their classes by the end of the Change of Schedule period in order to receive a 100 percent refund of tuition and fees. Students must withdraw online through Self Service. To withdraw online, login to Towson Online Services and click on Self Service; Student Center; Enroll/Drop. Notification to the instructor does not constitute a proper withdrawal.

For additional information regarding withdrawal, see the **Academic Regulations** section of this catalog.

Withdrawal Refund Policy – Full Fall/Spring Term

If a student chooses to fully withdraw after the Change of Schedule period, the last date on which they withdraw online from a class determines the percentage of the refund. All refund percentages are based on the official start of the term. The timing for effecting refunds is as follows:

1. Through the end of the Change of Schedule Period, 100 percent of tuition and fees shall be refunded to the student.
2. From the first day after the end of the Change of Schedule period through the 21st calendar day after the official start of the term, 50 percent of *tuition only* shall be refunded to the student who fully withdraws from the university.
3. Beginning with the 22nd calendar day after the official start of the session, no refund shall be issued.

Withdrawal Refund Policy – First Seven-Week Session of Fall/Spring Term

Notification to the instructor does not constitute a proper withdrawal. The last date on which a student withdraws online from a class determines the percentage of the refund. All refund percentages are based on the official start of the session. Students are considered full-time when carrying 12 units or greater; therefore, refunds apply only to unit loads under 12. The timing for effecting refunds is as follows:

1. Through the ninth calendar day after the official start of the session, 100 percent of tuition and fees shall be refunded to the student.
2. From the tenth calendar day after the official start of the session through the 21st calendar day, a 50 percent refund of tuition only shall be refunded to the student who fully withdraws from the university.
3. Beginning with the 22nd calendar day after the official start of the session, no refund shall be issued.

Withdrawal Refund Policy – Second Seven-Week Session of Fall/Spring Term

Notification to the instructor does not constitute a proper withdrawal. The last date on which a student withdraws online from a class determines the percentage of the refund. All refund percentages are based on the official start of the session. Students are considered full-time when carrying 12 units or greater; therefore, refunds apply only to unit loads under 12. The timing for effecting refunds is as follows:

1. Through the sixth calendar day after the official start of the second seven-week session, 100 percent of tuition and fees shall be refunded to the student.
2. Beginning with the seventh calendar day after the official start of the second seven-week session, no refund shall be issued.

Withdrawal Refund Policy – Summer Term

The Summer Trimester consists of four sessions, each with its own unique refund policy. The refund policies for all four sessions can be found at www.towson.edu/bursar. As with all other terms, in the

summer notification to the instructor does not constitute a proper withdrawal, and the last date on which a student withdraws online from a class determines the percentage of their refund.

NOTE: Based on documentation of extraordinary circumstances, including medical, exceptions may be made to these refund policies. Requests for refunds for extraordinary circumstances should be submitted immediately; however, *no requests will be considered 30 days beyond the term or session in question*. Undergraduate students should contact the director of the Bursar's Office, Enrollment Services Center 315, Towson, MD 21252-0001. Graduate students should contact the coordinator of graduate admissions and records, 7800 York Road, Room 218, Towson, MD 21252-0001.

Any unpaid charges on a student's financial account with the university or another state agency will be subtracted from the refund due prior to processing the refund request. For payments made by credit card, refunds will be credited to the original credit card account and will be reflected on the credit card monthly statement. Credit card payments made for term charges are refunded using the following practice. For each term, credit card refunds will be processed after the term Drop/Add period. However, students may ask for a credit card refund prior to this period by contacting the Bursar's Office. Credit card owners are responsible for paying any and all interest charges accrued on the credit card. All questions regarding tuition and fees should be referred to the Bursar's Office, Enrollment Services Center, 410-704-2100 or 1-888-5BURSAR.

Fees

The following fees are *non-refundable, regardless of when a withdrawal takes place*:

1. Late Payment Fee
2. Room Deposit Fee
3. Application Fee
4. Enrollment Contract Fee
5. Closed Contract Fee
6. Nursing Deposit Fee
7. Study Abroad Fee

In addition to the above fees, the following fees are *non-refundable after the official start of classes* for the term:

1. Housing Charge
2. Applied Fees (Private Instruction, Student Teaching, Clinical Practicum, etc.)
3. Parking Permit Fee

In addition to the above fees, the following fees are *non-refundable after the official Change of Schedule period* for the term:

1. Athletics Fee
2. Auxiliary Services Fees
3. Student Government Association Fee
4. Technology Fee
5. Overload Surcharge Fee
6. Course-based Fees
7. Student Classification Fee

The following fee is prorated after the official Change of Schedule period:

1. Meal Plan

Financial Aid

OFFICE

Enrollment Services 339, 410-704-4236

Fax: 410-704-2584

www.towson.edu/finaid

Towson University offers scholarships, grants, loans, and work-study programs. These programs are funded by the U.S. Department of Education, the state of Maryland and Towson University. Financial aid may be non-need based or need-based. Non-need based aid, such as scholarships, may use merit or academic achievement as the main criterion. Need based aid helps students to pay the difference between the cost of education and the amount that they (and their parents, if they are dependent students) can contribute.

Students (and the parents of dependent students) should complete the FAFSA by February 10 each year to meet the March 1 priority deadline to apply for federal and university need-based aid for the academic year beginning the following fall.

Need is determined by the following formula:

Cost of Education
– Expected Family Contribution (EFC)
– <u>Outside Resources (scholarships, etc.)</u>
Need for Title IV and university funds

The U.S. Department of Education calculates the student's EFC from the completed Free Application for Federal Student Aid (FAFSA), using a formula that considers factors such as income, certain assets, family size, and number of family members in college.

The cost of education includes direct costs such as tuition and fees and room and board as well as indirect costs including transportation and personal expenses.

Estimated Costs For Undergraduate Students¹

Expenses	Commuter	Resident	Out-of-State
Tuition/Fees	\$7,906 ²	\$7,906 ²	\$19,418 ²
Room/Board	\$1,500	\$9,942	\$9,942
Books	\$1,080	\$1,080	\$1,080
Transportation	\$1,800	\$1,600	\$1,600
Personal	\$1,250	\$1,500	\$1,500

¹Figures shown are for full-time enrollment for an academic year and are subject to revision. Students receive a bill each term for tuition/fees, and room and board charges (if the student lives on campus). All other costs shown above (including books) are estimates of out of pocket costs.

²Students may incur additional academic fees, depending on courses taken. Please refer to the "Expenses" section of this catalog.

³The Financial Aid Office may request documentation to verify the residency of any aid recipient. Documentation may include proof of current local address and copies of rental agreements.

DEADLINES AND APPLICATION PROCEDURES

All students must reapply for financial aid annually, as soon as possible after January 1 at the U.S. Department of Education's website, www.fafsa.ed.gov.

Students should complete the FAFSA by February 10 each year to meet the annual priority deadline of March 1. This date is the priority deadline for federal and university need-based aid for the academic year that begins the following September.

March 1 is also the deadline for many Maryland state scholarship and grant programs. All students must list Towson University (code #002099) in Step 6 of the FAFSA. The code allows the federal processor to transmit the application results to Towson University.

The Financial Aid Office offers aid first to students whose applications are completed and received from the U.S. Department of Education by the March 1 priority deadline. Applications received after that date processed on a rolling basis. However, students who apply late for aid should not expect consideration for limited campus-based financial aid.

Students should take the following steps toward ensuring that funds are available in time to pay term charges:

- complete the FAFSA on or before February 10 to meet the March 1 deadline
- complete the admissions requirements early
- register for classes at the earliest opportunity

STUDENT ELIGIBILITY

Factors that determine eligibility for Federal Title IV and need-based university aid include:

- financial need (except for unsubsidized and parent loans)
- degree candidacy or formal admission as a **regular student** making satisfactory academic progress toward a degree or certificate
- U.S. citizen or eligible non-citizen status
- possession of a valid Social Security number
- certification that the applicant is not in default on a student loan and does not owe a repayment of a Federal Title IV grant
- registration for the Selective Service, if required

FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS (SAP)

Federal and state regulations require the Financial Aid Office to monitor the academic progress of students who apply for aid or receive aid. The Financial Aid Office checks the progress of aid recipients at least once per year and more frequently when deemed necessary. The Satisfactory Academic Progress Policy for financial aid purposes appears in www.towson.edu/main/finaid/receivingaid/satisfactory.asp

VERIFICATION

Either the U.S. Department of Education or the university can select an application for verification. If selected, students must provide signed copies of federal income tax returns. They must also provide documentation to verify information such as the value of assets, household size and number in college. The Financial Aid Office encourages students to respond promptly and completely to any request for additional information.

All students who receive an offer of need-based Institutional Grant or Federal Supplemental Opportunity Grant will be subject to verification. All verification documents must be received in the Financial Aid Office within 30 days of the initial request, or the student's aid offer will be subject to cancellation.

Students who receive aid as on-campus or off-campus residents may be required to submit documentation to verify their actual housing arrangements. Such documentation may include proof of current local address and copies of rental agreements.

IMPORTANT: AID MAY CHANGE

Federal Title IV regulations will not permit a student to receive aid totaling more than the cost of education. Towson University may revise or cancel federal or institutional aid whenever the university becomes aware of information that changes a student's eligibility for aid, including changes in the student's Cost of Education or EFC. Other examples of circumstances that can result in revision or cancellation of existing aid include the following:

- receiving additional aid at any time not already considered as a part of the student's aid package (such as a scholarship)
- changes in residency (for example, from on-campus to commuter)
- change from out-of-state to in-state tuition
- changes to EFC resulting from verification (see VERIFICATION section)
- changes to enrollment level (for example, from full-time to part-time)
- withdrawal from the university

A student who applies for fall term graduation will have his or her aid for the following spring term cancelled.

SPECIAL CONDITIONS

Under a limited number of circumstances, the Financial Aid Office can base eligibility for aid on estimated year, rather than the base year of income. The Special Condition Form, complete with instructions, can be found under "Forms and Publications" at www.towson.edu/finaid.

TRANSFER STUDENTS

Financial aid, including most federal grants and loans, will not transfer from one institution to another. Eligibility for the Federal Pell Grant, and some state grants may transfer.

Students must apply for financial aid using the instructions stated in the "DEADLINE AND APPLICATION PROCEDURES" section. Mid-year transfer students who have already processed a FAFSA to attend a school during the fall term must request that the U.S. Department of Education send a copy of the application results to Towson University's Financial Aid Office. Students can contact the federal processor at 1-800-4-FEDAID or go online to www.fafsa.ed.gov.

NOTIFICATION GUIDE

Students who accept an offer of financial aid must read the Notification Guide for the year in which the aid is to be received. This publication will be found under "Forms and Publications" at www.towson.edu/finaid.

Online To Do List

The Financial Aid Office communicates essential messages and requests for information needed to complete the requirements for receiving aid via the student's Towson Online Services To Do List. Students who apply for, or receive financial aid, should check their To Do Lists at least weekly to ensure that they receive the aid for which they are eligible. The list may contain items from the Financial Aid Office and other departments throughout the university.

Financial Aid Emailers

Students who apply for, or receive aid must have active Towson University Tiger accounts to ensure that they receive important notices and reminders via e-mail.

CAMPUS-BASED FINANCIAL AID

Towson University receives a limited amount of money each year for the campus-based programs. Campus-based funds go to the earliest completed applications from eligible students whose applications demonstrate the greatest need. The Financial Aid Office processes applications in the order of EFC, starting with the lowest EFC and continuing through the highest EFC. Students with the lowest EFCs may receive aid from the programs requiring exceptional need.

The Financial Aid Office continues to process applications after the March 1 deadline, but late applicants cannot expect consideration for limited campus-based funds.

Federal Supplemental Educational Opportunity Grant

This federal grant is for exceptionally needy students pursuing first bachelor's degrees. Towson University may offer up to \$4,000 to a full-time eligible applicant.

Institutional Grant

Towson University may offer up to \$9,000 to full-time first bachelor's degree candidates who have financial need.

Federal Perkins Loan

Towson University may offer Perkins Loans to undergraduate candidates. The university offers loans from this need-based program first to students with exceptional financial need. Undergraduate students may receive up to \$5,000 per year. The statutory limit is \$27,000 for all undergraduate borrowing from this program.

This federal loan has an annual interest of 5 percent. Interest does not begin to accrue, and no payment of principal is due, until nine months after the borrower leaves school or drops below enrollment for at least 6 units. Payments depend on the total amount borrowed, but will never be less than \$40 per month, plus interest.

Federal Work Study

This need-based Federal Title IV program allows undergraduate and graduate degree candidates to work and earn money for educational expenses. The university pays aid from this program through paychecks every two weeks. The eligibility does not offset direct university charges such as tuition and fees.

Federal Work Study jobs are available on-campus in academic and administrative departments as well as at local elementary or middle schools in approved community service programs designed to help children develop reading and math skills.

DIRECT FEDERAL AID

Unlike the campus-based programs, federal funding for the direct aid programs makes it possible for all eligible students to receive aid. However, federal regulations limit the amount any student can receive from each program.

Federal Pell Grant

This federal grant is for first bachelor's degree candidates who have exceptional financial need. Scheduled Pell Grant awards range from \$0 to \$5,550. The maximum award can change each award year and depends on program funding.

Eligible students who attend the Towson University summer trimester may receive a portion of a second scheduled award.

Federal Direct Student Loan Program

These long-term loans are for first and second bachelor's degree students, as well as certificate and graduate students. The application requirements for these loans are the same as for other federal grant and loan programs. Borrowers must carry at least 6 units per term.

Depending on the amount of need, an aid offer may include an interest-subsidized loan or an unsubsidized loan. Some students receive both subsidized and unsubsidized loans.

The main difference between a subsidized loan and an unsubsidized loan is the point at which interest begins to accrue. No interest accrues on a subsidized loan until the repayment period begins at the end of a six-month grace period. The grace period begins when the borrower graduates, withdraws or drops below enrollment for at least 6 units. Interest on an unsubsidized loan accrues during enrollment, and throughout the grace period and repayment.

For all unsubsidized loans first disbursed on or after July 1, 2006, the interest rate is fixed at 6.8 percent. The interest rate for subsidized Direct Loans first disbursed on or after July 1, 2011 is fixed at 3.4 percent.

All Direct Loan borrowers pay a loan origination fee of 0.5 percent to the U.S. Department of Education. The university must deduct this fee from the loan proceeds.

DIRECT LOAN ANNUAL LIMITS				
Grade Level	Earned Units	Annual Loan Limit	Additional Unsubsidized Loan	Total Unsubsidized Loan Eligibility
Freshman	0-29	\$3,500	\$2,000	\$5,500
Sophomore	30-59	\$4,500	\$2,000	\$6,500
Junior	60-89	\$5,500	\$2,000	\$7,500
Senior	90+	\$5,500	\$2,000	\$7,500

Students who meet the Federal Title IV definition of an independent student may receive a higher amount of unsubsidized loan. Independent freshmen and sophomores may be eligible for up to \$4,000 in additional loan funds; juniors or seniors \$5,000. Individuals may apply for aid as independent students if they meet at least one of the following conditions:

- age 24 years on or before December 31 of the academic year during which financial aid is received
- veteran of the U.S. Armed Forces or serving on active duty in the U.S. Armed Forces for purposes other than training
- orphan, or foster care, or a ward of the court, or having been in foster care, or a ward of the court at any time when the individual was 13-years-old or older, or was immediately prior

to attaining the age of majority, an emancipated minor or in legal guardianship as determined by a court

- married at the time of application for aid
- having children who receive more than half of their support from the aid applicant, or having other dependents living with the student and receive more than half of their support from the student, now and through June 30 of the year in which student financial aid is received.

Federal Direct PLUS Loan for Parents

Parents of dependent students can borrow up to the cost of education minus all other aid received. Applicants do not have to demonstrate need but must submit a FAFSA. However, the U.S. Department of Education approves a loan from this federal program only after an evaluation of the parent borrower's credit history.

Interest begins to accrue at the time of disbursement. The interest rate for new PLUS loans is a fixed 7.90 percent. All borrowers pay a loan origination fee of 4 percent to the U.S. Department of Education. The university must deduct this fee from the loan proceeds.

The parent borrower has the option to begin repayment either 60 days after the loan is fully disbursed or six months after the dependent student on whose behalf the parent borrowed ceases to be enrolled for at least a 6 units.

A new PLUS borrower must complete an electronic Master Promissory note before receiving any disbursement of loan proceeds to the student's university account.

TEACH GRANT

The TEACH Grant Program provides up to \$4,000 per year (\$16,000 total for an undergraduate program) to full-time students who plan to teach full time in high-need subject areas at schools serving students from low-income families. Students who attend less than full-time may receive reduced amounts.

To receive a TEACH Grant, a student must be a U.S. citizen or eligible non-citizen, and must take the following steps:

- Complete the Free Application for Federal Student Aid (FAFSA), although demonstrated financial need is not required
- Complete the TEACH Grant Application and submit it to the Financial Aid Office Scholarship Unit
- Enroll as an undergraduate, post-baccalaureate, or graduate student in a TEACH Grant eligible program (a major that will prepare the student to become a highly-qualified teacher in a high need field as described below)

- Enroll in coursework necessary to begin a career in teaching, including subject area courses (e.g., math courses for a student who intends to be a math teacher)
- Meet certain academic achievement requirements such as an SAT score above the 75th percentile or a cumulative GPA of at least 3.25 (unless the grant applicant is currently a teacher or retiring from teaching and have expertise in a high need field (math, science, Special Education, English as a Second Language, or another high-need subject as defined by the U.S. Department of Education))
- Complete online TEACH Grant Initial Counseling for the TEACH first grant, and Subsequent Counseling for each TEACH Grant received at <https://teach-ats.ed.gov/ats/index.action> (done before signing the TEACH Grant Agreement to Serve)
- Sign a TEACH Grant Agreement to Serve

TEACH Grant recipients must agree to teach for at least four full years within eight years of finishing their teacher preparation program. They must teach in elementary or secondary schools that have been identified by the U.S. Department of Education as serving pupils from low-income families. These schools are listed in the U.S. Department of Education's Annual Directory of Designated Low-Income Schools for Teacher Cancellation Benefits.

TEACH Grant recipients must also teach in high-need subject areas, including bilingual education and English language acquisition, foreign language, mathematics, reading, science or special education. There may be additional teacher shortage areas identified at the time a student begins teaching. These teacher subject shortage areas (not geographic areas) are listed in the U.S. Department of Education's Annual Teacher Shortage Area Nationwide Listing.

Annually, TEACH Grant recipients must sign a service agreement to acknowledge that failure to complete the teaching obligation will mean repaying the grant as a Federal Direct Unsubsidized Loan, with interest accruing from the date that the grant funds were disbursed.

TEACH Grant recipients must complete counseling online each year and must complete Exit Counseling when graduating or leaving school. In addition, within 120 days of completing or ceasing enrollment in a teacher preparation program, the TEACH Grant recipient must confirm to the U.S. Department of Education that he or she will fulfill the terms and conditions of the service agreement.

LOAN COUNSELING AND PROMISSORY NOTE REQUIREMENTS FOR BORROWERS

New loan borrowers at Towson University of Federal Perkins Loans or Federal Direct Student

DIRECT STUDENT LOAN AGGREGATE LOAN LIMITS			
	Combined Base Limit for Subsidized and Unsubsidized Loans	Additional Limit for Unsubsidized Loans	Total Limit for Unsubsidized Loans (minus subsidized amounts)
Dependent Undergraduate	\$23,000	\$8,000	\$31,000
Independent Undergraduate	\$23,000	\$34,500	\$57,500

Loans must complete entrance loan counseling. In addition, borrowers who graduate or leave school must complete exit loan counseling sessions. These sessions provide borrowers with information on their rights and responsibilities.

New borrowers will find entrance and exit loan counseling for Direct Loans, as well as entrance counseling for the Federal Perkins Loan Program at www.towson.edu/finaid/. The university's Office of Financial Services provides exit loan counseling for Perkins Loan borrowers.

New borrowers must complete an electronic Master Promissory note before receiving any disbursement of loan proceeds to their university accounts.

STATE SCHOLARSHIPS

The state of Maryland offers scholarships and grants based on financial need or merit, or a combination of both. Legal residents of Maryland apply using the FAFSA or the Renewal FAFSA. The deadline for most programs is March 1.

Some state scholarships require special applications and have different deadlines. For more information about state scholarships, students can call the Maryland State Office of Student Financial Assistance at 410-260-4565, or visit www.mhec.state.md.us.

ADDITIONAL INFORMATION

Financial Aid Disbursements

Generally, students receive one-half of academic year financial aid funds (except Federal Work-Study) each term. The university will credit aid toward term charges for tuition and fees and other direct university charges.

Whenever the amount of term aid credited to a student's account exceeds the term charges, the student has a credit balance and will receive a rebate check to use for books and day-to-day expenses.

The Office of the Bursar will disburse rebate checks for credit balances no earlier than one week before the first day of the fall and spring terms and no earlier than the first day of a student aid recipient's summer session. Students may have a delay in receiving rebate checks if they receive a late or revised aid offer.

Minimester

Students cannot receive Federal Title IV or university aid financial aid for Minimester.

Summer

A supplemental application is required for summer trimester aid and is available online at www.towson.edu/finaid in the Forms and Publications section. Summer aid is usually limited to loans and Federal Pell Grants and available only if the student did not borrow the maximum for his or her grade level for the academic year immediately preceding the summer term.

Pell Grant eligible students may receive a portion of a second scheduled Pell Grant award for summer attendance.

Financial Aid Advising

Students and parents can schedule appointments to speak with Towson University financial aid advisers in person or by telephone. To schedule an appointment, call 410-704-4236.

Refund Policy

When a student withdraws from all courses during a term when the student is receiving student aid, the Financial Aid Office must determine what portion of the student's aid (not including Federal Work-Study) will revert to the aid programs. The Financial Aid Office must use a statutory refund formula required by the U.S. Department of Education to determine what portion of aid paid to university charges has been "earned" and what portion must be considered "unearned."

The percentage of assistance earned is equal to the percentage of the term completed as of the day the student withdraws. (If the withdrawal occurs after the 60 percent point, the percentage of aid earned is 100 percent.) The amount of aid *not* earned by the student is calculated by determining the complement of the percentage of assistance the student earned. That percentage is then applied to the total amount of grant and loan assistance disbursed for the term.

If the student received more grant or loan assistance than the amount earned, *the university or the student (or both) must return the unearned funds to the aid programs.*

Towson University returns the lesser of the unearned amount of assistance, or the institutional charges incurred for the term, multiplied by the unearned percentage of grant and loan assistance. Institutional charges are limited to tuition, fees, and room and board, (if the student paid these charges to the university).

The student returns unearned assistance minus the amount the university returns. **The U.S. Department of Education does not allow discretion on the part of the university for non-institutional costs. In most cases, when a student receives assistance greater than the amount of institutional charges and completely withdraws from the university, the student will have to return some of those funds.**

Academic Dismissal or Suspension

Academic dismissal or suspension will always result in cancellation of financial aid for future terms. A student who receives formal readmission to the university as a degree candidate may request consideration for financial aid.

Internet Services

The Financial Aid Office has a website at www.towson.edu/finaid/ which allows students to use many financial aid services electronically. Students can apply for financial aid online and link to other recommended websites.

Other Resources

Regular Student Employment

Various departments on campus hire students. Students will find a list of current job openings at www.towson.edu/careercenter.

Student Employment Program

This office helps students find part-time jobs off-campus in the Baltimore metropolitan area. For additional information, visit www.towson.edu/careercenter.

Private Scholarships

Various businesses, foundations and civic organizations offer scholarships. Students should check directly with groups in their local communities. The www.fastWEB.com website is another source for private scholarship information.

Veterans Benefits

The Veterans Affairs Office is part of Towson University's Office of the Registrar and functions primarily to certify veterans' enrollment to the U.S. Department of Veterans Affairs. Veterans or eligible dependents should contact the Towson University's Veterans Affairs Office (410-704-3094).

SCHOLARSHIP OFFICE

Enrollment Services 307

410-704-2647

E-mail: scholarship@towson.edu

www.towson.edu/finaid

The Towson University Scholarship Office is a unit of the Financial Aid Office, and serves as a clearinghouse for information on merit scholarships. In addition to serving as an information center, this office handles the applications for several university-wide scholarships.

Scholarship Seeker

The Scholarship Seeker allows a student to search for Towson University and state of Maryland scholarships. Students can view lists of potential scholarships and link to detailed information about scholarship requirements and application procedures. The Scholarship Seeker is a part of the Financial Aid Office website at <http://inside.towson.edu/scholarshipseeker>.

Over-Award Policy

Towson University will not award or disburse a combined total of federal, state, institutional and/or private scholarships that exceeds a student's cost of education unless all of the funding comes from a private external source. The cost of education is a standardized budget including tuition, fees, room, board and allowances for indirect costs such as transportation and personal expenses. Whenever a student's total aid package exceeds the cost of education, the Financial Aid Office will reduce aid offered by the university.

Private Scholarships

Students who receive scholarships from private organizations outside the university (not including Maryland state scholarships) should contact the Office of the Bursar to arrange for payment of scholarship funds. The Office of the Bursar will disburse scholarship proceeds in accordance with procedures and policies set by the private scholarship donors and Towson University. Students may defer partial payment of university charges before receipt of scholarship proceeds by forwarding a copy of the scholarship award letter to the Office of the Bursar. Any outstanding balance created when a student or donor fails to provide the university with adequate, timely information will become a financial obligation of the student.

Office of Admissions Scholarships

Towson University awards a limited number of academic scholarships each fall to qualified, full-time incoming freshmen and transfer students. The Office of Admissions awards these merit-based scholarships without regard to financial need. The earliest applicants for admission receive priority consideration. Although students do not need a separate application for these scholarships, they must complete their admission applications, and provide transcripts and test results by December 1.



The College of Business and Economics

VISION

To be recognized as the business college of choice for students, faculty and organizations in our region.

MISSION

The mission of the Towson University College of Business and Economics is to prepare students for success in business and the larger community through its unique combination of experiential learning, applied research, and community outreach; to support high-quality faculty who are actively engaged in teaching, scholarship, service and citizenship; and to promote the economic, educational, and societal advancement of Maryland.

VALUES

We embrace a culture of excellence, ethical behavior, respect, civility, accountability, diversity and inclusion.

Shohreh Kaynama, Dean
Louise Laurence, Associate Dean
The Entire CBE Faculty and Staff

Accounting

Business Administration:

- Economics
- Entrepreneurship
- Finance
- Human Resource Management
- International Business
- Legal Studies
- Management
- Marketing
- Project Management and Business Analysis
- e-Business
- Economics



COLLEGE OFFICE
Stephens Hall 218, 410-704-3342
Fax: 410-704-3664
E-mail: cbedean@towson.edu
www.towson.edu/cbe

THE PROFILE OF A COLLEGE OF BUSINESS AND ECONOMICS GRADUATE

As a premier school of applied business learning, the College of Business and Economics (CBE) prepares its graduates to achieve excellence in their professional careers. CBE's combination of rigorous academic studies and hands-on business experience—all subject to strict measures of performance—develop the following Knowledge, Skills and Attitudes (KSAs) that are foundations for professional success:

- ACCREDITED BUSINESS KNOWLEDGE
 1. Know, apply and integrate the content of one's major
- COMMUNICATION
 2. Write articulate, persuasive and influential reports, proposals, letters
 3. Make articulate, persuasive and influential oral presentations
 4. Develop graphic, spreadsheet and financial analysis to support position taken
 5. Engage in active listening in individual and group settings
- THINKING: CRITICAL AND CREATIVE
 6. Identify problems and/or opportunities using disciplinary concepts
 7. Generate and evaluate feasible alternatives
 8. Develop comprehensive, justified conclusions and recommendations using qualitative and/or quantitative tools
- TECHNOLOGY
 9. Use general and discipline-specific software for state-of-the-practice business applications
- LEADERSHIP AND TEAMWORK
 10. Focus on goal achievement
 11. Guide team towards the achievement of common goals
 12. Maintain group cohesion, follower satisfaction and efficient operations.
- ETHICS AND VALUES
 13. Display ethical conduct and honor-system behavior
 14. Apply ethics in business decision-making, considering the impact on multiple stakeholders
- ATTITUDE AND PRACTICAL EXCELLENCE
 15. Be attentive, proactive and ready to learn
 16. Meet commitments and complete tasks according to assigned requirements
 17. Treat others with respect; show sensitivity to their views, values and customs
- EMPLOYABILITY
 18. Show evidence of a quality, mentored, reflective professional experience
 19. Demonstrate effective job search: career portfolio, resume and interview skills
 20. Assume responsibility for one's own career management and goal-setting



College of Business and Economics

Towson University is the only University System of Maryland (USM) state university with both its Business and Accounting programs accredited by AACSB International – the Association to Advance Collegiate Schools of Business.

PROGRAMS AVAILABLE

Major in Accounting

Major in Business Administration

Economics Track

Entrepreneurship Track

Financial Planning Certification Preparation

Human Resource Management Concentration

International Business Concentration

Legal Studies Track

Management Concentration

Marketing Concentration

Project Management and Business Analysis Track

Combined Major in Business Administration and Information Systems

Major in e-Business

Combined Major in e-Business and Business Administration (Management)

Combined Major in e-Business and Business Administration (Marketing)

Combined Major in e-Business and Business Administration (Project Management and Business Analysis)

Combined Major in e-Business and Information Systems

Major in Economics

Combined Major in Economics and Geography and Environmental Planning

Combined Major in Economics and Mathematics

Combined Major in Economics and Political Science

Minor in Business Administration

Minor in Economics

DISTINCTIVE FEATURES

- Center for Applied Business and Economic Research
- Maryland Council on Economic Education
- Business Advisory Boards
 - CBE Advisory Board
 - Accounting Advisory Board
- Student Organizations
 - Student Leadership Council
 - Alpha Kappa Psi
 - American Marketing Association
 - Beta Alpha Psi
 - Beta Gamma Sigma
 - Electronic Business Association
 - Economics Society
 - Financial Management Association
 - Society for Human Resource Management
 - Towson University Investment Group

TRANSFER CREDIT POLICIES

In order to graduate from Towson University with a major from the CBE, students must complete at least 50 percent of the units required in their major at Towson University.

Lower-Level Courses: Students planning to transfer into the Business Administration, e-Business or Accounting majors at Towson University may transfer the following lower-level required courses: Principles of Accounting I and II, Microeconomics, Macroeconomics, Statistics, Legal Environment of Business, and, for Accounting majors only, Introduction to Business Technology (COSC 111/112 equivalent). Students transferring from a Maryland community college should inquire at that institution's transfer office or refer to ARTSYS, the articulation system of Maryland, regarding the Recommended Transfer Program (RTP) for their intended major (<http://artweb.usmd.edu/>). Students may also contact Towson University's CBE Student Academic Services at 410-704-3496.

Upper-Level Courses: A course transferred from a four-year college that possesses "level and content equivalency" to a TU course may be used to satisfy a course requirement with the approval of the TU department that houses the course. Only one transferred course will be accepted in fulfillment of a concentration/track requirement. A student intending to transfer a course must provide a course description from the other college's catalog. Contact CBE Student Academic Services, 410-704-3496, or refer to the CBE website, www.towson.edu/cbe/student_resources/transfer.asp, for policy and procedures regarding transfer of units for upper-level Accounting, Business, e-Business and/or Economics courses.

NOTE: Lower-level units cannot transfer as upper-level units. Courses completed at the 100 or 200 level at a community college or a four-year college that are offered at TU as 300- or 400-level courses do not need to be repeated, but must be validated in order to be recognized as meeting upper-level requirements. Validation generally requires that another specified course be completed at TU with a grade equivalent of 2.00 or higher.

CODE OF CONDUCT

The CBE Code of Conduct holds all members of the College of Business and Economics (students, faculty, administrators and staff) to a high standard of academic and personal integrity, conduct, and trust with the intent of promoting and building a reputation for fair and ethical business practices, for tolerance of others' opinions and ideas, and for being lifelong contributors to society. Members of the CBE community are expected to display behavior consistent with the following values:

- I. A positive attitude: Face every task with passion and purpose.
- II. Honesty: Represent oneself honestly in all communications, oral and written, including interviews, research proposals, manuscripts, student assignments, papers, exams and other correspondence.
- III. Integrity: Execute assignments honestly and fairly, avoiding any actions that might be construed as having the potential for one to gain an unfair advantage. Respect the integrity and confidentiality of ideas, materials, data, and the real and intellectual property of others gathered during conversations, class projects, or research studies, making sure that any such materials or property are not used for commercial or personal gain without prior permission of the owners.
- IV. Diversity: Foster a positive learning environment for all individuals by not tolerating disparaging comments or harassment of any individual or group based on gender, race, ethnicity, religion or sexual orientation. Discourage bigotry, always striving to learn from the differences in the cultures, ideas, experiences and opinions of others. Respect the dignity of all others.
- V. Support the learning environment: Recognize learning as a lifelong process, accept responsibility for one's own learning, encourage the learning of others, and avoid any action that might impede the learning of others.
- VI. Community responsibility: Contribute to the learning environment by participating and/or leading in informal and formal sessions including classroom and extracurricular activities in the college, sharing experiences with peers, holding classroom discussions, and contributing one's views while respecting the views of others.
- VII. Professionalism: Maintain an attitude of leadership, respect, responsibility and accountability.

Administration of the Code

This code of conduct is a serious statement that represents the culture of the College of Business and Economics. It is incumbent upon every CBE member to assure that it is upheld with pride and reinforced on a daily basis. While each and every member of the CBE community is responsible for his or her own conduct, there is a collective responsibility to ensure that the standards in this code are respected. Should a member of the CBE community discover a breach of these principles, that member is responsible for alerting the department chair, program director or associate dean of the college. In the event of any accusation of a breach of this code, there will be an investigation of the facts by the appropriate department chair, program director or associate dean, who will determine the action to be taken using the relevant enforcement means available.

CBE STUDENT ACADEMIC SERVICES

Stephens Hall 301, 410-704-3496

Fax: 410-704-2300

E-mail: lsawyer@towson.edu

www.towson.edu/cbe/students

Director: Patricia Atkinson

Administrative Assistant: Linda Sawyer

The College of Business and Economics (CBE) Student Academic Services is the first place a student contacts for information concerning a major or minor program in the College of Business and Economics. Our team of professional staff, student aides and CBE student consultants are available to provide information and assistance to both current and prospective CBE students, and in particular to those students seeking admission to the Business Administration major or pursuing a minor in Business Administration.

Prospective students are invited to contact us to discuss the college's academic programs and discover the wealth of resources provided by Towson University and the CBE such as student clubs and organizations, and study abroad programs.

BUSINESS EXCELLENCE PROGRAM

Stephens Hall 301, 410-704-4682

Fax: 410-704-2300

www.towson.edu/busx

BUSX 301 Coordinator: Quincey R. Johnson

BUSX 460 Director of Professional Experience:

Laleh Malek

Lecturers: Vera L. Case, Kathryn Delahanty,

Amanda Gates, Christopher Thacker,

Quincey Johnson

Administrative Assistant: Wanda Rodgers

BUSX COURSES**BUSX 301 Business Cornerstone**

In this course, students are challenged to sharpen and further develop essential knowledge, skills and attitudes (KSAs) such as oral and written communication, problem solving and critical thinking, teamwork, and career and self-awareness. These KSAs serve as a foundation for the rest of the student's business school course work. Students are also encouraged to develop habits of professionalism and lifelong learning. BUSX 301 should be completed as soon as possible after lower-level required courses.

BUSX 460 Professional Experience

This course focuses on a successful transition between the last college term and the first day of professional work. Students take an internship as part of the course. Through self-assessment, students develop a portfolio that demonstrates their knowledge, skills and attitudes (KSAs) and their commitment to lifelong career development. A special permit is required.

**Department of Accounting**

Professors: Martin Freedman, Seth Hammer, Norma Holter, Charles Martin, Donald Rosenberg, Andrew Schiff, Michael Seganish

Associate Professors: Benjamin Neil, Manash Ray

Assistant Professors: Loretta Baryeh, Barry Buchoff, Islam Elshahat, Lasse Mertins, Jin Park, Arundhati Rao, Jorge Romero, Charles Russo, Arthur Wharton

Lecturers: Robert Kasmir, Robert Miller

Administrative Assistant: Paulette Pearson

OFFICE

Stephens Hall 102, 410-704-2227

Fax: 410-704-3641

E-mail: ppearson@towson.edu

www.towson.edu/accounting

PROGRAM AVAILABLE

- Major in Accounting

WHY STUDY ACCOUNTING?

- To prepare for college-graduate, entry-level jobs such as cost accountant, staff accountant, tax preparer and auditor.
- To prepare for specialized master's programs in Accounting and the CPA exam in order to hold jobs such as auditor, tax adviser, system analyst, business and personal accountant. (Note: The state of Maryland requires 30 units beyond the B.S. to qualify to sit for the CPA exam. Students who are not Maryland residents should check their own state's requirements.)

In business and society, accountants make a difference. They prepare and review the financial information that is relied upon by investors, lenders, businesses and other organizations throughout the world. Accountants also provide expert advice on taxes, financial planning, information systems and a wealth of other business matters. In today's fast-paced, rapidly changing world, few careers offer as many advantages and rewards as a career in accounting. These include:

- a high level of job security
- competitive starting salaries
- a wide range of career options
- top-tier income potential
- a path to senior management
- the option to create your own business
- an opportunity to travel
- a respected, established profession
- the knowledge that you are an expert, trusted adviser
- the satisfaction of helping others

At Towson University, you will join one of only three accounting programs among Maryland's public colleges and universities accredited by the Association to Advance Collegiate Schools of Business (AACSB International). Of all the accounting programs in the United States, only about one in three have achieved this distinction.

A wealth of additional information about accounting is available on the Internet. A few of the websites that you may want to visit include the Department of Labor Occupational Outlook Handbook (www.bls.gov/oco/ocos001.htm), the American Institute of CPAs (www.StartHereGoPlaces.com), and the Maryland Association of CPAs (www.tomorrowscpa.org).

VISION, MISSION AND CORE VALUES**Vision:**

To be nationally recognized as a premier accounting program.

Mission:

The mission of the Department of Accounting is to provide a high quality and accessible accounting education at the graduate and undergraduate levels that leads to successful career development, positions of business and social responsibility, leadership and life-long learning in a rapidly changing global environment. This is accomplished through Knowledge, Skills and Attitudes (KSAs) developed within a culture of excellence and a learning environment that emphasizes effective experiential learning; support of high-quality faculty engaged in teaching and applied scholarship; and opportunities for interaction with the professional community and service to the community.

Core Values:

Our values include an uncompromising belief in a culture where faculty excellence is fostered and rewarded; ethical behavior is a norm; professionalism including civility and respect is a way of life; and diversity and inclusion are highly valued.

DISTINCTIVE FEATURES

- Student Chapter of Beta Alpha Psi
- Student Chapter of National Association of Black Accountants (NABA)
- Accounting Club
- Accounting Advisory Board (of business professionals)
- Annual Accounting Open House
- Annual Department of Accounting Awards Banquet
- Annual Accounting Alumni Reunion
- Student Awards for Academic Achievement:
 - SCH Group Scholarship
 - Lester Ellin Scholarship
 - CPA Review Scholarships
 - MACPA Outstanding Achievement in Accounting Award
 - Association of Government Accountants Award
 - Financial Executives Institute Academic Honors
 - Sylvia Bernstein Prize for Excellence in Accounting
 - Russell E. Denison Annual Award for Excellence in Accounting
 - Outstanding Accounting Student Achievement Award
 - Accounting Alumni Scholarship Award

ACCOUNTING PROGRAM

The undergraduate Accounting major is a 120-unit program. The program provides transition to our specialized M.S. in Accounting and Business Advisory Services, which is designed to complete the 150 credit hours to sit for the Uniform Certified Public Accountant (CPA) exam in Maryland and many other states.

Requirements for the Accounting Major are set forth below.

All major course requirements must be completed with a grade equivalent of 2.00 or higher.

In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. Students also take a comprehensive accounting exam which is 10 percent of their grade in ACCT 321.

Requirements for Admission to the Accounting Major

Students are admitted to the major in Accounting on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term the accounting department considers applications for admission to the accounting major. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.70 or higher in all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course (listed below)
4. Minimum average GPA of 2.70 for ALL upper-level accounting courses at Towson (minimum of 9 units). Intermediate Accounting I (ACCT 301) must be completed, as well as two courses from the following list:
 - ACCT 300 – Accounting Information Systems
 - ACCT 302 – Intermediate Accounting II
 - ACCT 341 – Cost Accounting I
 - ACCT 361 – Tax Accounting I
 - ACCT 362 – Tax Accounting II
 - ACCT 342 – Cost Accounting II
5. A passing score for the CBE Computer Proficiency Exam
6. Completion of:
 - a. ECON 205 or MATH 231 (Statistics) with a grade equivalent of 2.00 or higher
 - b. ANTH or PSYC or SOCI course

Students **will not** be permitted to enroll in ACCT 303, ACCT 321 or ACCT 401 without first being admitted to the major.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Accounting are designated as pre-Accounting (PACT) until admitted into the Accounting major. Students are encouraged to communicate each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students are required to apply for the Accounting major using forms available in the Department of Accounting office, Stephens Hall 102, or online at www.towson.edu/cbe/student_resources/advising/intomajor.asp.

Students who enroll in upper-level “major-only” accounting courses before being admitted to the Accounting major do so at their own risk. Those who do not meet all prerequisites for an accounting course will be disenrolled.

Lower-Level Required Courses (27 units)

ACCT 201	Accounting Principles I (or ACCT 211) (3)
ACCT 202	Accounting Principles II (or ACCT 212) (3)
COMM 131	Fundamentals of Speech Communication (3)
COSC 111	Information and Technology for Business (or COSC 112) (3)
ECON 201	Microeconomic Principles (or ECON 203) (3)
ECON 202	Macroeconomic Principles (or ECON 204) (3)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (or MATH 233) (3)
LEGL 225	Legal Environment of Business (3)
LEGL 226	Business Law (3)

Other Required Courses (6 units)

One ANTH or PSYC or SOCI course (3)	
PHIL 371	Business Ethics (3)
	or
MNGT 482	Business Ethics and Society (3)

Upper-Level Business Courses (27 units)

BUSX 301	Business Cornerstone (3)
ECON 306	Statistics for Business and Economics (3)
FIN 331	Principles of Financial Management (3)
FPLN 341	Fundamentals of Financial Planning (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
MNGT 361	Principles of Management (3)
BUSX 460	Professional Experience (3)
MNGT 481	Business Strategy and Policy (3)
<i>One of the following international courses:</i>	
ECON 305	Survey of International Economics (3)
FIN 435	International Finance (3)
MKTG 445	International Marketing (3)
MNGT 375	International Business: Theory and Practice (3)

Upper-Level Accounting Courses (27 units)

ACCT 300	Accounting Information Systems (3)
ACCT 301	Intermediate Accounting I (3)
ACCT 302	Intermediate Accounting II (3)
ACCT 303	Intermediate Accounting III (3)
ACCT 321	Advanced Accounting I (3)
ACCT 341	Cost Accounting I (3)
ACCT 361	Tax Accounting I (3)
ACCT 401	Auditing I (3)
<i>One accounting elective selected from:</i>	
ACCT 342	Cost Accounting II (3)
ACCT 362	Tax Accounting II (3)
ACCT 402	Auditing II (3)

Suggested but not required: If you do not have accounting experience, consider adding ACCT 497 Accounting Internship (3). However ACCT 497 and BUSX 460 cannot be taken in the same term, nor can ACCT 497 be substituted for BUSX 460. If elected, ACCT 497 must be a different experience than BUSX 460. ACCT 497 will not count as part of the 120-unit accounting program, but may be counted toward the 150-unit program.

SUGGESTED COURSE SEQUENCE FOR ACCOUNTING MAJORS

Based on course availability and student needs and preferences, the selected sequences will probably vary from those presented below. Students should consult with their adviser to make the most appropriate elective choices.

FRESHMAN YEAR

First Term (15 units)

ACCT 201	Accounting Principles I (ACCT 211 Honors) (3)
Core (1 or 2)	Towson Seminar or ENGL 102 (ENGL 190 Honors) (3)
Core (3)	MATH 111 Algebra for Applications (prerequisite for ECON 205/MATH 231) (3)
Core (6)	ECON 201 Microeconomic Principles (ECON 203 Honors) (3)
Core (10, 11, 12, 13 or 14)	

Second Term (15 units)

ACCT 202	Accounting Principles II (ACCT 212 Honors) (3)
ECON 202	Macroeconomic Principles (ECON 204 Honors) (3)
COSC 111	Information and Technology for Business (COSC 112 Honors) (3)
Core (1 or 2)	Towson Seminar or ENGL 102 (ENGL 190 Honors) (3)
Core (10, 11, 12, 13 or 14)	

SOPHOMORE YEAR

First Term (16 units)

ACCT 300	Accounting Information Systems (3)
ACCT 301	Intermediate Accounting I (3)
LEGL 225	Legal Environment of Business (3)
ECON 205	Statistics for Business and Economics I (3)
	or
	MATH 231 Basic Statistics (MATH 233 Honors) (3)
Core (5)	COMM 131 Fundamentals of Speech Communication (3)

Second Term (15 units)

ACCT 341	Cost Accounting I (3)
ACCT 302	Intermediate Accounting II (3)
ECON 306	Statistics for Business and Economics (3)
LEGL 226	Business Law (3)
Core (9)	ENGL 317 recommended (3)

Submit application for admission to the Accounting major (March 15 deadline).

JUNIOR YEAR

First Term (15 units)

ACCT 303	Intermediate Accounting III (3)
BUSX 301	Business Cornerstone (3)
FIN 331	Principles of Financial Management (3)
MNGT 361	Principles of Management (3)
Core (7)	Biological and Physical Science with Lab (4)

Second Term (15 units)

ACCT 321	Advanced Accounting (3)
ACCT 361	Tax Accounting (3)
FPLN 341	Fundamentals of Financial Planning (3)
MKTG 341	Principles of Marketing (3) (MKTG 342)
Core (8)	Biological and Physical Science

SENIOR YEAR**First Term (15 units)**

ACCT 401	Auditing I (3)
MNGT 482	Business Ethics and Society (3)
International Requirement – one of the following:	
ECON 305	Survey of International Economics (3)
FIN 435	International Finance (3)
MKTG 445	International Marketing (3)
MNGT 375	International Business: Theory and Practice (3)
Core (4)	Creativity and Creative Development
Core (10, 11, 12, 13 or 14)	

Second Term (15 units)

MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)
Accounting Elective – one of the following:	
ACCT 342	Cost Accounting II (3)
ACCT 362	Tax Accounting II (3)
ACCT 402	Auditing II (3)
Core (10, 11, 12, 13 or 14)	
Core (10, 11, 12, 13 or 14)	



Business Administration Program

OFFICE

CBE Student Academic Services
 Stephens Hall 301, 410-704-3496
 Fax: 410-704-2300
 E-mail: lsawyer@towson.edu
 www.towson.edu/cbe

PROGRAMS AVAILABLE

- Major in Business Administration with concentrations or tracks in:
 - Economics
 - Entrepreneurship
 - Finance
 - Human Resource Management
 - International Business
 - Legal Studies
 - Management
 - Marketing
 - Project Management and Business Analysis
- Combined Major in Business Administration and Information Systems
- Combined Major in e-Business and Information Systems
- Combined Major in e-Business and Business Administration (Management)
- Combined Major in e-Business and Business Administration (Marketing)
- Combined Major in e-Business and Business Administration (Project Management and Business Analysis)
- B.A. Degree Option
- Minor in Business Administration
- Financial Planning Certification Preparation

MAJOR IN BUSINESS ADMINISTRATION

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business required courses, and 21–24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10% of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the University Core Curriculum requirements, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the

complete Degree Requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the University Core Curriculum requirements. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average QPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level "majors-only" CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level "majors-only" CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our Web site, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3) or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3) or
MATH 273	Calculus I (4)
<i>plus</i>	
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Required Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3) or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301.

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311.

Concentrations/Tracks (21–24 units)

- Economics Track
- Entrepreneurship Track
- Finance Concentration
- Human Resource Management Concentration
- International Business Concentration
- Legal Studies Track
- Management Concentration
- Marketing Concentration
- Project Management and Business Analysis Track

B.A. DEGREE OPTION

A student must complete all the courses required for the major and a foreign language's intermediate (202) courses (or equivalent).

LEGAL STUDIES TRACK

Coordinator: Quincey R. Johnson
Stephens Hall 301, 410-704-2227

To complete the major in Business Administration with the Legal Studies Track, students must be admitted to the Business Administration major (see admission requirements in the Business Administration major section of this catalog) before taking 24 units in Legal Studies and 33 units in upper-level business courses. All requirements for the major must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10% of the MNGT 481 grade.

See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration (BUAD) requires a minimum of 120 earned units, which must include successful completion of the Core Curriculum requirements, the Business Administration major requirements listed below, and electives. See the complete Degree Requirements in the **University Curriculum** section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the Core Curriculum requirements. Students who enroll in CBE "majors only" courses without having fulfilled the prerequisites risk losing their place in those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Legal Studies Track Required Courses (24 units)

LEGL 226	Business Law (3)
<i>Five of the following:</i>	
LEGL 325	Sports Law (3)
LEGL 326	Elder Law (3)
LEGL 328	Cyber Law: The Law of the Internet (3)
LEGL 470–479	Special Topics in Legal Studies (3) (Topics include: Employment Law, Real Estate Law, Administrative Law, White Collar Crime, International Law, Environmental Law, Women and the Law, Contemporary Legal Issues, Internship)

Two of the following:

FMST 380	Family Law (3)
MCOM 350	Media Law (3)
HCMN 441	Legal and Ethical Issues In Health Administration (3)
PHIL 101	Introduction to Philosophy (3)
PHIL 103	Introduction to Ethics (3)
PHIL 111	Logic (3)
POSC 384	The Judicial System (3)
POSC 418	Constitutional Law (3)

COMBINED MAJOR IN BUSINESS ADMINISTRATION AND INFORMATION SYSTEMS

The combined major in Business Administration and Computer Information Systems requires at least 89 units to be earned with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

Degree candidates intending to major in Business Administration are designated as "Pre-Business" (PBUA) until admitted into the BUAD major. (See admission requirements in the Business Administration major section of this catalog.)

Lower-Level Required Courses (21 units)

ACCT 201/211	Accounting Principles I (3)
ACCT 202/212	Accounting Principles II (3)
ECON 201/203	Microeconomic Principles (3)
ECON 202/204	Macroeconomic Principles (3)
LEGL 225	Legal Environment of Business (3)
MATH 231/233	Basic Statistics (3) or
ECON 205	Statistics for Business and Economics I (3)
MATH 211	Calculus for Applications (3)

Required Mathematics Courses (6–7 units)

MATH 211	Calculus for Applications (3) or
MATH 273	Calculus I (4)
MATH 263	Discrete Math (3)

Note: See Requirements for Admission to the Business Administration Major.

Upper-Level Business Required Courses (30 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
EBTM 311	Principles of e-Business (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (or MKTG 342) (3)
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
BUSX 460	Professional Experience (3)
MNGT 482	Business Ethics and Sustainability (3) or
COSC 418	Ethical and Societal Concerns of Computer Scientists (3)
MNGT 481	Business Strategy and Policy (3)

*Note: Advanced Writing Seminar is taken prior to or concurrent with BUSX 301.

CIS Project Course (3 units)

CIS 435	Human-Computer Interaction (3) or
CIS 440	Systems Development for E-Commerce (3) or
CIS 475	Analysis/Design for Web Sites (3)

Required Course (3 units)

CIS 479	Software Project Management (3) or
EBTM 443	Introduction to Project Management (3)

Information Systems Requirements (26 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
CIS 239	Computer Systems Architecture (3)
CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)

MINOR IN BUSINESS ADMINISTRATION (21 UNITS)

Director: Patricia L. Atkinson
Stephens Hall 301, 410-704-3496

This minor is available to students who have a major other than Accounting, e-Business or Business Administration. All requirements for the Business Administration minor must be completed with a grade equivalent of 2.00 or higher. Students electing a Business Administration minor are not formally admitted to nor graduates of the College of Business and Economics. Students must complete at least 12 units of CBE courses at Towson University in order to earn this minor.

ACCT 201	Accounting Principles I (or ACCT 211) (3)
ACCT 202	Accounting Principles II (or ACCT 212) (3)
ECON 201	Microeconomic Principles (or ECON 203) (3)
ECON 202	Macroeconomic Principles (or ECON 204) (3)
FIN 331*	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
MNGT 361	Principles of Management (3)

*Prerequisites: ACCT 201/211, ACCT 202/212, ECON 201/203, ECON 202/204, ECON 205 or MATH 231/233 or equivalent.

SUGGESTED COURSE SEQUENCE FOR BUSINESS ADMINISTRATION MAJORS

Before advancing into upper-level (300–400) CBE courses, students must be eligible for admission to the Business Administration major. See the Requirements for Admission to the Business Administration Major section in this catalog or the CBE Web site: www.towson.edu/cbe for information.

Students must complete at least one concentration/track from among Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Legal Studies, and Project Management and Business Analysis.

Students must complete a minimum of 120 units to be eligible for graduation. The final 30 units must be taken in residence. Students should consult with their faculty adviser to make the most appropriate elective choices.

NOTE: Based on course availability and student needs and preferences, the selected sequences will probably vary from those presented below

FRESHMAN YEAR

First Term (15 units)

Towson Seminar (3)*
or

ENGL 102/190 (3)*	
College Math (3)*	
ECON 201	Microeconomics (3)*
Core Curriculum (3)*	
Core Curriculum (3)*	

Second Term (16 units)

Towson Seminar (3)*
or

ENGL 102/190 (3)*	
MATH 211	Calculus for Applications (3)
ECON 202	Macroeconomics (3)
Biological and Physical Science with laboratory (4)*	
Core Curriculum (3)*	

SOPHOMORE YEAR

First Term (15–16 units)

ACCT 201 (3)	Accounting Principles I
LEGL 225 (3)	Legal Environment of Business
Biological and Physical Science, with or without laboratory (3–4)*	
Core Curriculum (3)*	
Core Curriculum (3)*	

Second Term (15 units)

ACCT 202 (3)	Accounting Principles II
ECON 205 (3)	Statistics for Business and Economics (may substitute MATH 231/233)
Advanced Writing Seminar (3)*	
Core Curriculum (3)*	
Core Curriculum (3)*	

During the second term of the sophomore year, the student should submit an application for admission to the BUAD major (October 1 or March 1 deadline). A minimum passing score of 70 percent on the Computer Proficiency Exam (CPE) is required for admission to the BUAD major (www.towson.edu/cbe/student_resources/cpe.asp).

JUNIOR YEAR

First Term (15 units)

BUSX 301 (3)	Business Cornerstone
EBTM 337 (3)	Information Technology
MNGT 361 (3)	Principles of Management
MKTG 341 (3)	Principles of Marketing
EBTM 306 (3)	Fundamentals of Project Management and Business Decisions

Second Term (15 units)

FIN 331 (3)	Principles of Finance
EBTM 311 (3)	Principles of e-Business
EBTM 365 (3)	Principles of Operations Management
Concentration/Track course 1 (3)	
Concentration/Track course 2 (3)	

SENIOR YEAR

First Term (15 units)

MNGT 482	Business Ethics and Sustainability (3)
Concentration/Track course 3 (3)	
Concentration/Track course 4 (3)	
Concentration/Track course 5 (3)	
Concentration/Track course 8 if required or Free Elective (3)	

Second Term (13–15 units)

MNGT 481 (3)	Business Strategy and Policy
BUSX 460 (3)	Professional Development
Concentration/Track course 6 (3)	
Concentration/Track course 7 (3)	
Free Elective (1–3, depending on need to reach 120 units)	
*Denotes university Core Curriculum course. Refer to the Core Curriculum section of this catalog for requirements and restrictions.	

Department of e-Business and Technology Management

Professor: Barin Nag
Associate Professors: James Otto, Sharma Pillutla (Chair), Dong-Qing Yao
Assistant Professors: Chaodong Han, Xiaolin Li, Neeraj Parolia, Tobin Porterfield, Stella Taylor
Lecturers: Diane Cabral, Laleh Malek, Samuel Smith
Administrative Assistant: Donna M. Rogers

OFFICE

Stephens Hall 314
Phone: 410-704-2783
Fax: 410-704-3454
E-mail: dmrogers@towson.edu
www.towson.edu/ebtm

PROGRAMS AVAILABLE

- Major in e-Business
- Business Administration—Track in Project Management and Business Analysis (PMBA)
- Combined Major in e-Business and Information Systems
- Combined Major in e-Business and BUAD (Marketing concentration, Management concentration, or Project Management and Business Analysis track)

WHY STUDY E-BUSINESS?

- To prepare for college-graduate, entry-level jobs such as e-business analyst, e-business development manager, e-business consultant, e-business project manager.
- To be proficient in business as well as technology needed for today's fast-paced world of business.
- To act as a liaison between business managers and technology professionals.

WHY STUDY PROJECT MANAGEMENT AND BUSINESS ANALYSIS?

- To prepare for college-graduate, entry-level jobs such as business analyst, quality analyst, project manager, business consultant.
- To gain professional certification to enhance one's career prospects.
- To obtain an integrated perspective of business.

MISSION STATEMENT

The mission of the Department of e-Business and Technology Management is to produce graduates who possess the knowledge, skills and abilities necessary to function effectively in an integrated business community. The department's aim is to develop students who are competent, ethical and capable of meeting the challenges of an increasingly complex, global and technologically-enabled environment.

GOALS

The goals of the department are: (1) to achieve excellence in teaching while offering innovative and state-of-the-art programs and curriculum that are infused with cutting edge technology. (2) to increase the body of knowledge in the e-Business, Business Analysis and Project Management fields through applied scholarship activities, and (3) to provide applied research, consulting and advisory services to the business and professional community.

DISTINCTIVE FEATURES

- Strong technology focus in all courses
- Linkage to professional certification
- Student Certificate in Project Management (SCiPM)
- e-Business Student Association (e-BA)
- Project Management Association (PMA)

MAJOR IN E-BUSINESS

The program consists of 18 units in lower-level required courses, 30 units of upper-level business required courses, and 24 units of e-Business courses. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

The Bachelor of Science (B.S.) degree in e-Business requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum requirements, the e-Business major requirements and electives.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration. Please note that not all e-Business courses are offered every term. Students need to create a plan in conjunction with their advisors based on the planned course offerings.

Requirements for Admission to the e-Business Major

To be eligible, students must complete each of the six specific lower-level required courses with a grade equivalent of 2.00 or higher and a minimum average GPA of 2.70 for ALL six lower-level required courses and pass the CBE Computer Proficiency Exam.

Degree candidates intending to major in e-Business (EBUS) are designated as "pre-e-Business" (PEBU) until admitted into the EBUS major. Students must meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the e-Business (EBUS) major and a change of major declaration form (if they currently are not an e-Business or pre-e-Business major) before registering for upper-level majors-only CBE courses (BUSX,

EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on the CBE website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (18 units)

ACCT 201	Principles of Accounting I (or ACCT 211) (3)
ACCT 202	Principles of Accounting II (or ACCT 212) (3)
ECON 201	Microeconomics (or ECON 203) (3)
ECON 202	Macroeconomics (or ECON 204) (3)
LEGL 225	Legal Environment of Business (3)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (or MATH 233) (3)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (30 units)

BUSX 301	Business Cornerstone (3)*
BUSX 460	Professional Experience (3)
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
	Information Technology (3)
EBTM 337	Principles of e-Business (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3) (or MKTG 342)
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 481	Business Strategy and Policy (3)

*Note: The Advanced Writing Seminar course (university Core Curriculum requirement) is taken prior to or concurrent with BUSX 301.

e-Business Courses (24 units) Required Courses (18 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 454	Business Process Management (3)
EBTM 443	Introduction to Project Management (3)
EBTM 419	Supply Chain Management (3)
EBTM 431	Advanced e-Business (3)

Elective Courses (6 units)

Two courses selected from:

COSC 311	Digital Technologies in Society (3)
LEGL 328	Cyber Law: The Law of the Internet (3)
MKTG 345	Managing Integrated Marketing Communications (3)
	Business Ethics and Sustainability (3)
MNGT 482	Entrepreneurship (3)
ENTR 355	Accounting Information Systems (3)
ACCT 300	Special Topics in e-Business (3)
EBTM 470-474	EBTM Directed Readings (3)
EBTM 491	EBTM Independent Research (1-3)
EBTM 495	EBTM Internship (3)
EBTM 497	

COMBINED MAJOR IN E-BUSINESS AND INFORMATION SYSTEMS

The combined major in e-Business and Information Systems requires a minimum of 136 units to be earned with a grade equivalent of 2.00 or higher. The program consists of 18 units of lower-level required courses, 6 or 7 units of required mathematics, 24 units of upper-level BUAD required courses, 15 units of e-Business courses, and 32 units of information systems requirements as well as the university Core Curriculum requirements.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration. Please note that not all e-Business courses are offered every term. Students need to create a plan in conjunction with their advisers based on the planned course offerings.

Admission to the Combined Major in e-Business and Information Systems

Students are admitted to the combined major in e-Business and Information Systems on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to this combined major. Each term, the Department of e-Business and Technology Management considers applications for admission to the major in the following term. In order to be admitted to the major, students must satisfy specific screening requirements (listed under the e-Business major) and complete an application form for admission. Degree candidates intending to pursue the combined major in e-Business and Information Systems are designated as "pre-e-Business" (PEBU) until admitted into the major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the EBUS major and the degree.

Admission Requirements

Candidates for the combined major in e-Business and Information Systems must satisfy the requirements for the e-Business major.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the e-Business and Information Systems (XCIEB) major and a change of major declaration form (if they are currently not an e-Business or pre-e-Business major) before registering for upper-level "majors-only" CBE courses (BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available in the CBE Office of Student Academic Services in Stephens Hall 301 and on our website, www.towson.edu/cbe/files/advising/Admission_Application_EBUS.pdf. Deadline for spring admission is October 1; the deadline for summer and fall is March 1.

Lower Level Required Courses (18 units)

ACCT 201	Principles of Accounting I (or ACCT 211) (3)
ACCT 202	Principles of Accounting II (or ACCT 212) (3)
ECON 201	Microeconomics (or ECON 203) (3)
ECON 202	Macroeconomics (or ECON 204) (3)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (or MATH 233) (3)
LEGL 225	Legal Environment of Business (3)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Required Mathematics Courses (6-7 units)

MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
MATH 263	Discrete Math (3)

Information Systems Requirements (32 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
CIS 239	Computer Systems Architecture (3)
CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)
CIS 479	Software Project Management (3)
EBTM 443	Introduction to Project Management (3)
EBTM 311	Principles of e-Business (3)** (as the CIS Projects-Based course)

Upper-Level BUAD Required Courses (24 units)

BUSX 301	Business Cornerstone (3)*
BUSX 460	Professional Experience (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
EBTM 337	Information Technology (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 481	Business Strategy and Policy (3)

*Note: The Advanced Writing Seminar course is taken prior to or concurrently with BUSX 301.

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311.

e-Business Courses (15 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 419	Supply Chain Management (3)
EBTM 454	Business Process Management (3)
EBTM 431	Advanced e-Business (3)

COMBINED MAJOR IN BUSINESS ADMINISTRATION AND INFORMATION SYSTEMS

The combined major in Business Administration and Computer Information Systems requires at least 89 units to be earned with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

Degree candidates intending to major in Business Administration are designated as "pre-Business" (PBUA) until admitted into the BUAD major. (See admission requirements in the Business Administration major section of this catalog.)

Lower-Level Required Courses (21 units)

ACCT 201/211	Accounting Principles I (3)
ACCT 202/212	Accounting Principles II (3)
ECON 201/203	Microeconomic Principles (3)
ECON 202/204	Macroeconomic Principles (3)
LEGL 225	Legal Environment of Business (3)
MATH 231/233	Basic Statistics (3)
	or
ECON 205	Statistics for Business and Economics I (3)
MATH 211	Calculus for Applications (3)

Required Mathematics Courses (6–7 units)

MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
MATH 263	Discrete Math (3)

Note: See Requirements for Admission to the Business Administration Major.

Upper-Level Business Courses (30 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
EBTM 311	Principles of e-Business (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (or MKTG 342) (3)
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
BUSX 460	Professional Experience (3)
MNGT 482	Business Ethics and Sustainability (3)
	or
COSC 418	Ethical and Societal Concerns of Computer Scientists (3)
MNGT 481	Business Strategy and Policy (3)

*Note: The Advanced Writing Seminar course is taken prior to or concurrent with BUSX 301.

CIS Project Course (3 units)

CIS 435	Human-Computer Interaction (3)
	or
CIS 440	Systems Development for E-Commerce (3)
	or
CIS 475	Analysis/Design for Web Sites (3)

COMBINED MAJOR IN E-BUSINESS AND BUSINESS ADMINISTRATION

The combined major in e-Business and Business Administration requires a minimum of 124 units to be earned with a grade equivalent of 2.00 or higher. The program consists of 21 units of lower-level required courses, 33 units of upper-level BUAD required courses, 18 units of upper-level e-Business courses as well as the university Core Curriculum requirements. Additionally, the students must choose one track/concentration from the following: (a) Management Concentration (b) Marketing Concentration or (c) Project Management and Business Analysis Track. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

Requirements for Admission to the Combined Major in e-Business and Business Administration

Students are admitted to the combined major in e-Business and Business Administration on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the combined major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. Degree candidates intending to pursue the combined major in e-Business and Business Administration are designated as "pre-e-Business" (PEBU) until admitted into the majors. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Admission Requirements

Candidates for the combined major in e-Business and Business Administration must satisfy the admission requirements for the e-Business major as well as the Business Administration major.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application

for Admission to the e-Business and Business Administration (XEBBA) major and a change of major declaration form (if they currently are not an e-Business or pre-e-Business major) before registering for upper-level majors-only CBE courses (BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available in the CBE Office of Student Academic Services in Stephens Hall 301 and on our website, http://www.towson.edu/cbe/Files/advising/Admission_Application_EBUS.pdf Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)

plus

Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

e-Business Required Courses (18 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 419	Supply Chain Management (3)
EBTM 431	Advanced e-Business (3)
EBTM 443	Introduction to Project Management (3)
EBTM 454	Business Process Management (3)

Choose one concentration/track from the following:

Marketing Concentration (XMKTG)**Marketing Concentration Required Courses (15 units)**

MKTG 425	Consumer Behavior Analysis (3)
MKTG 431	Marketing Information for Decision Making (3)
MKTG 441	Marketing Research (3)
MKTG 445	International Marketing (3)
MKTG 485	Strategic Marketing (3)

Management Concentration (XMNGT)**Management Concentration Required Courses (9 units)**

MNGT 381	Human Resource Management (3)
MNGT 421	Management of Organizational Behavior (3)
MNGT 375	International Business: Theory & Practice (3)

Electives Courses (6 units)

MNGT 425	Organizational Theory and Development (3)
MNGT 433	Compensation and Benefits (3)
MNGT 438	Multinational Management and Culture (3)
MNGT 453	Conflict Resolution in Business (3)
ENTR 355	Entrepreneurship and Small Business (3)
ENTR 401	Consulting Workshop (3)
MNGT 463	Organizational Leadership (3)
MNGT 470–479	Special Topics in Management (3)
MNGT 491	Directed Readings (3)
MNGT 494	Study Abroad in Management (3)
MNGT 495	Independent Research (3)
MNGT 497	Management Internship (3)
MNGT 498	Practicum in Management (3)

Note: Only 3 units of the MNGT 497 or 498 courses can be applied to the Management Concentration requirement.

Project Management and Business Analysis Track (XPMBA)**XPMBA Required Courses (9 units)**

EBTM 446	Business Intelligence (3)
EBTM 450	Advanced Project Management (3)
EBTM 462	Project Quality and Six Sigma (3)

Elective Courses (6 units)

MKTG 349	Product Development and Planning (3)
ACCT 341	Cost Accounting I (3)
ACCT 342	Cost Accounting II (3)
EBTM 475–479	Special Topics in PMBA (3)
EBTM 491	EBTM Directed Readings (3)
EBTM 495	EBTM Independent Research (1–3)
EBTM 497	EBTM Internship (3)
MNGT 463	Organizational Leadership (3)

MAJOR IN BUSINESS ADMINISTRATION—PROJECT MANAGEMENT AND BUSINESS ANALYSIS TRACK

The Project Management and Business Analysis (PMBA) track is a rigorous, high quality program that addresses the needs and wishes of stakeholders in today's globally integrated and technology-driven business environment. Project managers and business analysts are key employees in every

industry and all types of companies, all over the world. In today's fast-changing environment, project management is rapidly becoming one of the most important functions within organizations as they implement projects to respond to market and economic demands. The program is designed to offer project management and business analysis education to students wishing to pursue careers in areas such as project management, business analysis, and business consulting. The program will offer the latest in technological tools needed to compete in today's competitive business environment.

The program leverages state-of-the-art vendor technologies (such as Oracle enterprise resource planning modules). The track incorporates the Project Management Institute (PMI) project management body of knowledge (PMBOK). The PMI is a prestigious project management certification organization. Completion of this track provides students with the knowledge needed to take the exam to obtain the "Certified Associate in Project Management®" offered by the Project Management Institute. On completion of the program, students interested in Six Sigma Quality can enhance their competitiveness through certification such as six sigma green belt certification offered by the American Society for Quality. Students interested in enhancing their credentials can also take the Business Analyst certification exam offered by The International Institute for Business Analysis™.

Students in the Project Management and Business Analysis Track complete the major in Business Administration and 24 units in the track, of which 15 units are in required courses and 9 units are from elective courses.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21–24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis or Legal Studies. All

major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum requirements, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the Core Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum requirements. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.



Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our Web site, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Project Management and Business Analysis Track (24 units)

Required Courses (15 units)

EBTM 443	Introduction to Project Management (3)
EBTM 446	Business Intelligence (3)
EBTM 450	Advanced Project Management (3)
EBTM 454	Business Process Management (3)
EBTM 462	Project Quality and Six Sigma (3)

Elective Courses (9 units)

EBTM 419	Supply Chain Management (3)
MKTG 349	Product Development and Planning (3)
ACCT 341	Cost Accounting I (3)
ACCT 342	Cost Accounting II (3)
EBTM 475-79	Special Topics in PMBA (3)
EBTM 491	EBTM Directed Readings (3)
EBTM 495	EBTM Independent Research (1-3)
EBTM 497	EBTM Internship (3)
MNGT 463	Organizational Leadership (3)

Department of Economics

Professors: James Dorn, John Egger, George Georgiou, Louise Laurence, Tamara Woroby
Associate Professors: Matthew Chambers, Melissa Groves, Mark J. Lee, Thomas Rhoads, Timothy Sullivan (*Chair*)

Professors Emeriti: J. Van Fenstermaker, Chang Kong, Jeremiah German, Harvey Paul, Henry Sanborn, Bong Shin, Irvin Weintraub

Assistant Professors: Finn Christensen, Eva de Francisco, Seth Gitter, Juergen Jung, Michael Makowsky, James Manley, Nanyun Zhang

Administrative Assistant: C.F. Eifert

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WHY STUDY ECONOMICS?

- To prepare for jobs in:
Government, such as research assistant, program analyst, and budget analyst. Government economists analyze economic conditions and estimate the economic impact of public policy.
Business and Consulting, such as financial analyst, long-range planner, and stockbroker. Business economists provide information on market conditions, forecasting, government regulations, facilities planning, product planning and pricing.
- To prepare for graduate school in such programs as Law, Economics, Public Policy, or Business Journalism
- To earn a combined major in Geography and Environmental Planning, Mathematics or Political Science
- To blend business and economics by taking either an Economics major with a Business Administration minor or a Business Administration major with a track in Economics
- To have the ability to analyze the American economic system and international and domestic economic forces that determine production, prices, profits and incomes

MISSION STATEMENT

The department is committed to an excellent economics education built on a comprehensive liberal arts foundation to enable graduates to excel as leaders in a dynamic business environment and/or a career in public service by means of individualized student advising, professional work experience, teaching excellence, and commitment to the highest academic and ethical standards.

DISTINCTIVE FEATURES

Maryland Council on Economic Education (MCEE)

Council President: Tony DeGeorge, Symantec
Council Executive Director: Mary Ann Hewitt
Associate Executive Director: Debbie Batchelor
 The MCEE is an affiliate of the University Advancement Division, and is responsible for

increasing the quality and quantity of economics taught in Maryland schools and the general community.

Center for Economic Education

Director: Melissa Groves, Ph.D.

The Center for Economic Education is responsible for consulting with educational and community organizations; developing economic education materials; improving economics instructional programs; and conducting research in economic education. The CEE has received multiple Student Recognition Awards, including the Federal Reserve Bank Excellence Award; *The Wall Street Journal* Award; J.J. German Scholarship; Harvey Paul Scholarship; Tamara Woroby Scholarship; Catherine Britt Memorial Scholarship; Economics Club; and Omicron Delta Epsilon—The International Economics Honor Society.

PROGRAMS OF THE DEPARTMENT

Major in Economics

Major in Business Administration: Economics Track
 Combined Major in Economics and Geography and Environmental Planning

Combined Major in Economics and Mathematics
 Combined Major in Economics and Political Science
 Minor in Economics

MAJOR IN ECONOMICS

The major in Economics requires 36 units in Economics, completed with a grade equivalent of 2.00 or higher. (See the Suggested Course Sequence for Economics Majors.)

Transfer students must take a minimum of 15 units in economics at Towson University to qualify for an Economics major.

Required Courses (24 units)

ECON 201	Microeconomic Principles (or Honors ECON 203) (3)
ECON 202	Macroeconomic Principles (or Honors ECON 204) (3)
ECON 205	Statistics for Business and Economics (3)
MATH 211	Calculus for Applications (3) (or MATH 273) (4)
ECON 306	Statistics for Business and Economics II (3)
ECON 309	Intermediate Price Theory (3)
ECON 310	Macroeconomic Theory (3)

One 400-level economics course (excluding ECON 495 and ECON 497)

Elective Courses (12 units)

Four upper-level economics electives

Only one Internship in Economics (ECON 497) will count toward the major.

The department allows any one of the following courses outside the department to count toward the major in satisfying electives:

FIN 332	Advanced Financial Management (3)
MATH 377	Mathematical Models (3)
POSC 459	Simulation and Games in Political Science (3)

Recommended Courses for Graduate School

The following courses are recommended for students considering graduate school in Economics: ECON 401, ECON 451, MATH 273, MATH 274, MATH 275 and MATH 463.

MAJOR IN BUSINESS ADMINISTRATION—ECONOMICS TRACK

Students in the Economics Track complete the major in Business Administration and 21 units of Economics requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum requirements, Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete degree requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level courses and most of the university Core Curriculum requirements. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "Pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301.

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311.

Economics Track Required Courses (21 units)

ECON 309	Intermediate Price Theory (3)
ECON 310	Macroeconomic Theory (3)
ECON 313	Money and Banking (3)
ECON xxx	Upper-level Electives (12)

Recommended as one elective: ECON 409

NOTE: EBTM 306 and ECON 497 cannot count as electives.

COMBINED MAJORS

The Department of Economics offers three combined major programs: 1) Economics and Mathematics, 2) Economics and Geography and Environmental Planning, and 3) Economics and Political Science. A student majoring in economics may declare a second major and obtain a degree certifying that both majors have been completed.

COMBINED MAJOR IN ECONOMICS AND MATHEMATICS

The Economics major with a second major in Mathematics requires 76–77 units completed with a grade equivalent of 2.00 or higher in all major courses.

Required Courses (58 units)

COSC 236	Introduction to Computer Science I (4)
ECON 201	Microeconomic Principles (or ECON 203) (3)
ECON 202	Macroeconomic Principles (or ECON 204) (3)
ECON 306	Statistics for Business and Economics II (3)
ECON 309	Intermediate Price Theory (3)
ECON 310	Macroeconomic Theory (3)
ECON 451	Introduction to Mathematical Economics (3)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 331	Probability (4)
MATH 332	Mathematical Statistics (3)
MATH 369	Introduction to Abstract Algebra (3)
MATH 377*	Mathematical Models (3)
	or
MATH 439*	Computational Probability Models (3)
MATH 490	Senior Seminar in Mathematics (3)

*NOTE: One of MATH 377 or MATH 439, but not both.

Upper-Level Economics Electives (6 units)

Two additional courses to be chosen in economics.

Upper-Level Mathematics Electives (12–13 units)

Three courses from the following:

MATH 337	Applied Regression and Time Series Analysis (3)
MATH 374	Differential Equations (3)
MATH 437	Operations Research (3)
MATH 485	Mathematical Finance (3)
MATH 486	Risk Management and Financial Engineering (3)

And one course from the following:

MATH 435	Numerical Analysis I (3)
MATH 451	Graph Theory (3)
MATH 473	Introduction to Real Analysis (4)
MATH 475	Complex Analysis (3)

COMBINED MAJOR IN ECONOMICS AND GEOGRAPHY AND ENVIRONMENTAL PLANNING

Completion of individual majors in Geography and Environmental Planning and Economics requires the successful completion of 75 units (39 geography and environmental planning and 36 in economics). However, by electing the combined major in Geography and Environmental Planning and Economics, students will be able to complete both majors with a total of 60 units.

In Economics, students must complete all requirements for the major. However, for the first statistics requirement, they may choose either:

ECON 205	Statistics for Business and Economics I (3)
or	
GEOG 375	Quantitative Methods in Geography (3)

In addition, they may substitute two of the following upper-level courses in geography and environmental planning toward fulfillment of the required four courses of upper-level economics electives:

GEOG 355	Historical Geography of Urbanization (3)
GEOG 359	Economic Geography (3)
GEOG 381	Political Geography (3)
GEOG 385	Population Geography (3)
GEOG 391	Urban Systems (3)
GEOG 393	Transportation and Infrastructure Planning (3)
GEOG 405	Comprehensive Planning
GEOG 427	The Global Economy (3)
GEOG 470-479	Seminar: Selected Topics in Geography* (3)
GEOG 481	Environmental Impact Analysis (3)
GEOG 484	Land Use Planning (3)

* Requires approval from Department of Economics depending on course topic.

In Geography and Environmental Planning, students must complete all requirements for the major noting the option of either ECON 205 or GEOG 375 for their first statistics requirement. In addition, they may substitute two of the following upper-level courses in economics toward fulfillment of the required upper-level elective courses in geography and environmental planning:

ECON 322	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 334	Poverty and Discrimination (3)
ECON 351	Urban Economics (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)
ECON 470-479	Topics in Economics* (3)

* Requires approval from the Department of Geography and Environmental Planning depending on course topic.

COMBINED MAJOR IN ECONOMICS AND POLITICAL SCIENCE

Completion of individual majors in Political Science and Economics requires the successful completion of 75 units (39 in political science and 36 in economics). However, by electing the combined

major in Political Science and Economics, students will be able to complete both majors with a total of 60 units.

In Economics, students must complete all required courses for the major. However, they may substitute two of the following upper-level courses in political science toward fulfillment of the required four courses of upper-level economics electives:

POSC 305	Urban Government and Politics (3)
POSC 375	Public Administration (3)
POSC 421	Politics and Environmental Policy (3)
POSC 459	Simulation and Games in Political Science (3)
POSC 470-479	Special Topics* (3)
POSC 481	Seminar in American Government and Public Administration (3)

* Requires approval from the Department of Economics depending on course topic.

In Political Science, students must complete all requirements for the major. However, they may substitute two of the following upper-level courses in economics toward fulfillment of the required four upper-level courses in section D of the Political Science major.

ECON 322	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 331	Government and Economic Life (3)
ECON 337	Public Finance (3)
ECON 339	Health Economics (3)
ECON 351	Urban Economics (3)
ECON 375	Environmental Economics (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)
ECON 470-479	Topics in Economics* (3)

* Requires approval from the Department of Political Science depending on course topic.

MINOR IN ECONOMICS (18 UNITS)

The Economics minor may be taken with any other major. All Economics courses must be completed with a grade equivalent of 2.00 or higher.

Required Courses (6 units)

ECON 201	Microeconomic Principles (or Econ 203) (3)
ECON 202	Macroeconomic Principles (or Econ 204) (3)

Elective Courses (12 units)

ECON xxx	Upper-level Electives (12)

DEPARTMENTAL HONORS IN ECONOMICS

Students majoring in Economics are eligible to apply to the Departmental Honors Program if they have a 3.25 cumulative GPA, a 3.50 GPA in economics classes, and the consent of a faculty thesis adviser. Students interested in Departmental Honors should obtain the application form from the department chair or honors coordinator before the end of their junior year. Honors in Economics requires 36 units in economics (18 required units, 9 units of ECON electives, and 9 units required for Honors). The 9-unit requirement for Departmental Honors includes: a) one of the following: ECON 321 History of Economic Thought, ECON 401 Econometrics, or ECON 451 Mathematical Economics; b) 3 units of ECON 495 Independent Study; and c) ECON 499 Honors Thesis. ECON 495 and ECON 499 must be taken sequentially. The thesis must be presented orally to the Thesis Committee at a public colloquium. Honors are designated on the graduate's transcript and diploma.

SUGGESTED COURSE SEQUENCE FOR ECONOMICS MAJORS

Students should consult with their advisers to make the most appropriate elective choices. Based on course availability and student needs and preferences, the selected sequences may vary from those presented below.

FRESHMAN YEAR

First Term (15 units)

ECON 201	Microeconomic Principles (Honors ECON 203) (3)
Core Curriculum	(12)

Second Term (15 units)

ECON 202	Macroeconomic Principles (Honors ECON 204) (3)
Core Curriculum	(12)

SOPHOMORE YEAR

First Term (15 units)

ECON 205	Statistics for Business and Economics I (3)
Core Curriculum	(9)
MATH 211	Calculus for Applications (3)
or	
MATH 273	Calculus I (4)

Second Term (15 units)

ECON 306	Statistics for Business and Economics II (3)
Electives	(9)
CORE Curriculum	(3)

JUNIOR YEAR

First Term (15 units)

ECON 310	Macroeconomic Theory (3)
ECON XXX	Electives (6)
Electives	(6)
Core Curriculum	(3)

Second Term (15 units)

ECON	Elective (3)
ECON 309	Intermediate Price Theory (3)
Electives	(12)

SENIOR YEAR

First Term (15 units)

ECON 4xx	Elective (3)
Electives	(12)

Second Term (15 units)

ECON	Elective (3)
Electives	(12)



Department of Finance

Professors: Albert Avery, Bharat Jain, Joanne Li (Chair), Daniel Singer

Associate Professors: Babu Baradwaj,

Moon-Whoan Rhee, Susan Flaherty

Assistant Professors: Michael Dewally, Yingying Shao

Lecturer: Ted Rugemer

Administrative Assistant: Donna M. Rogers

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WHY STUDY FINANCE?

- To prepare for positions in managerial finance, banking, insurance, and securities industries
- To become proficient in applying financial tools to investment and financing decisions
- To develop analytical skills that can be used throughout a business career
- To build a solid foundation for making personal financial decisions

MISSION STATEMENT

The mission of the Department of Finance is to produce finance graduates who possess the knowledge, skills and abilities necessary to function effectively in the financial community. The department's aim is to develop students who are competent, ethical and capable of meeting the challenges of an increasingly complex, global environment.

GOALS

The goals of the department are: (1) to achieve excellence in teaching while offering students a curriculum based on leading-edge financial skills and techniques, (2) to increase the body of knowledge in the finance professions through applied scholarship activities, and (3) to provide applied research, consulting and advisory services to the business and professional community.

DISTINCTIVE FEATURES

- FMA (Student Chapter of Financial Management Association)
- FMA Honor Society
- Towson University Investment Group
- Internships in Finance
- Student Recognition Award
- — Kathryn H. Gerling Scholarship
- Chartered Financial Analyst (CFA) Scholarships

MAJOR IN BUSINESS ADMINISTRATION—FINANCE

Students in the Finance Concentration complete the major in Business Administration and 21 units of Finance requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International

Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete degree requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each

term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG, MNGT.) The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Finance Concentration (21 units)

FIN 350	Financial Modeling in Corporate Finance (3)
FIN 351	Advanced Corporate Finance (3)
FIN 333	Investments and Equity Security Analysis (3)
FIN 423	Investments and Fixed Income Security Analysis (3)
FIN 430	Financial Institutions and Management of Risk (3)
FIN 435	International Finance (3)
FIN 439	Financial Policy (3)

Department of Management

Professors: Tom Basuray (*Chair*), Douglas Ross, William Smith, Filiz Tabak, Precha Thavikulwat

Associate Professors: Nhung Nguyen, Douglas Sanford

Assistant Professors: Yong-Yeon Ji, Lori Kiyatkin, Donald Kopka, John Michel

Senior Lecturer: Don McCulloh

Administrative Assistant: Carol Lindsay

OFFICES

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MISSION STATEMENT

The mission of the Department of Management is to provide graduates with the knowledge, skills and attitudes to be successful managers in a variety of organizational settings. We seek to develop graduates with global perspectives, ethical grounding, technological competency and a desire for lifelong learning.

PROGRAMS OF THE DEPARTMENT

The Department of Management offers the following programs:

Major in Business Administration with

- Management Concentration
- Entrepreneurship Track
- Human Resource Management Concentration
- International Business Concentration

WHY STUDY MANAGEMENT?

The rapid and continuous changes taking place in our global economy require skilled managers and leaders to ensure not only effective performance but also survival. Organizations of all sizes in all sectors of our economy face unprecedented challenges that require informed, strategic decision-making and principled leadership.

The programs of study in management are designed to allow students to develop the critical marketable skills that employers seek. Courses and programs of study within the department emphasize the development of global awareness, ethical decision-making, technological competency and ongoing personal and professional development. Ongoing curricula development ensures that course offerings and content reflect the current practices used and challenges faced by organizations. Because management is a broad field of study, the concentrations/tracks in Entrepreneurship, Human Resource Management, International Business, and Management offer students a flexible course of study that can be individualized to meet their specific career objectives.

Regardless of concentration area, all students will find several recurring themes in their course work:

- the impact of technology on management practices
- an awareness and understanding of the global environment in which organizations operate and managers make decisions

- legal and ethical dilemmas faced by managers in carrying out their responsibilities

MAJOR IN BUSINESS ADMINISTRATION—MANAGEMENT

Students in the Management Concentration complete the major in Business Administration and 21 units of Management requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the **Core Curriculum** section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses

5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Management Concentration (21 units)

MNGT 375	International Business: Theory & Practice (3)
MNGT 381	Human Resource Management (3)

MNGT 421	Management of Organizational Behavior (3)
EBTM 443	Introduction to Project Management (3)

Choose three electives from:

Any two non-BUAD required EBTM courses

ENTR 355	Entrepreneurship & Small Business (3)
ENTR 401	Consulting Workshop (3)
MNGT 425	Organizational Theory and Development (3)
MNGT 433	Compensation and Benefits (3)
MNGT 438	Multinational Management and Culture (3)
MNGT 452	Staffing and Retention (3)
MNGT 453	Conflict Resolution in Business (3)
MNGT 463	Organizational Leadership (3)
MNGT 470-479	Special Topics in Management (3)
MNGT 491	Directed Readings (3)
MNGT 494	Study Abroad in Management (3)
MNGT 495	Independent Research (3)
MNGT 497	Management Internship (3)
MNGT 498	Practicum in Management (3)

Note: Only 3 units of the MNGT 497 or 498 courses can be applied to the Management Concentration requirement.

MAJOR IN BUSINESS ADMINISTRATION—ENTREPRENEURSHIP TRACK

The Entrepreneurship (ENTR) Track is a rigorous, high-quality program that addresses the needs and wishes of various stakeholders in today's globally integrated business, political and cultural environment. The program includes training in business start-ups and entrepreneurship fundamentals, opportunities to participate in an entrepreneurship practicum, a business plan competition, and a term-long experience in consulting for start-ups and entrepreneurial ventures. Students in the Entrepreneurship Track complete the major in Business Administration and 24 units in the track, of which 15 units are in required courses and 9 units are from elective courses.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required

courses and most of the university Core Curriculum. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)

LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Entrepreneurship Track Required Courses (24 units)

EBTM 443	Introduction to Project Management (3)
ENTR 355	Entrepreneurship and Small Business (3)
ENTR 401	Consulting Workshop (3)
FIN 424	Entrepreneurial Finance (3)
MKTG 451	Personal Selling and Sales Management (3)

Choose three electives from:

ENTR 402	Family Business Management (3)
ENTR 403	International Entrepreneurship (3)
ENTR 410	Business Plan Competition (3)
ENTR 498	Entrepreneurship Practicum (3)

MAJOR IN BUSINESS ADMINISTRATION—HUMAN RESOURCE MANAGEMENT CONCENTRATION

The Human Resource Management Concentration is designed to prepare students to apply their knowledge and skills for managerial positions in a human resource department. Students in the Human Resource Management Concentration complete the major in Business Administration and 21 units of Human Resource Management requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the **Core Curriculum** section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before

registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
plus	
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Human Resource Management Concentration Required Courses (21 units)

MNGT 381	Human Resources Management (3)
MNGT 433	Compensation and Benefits (3)
MNGT 452	Staffing & Retention (3)
MNGT 483	Strategic HR Management (3)

Choose three electives from:

ECON 341	Labor Economics and Labor Relations (3)
MNGT 375	International Business: Theory & Practice (3)
MNGT 421	Management of Organizational Behavior (3)
MNGT 425	Organizational Theory and Development (3)
MNGT 438	Multinational Management and Culture (3)
MNGT 453	Conflict Resolution in Business (3)
MNGT 463	Organizational Leadership (3)
MNGT 470-479	Special Topics in Management (3)
MNGT 491	Directed Readings (3)
MNGT 495	Independent Research (3)

MAJOR IN BUSINESS ADMINISTRATION—INTERNATIONAL BUSINESS CONCENTRATION

The International Business Concentration is an interdisciplinary program comprising courses drawn from disciplines within CBE. Students complete the major in Business Administration and 21 units of International Business Concentration requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as “pre-Business Administration” (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level majors-only CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level majors-only CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

International Business Concentration (21 units)

MNGT 375	International Business: Theory & Practice (3)
FIN 435	International Finance (3)
MNGT 438	Multinational Management & Culture (3)
MKTG 445	International Marketing (3)

Three courses (total of 9 units) to develop an understanding of the linguistic, economic, socio-cultural, and physical environments of foreign countries

or regions, selected from the following: (Approval by the appropriate department may be needed depending upon the student's qualifications.)

Foreign Language (a maximum of 9 intermediate or 200+ level or above units)

ANTH 368	Development and Industrialization: Cross-Cultural Perspective (3)
ECON 305	Survey of International Economics (3)
ENTR 403	International Entrepreneurship (3)
MKTG/MNGT 479	Special Topics (if include travel and study abroad)
MNGT 494	Study Abroad in Management (3)

COMBINED MAJOR IN E-BUSINESS AND BUSINESS ADMINISTRATION

The combined major in e-Business and Business Administration requires a minimum of 124 units to be earned with a grade equivalent of 2.00 or higher. The program consists of 21 units of lower-level required courses, 33 units of upper-level BUAD courses, 18 units of upper-level e-Business courses as well as the university Core Curriculum requirements. Additionally, the students must choose one track/concentration from the following: (a) Management Concentration (b) Marketing Concentration or (c) Project Management and Business Analysis Track. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

Requirements for Admission to the Combined Major in e-Business and Business Administration

Students are admitted to the combined major in e-Business and Business Administration on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the combined major. Candidates for the combined major in e-Business and Business Administration must satisfy the admission requirements for the e-Business major as well as the Business Administration major.

Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. Degree candidates intending to pursue the combined major in e-Business and Business Administration are designated as “pre-e-Business” (PEBU) until admitted into the majors. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the e-Business & Business Administration (XEBBA) major and a change of major declaration form (if they currently are not an e-Business or pre-e-Business major) before registering for upper-level majors-only CBE courses (BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available in the CBE Office of Student Academic Services in Stephens Hall 301 and on our website, www.towson.edu/cbe/Files/advising/Admission_Application_EBUS.pdf. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

e-Business Required Courses (18 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 419	Supply Chain Management (3)
EBTM 431	Advanced e-Business (3)
EBTM 443	Introduction to Project Management (3)
EBTM 454	Business Process Management (3)

Management Concentration Required Courses (9 units)

MNGT 375	International Business: Theory and Practice (3)
MNGT 381	Human Resource Management (3)
MNGT 421	Management of Organizational Behavior (3)

Choose two electives (6 units) from the following:

ENTR 355	Entrepreneurship and Small Business (3)
ENTR 401	Consulting Workshop (3)
MNGT 425	Organizational Theory and Development (3)
MNGT 433	Compensation and Benefits (3)
MNGT 438	Multinational Management and Culture (3)
MNGT 453	Conflict Resolution in Business (3)
MNGT 463	Organizational Leadership (3)
MNGT 470-479	Special Topics in Management (3)
MNGT 491	Directed Readings (3)
MNGT 494	Study Abroad in Management (3)
MNGT 495	Independent Research (3)
MNGT 497	Management Internship (3)
MNGT 498	Practicum in Management (3)

Note: Only 3 units of the MNGT 497 or 498 courses can be applied to the Management Concentration requirement.

Department of Marketing

Chair: Judy Harris

Professors: Garland Keesling, Thomas Maronick, Rodney Stump

Associate Professor: Erin Steffes

Assistant Professors: Sunil Contractor,

Philippe Duverger, Feisal Murshed,

Plamen Peev, Veronica Thomas

Administrative Assistant: Diane Hornbuckle

OFFICE

Stephens Hall 123, 410-704-3351

Fax: 410-704-3772

E-mail: dhornbuckle@towson.edu

www.towson.edu/marketing

MISSION STATEMENT

The Department of Marketing is committed to an excellent broad-based education in marketing that enables students to excel in positions of responsibility and leadership in a dynamic business environment by means of:

- Dedication to students and personalized service
- Teaching excellence
- Involvement with businesses, nonprofit organizations and government
- Commitment to the highest ethical standards

PROGRAMS OF THE DEPARTMENT

The Department of Marketing offers the following programs:

- The major in Business Administration with a Marketing Concentration
- The combined major in e-Business and Business Administration (Marketing)

Marketing is the business function that is responsible for creating, communicating, and delivering value to customers. Marketing involves determining who an organization's customers are (or should be) and figuring out how best to attract and keep them. As such, proficiency in marketing is essential for any organization to prosper and grow.

For students entering the business world, marketing is an exciting profession and offers a wide variety of opportunities. Do you want to translate creative ideas into practical realities? Do you want to develop innovative business strategies from in-depth data analysis? Do you want to engage clients and business partners and demonstrate how your product provides real value? If you find any of these possibilities intriguing, marketing may be the field for you.

Careers in marketing can involve brand management, marketing research, professional selling and sales force management, advertising, public relations, international marketing, non-profit management, supply chain management, retailing, database management, social media and more. The Bureau of Labor Statistics projects that jobs in marketing and sales management will grow as fast or faster than average through 2018 (<http://www.bls.gov/oco/ocos020.htm>).

MAJOR IN BUSINESS ADMINISTRATION—MARKETING

Students in the Marketing Concentration complete the major in Business Administration and 21 units of Marketing requirements.

The major in Business Administration (BUAD) requires 21 units in lower-level required courses, 33 units of upper-level business required courses, and 21-24 units in one of the following concentrations or tracks: Economics, Entrepreneurship, Finance, Human Resource Management, International Business, Management, Marketing, Project Management and Business Analysis, or Legal Studies. All major requirements must be completed with a grade equivalent of 2.00 or higher. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade. See the Suggested Course Sequence for Business Administration Majors.

The Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree in Business Administration requires a minimum of 120 earned units, which must include successful completion of the university Core Curriculum requirements, the Business Administration major requirements and electives. The electives may include the units required for a minor or specialization program, or in a foreign language for the B.A. degree. See the complete Degree Requirements in the University Curriculum section in this catalog.

During the freshman and sophomore years, pre-business administration (PBUA) students must concentrate on building an academic foundation as a base for the in-depth, upper-level courses. This foundation includes both lower-level required courses and most of the university Core Curriculum requirements. Students who enroll in CBE courses without having fulfilled the prerequisites will be disenrolled from those courses.

Students are responsible for monitoring their own progress toward graduation. Students must consult with their assigned advisers each term to ensure that prerequisite courses are taken in proper sequence to meet the student's target completion date for the degree. Prerequisites are monitored during registration.

Requirements for Admission to the Business Administration Major

Students are admitted to the major in Business Administration (BUAD) on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the major. Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. In order to be admitted, students must satisfy the following requirements:

1. Formal admission to TU as a degree candidate
2. Minimum cumulative GPA of 2.00 or higher for all course work
3. Grade equivalent of 2.00 or higher in each lower-level required course
4. Minimum average GPA of 2.70 for ALL seven lower-level required courses
5. A passing score for the CBE Computer Proficiency Exam

The minimum GPA will be reviewed each year and may be adjusted as space availability dictates. Candidates for the major must fulfill the requirements in effect at the time of application.

No more than two courses may be repeated, of which no more than one course may be repeated twice.

Degree candidates intending to major in Business Administration are designated as "pre-Business Administration" (PBUA) until admitted into the BUAD major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Students who take upper-level "majors-only" CBE courses before being admitted to the Business Administration major do so at their own risk.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the BUAD Major before registering for upper-level "majors-only" CBE courses (ACCT, BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available at CBE Student Academic Services, Stephens Hall 301 and on our website, www.towson.edu/cbe/student_resources/advising. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3)
	or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
	plus
	Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3)
	or
MKTG 342	Department Honors Principles of Marketing (3)
EBTM 337	Information Technology (3)
EBTM 311	Principles of e-Business (3)**
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Marketing Concentration (21 units)

EBTM 411	e-Business Marketing (3)
MKTG 425	Consumer Behavior Analysis (3)
MKTG 441	Marketing Research and Forecasting (3)

MKTG 445	International Marketing (3)
MKTG 451*	Personal Selling and Sales Management (3) or
MKTG 431*	Marketing Information for Decision Making (3)
MKTG 485	Strategic Marketing (3)

Choose one elective from::

MKTG 345	Managing Integrated Marketing Communications (3)
MKTG 347	Services Marketing (3)
MKTG 349	Product Management (3)
MKTG 355	Retail Management (3)
MKTG 357	Marketing Channels (3)
MKTG 361	Marketing for Nonprofit Organizations (3)
MKTG 442	Marketing Seminar (3)
MKTG 470-479	Special Topics in Marketing (3)
MKTG 494	Marketing Study Abroad (3)
MKTG 497**	Marketing Internship (1-3)

*Note: If both MKTG 451 and MKTG 431 are taken, the additional course can be applied to the Marketing Concentration requirement as an elective.

**Note: Only 3 units of the MKTG 497 course can be applied to the Marketing Concentration requirement.

COMBINED MAJOR IN E-BUSINESS AND BUSINESS ADMINISTRATION

The combined major in e-Business and Business Administration requires a minimum of 124 units to be earned with a grade equivalent of 2.00 or higher. The program consists of 21 units of lower-level required courses, 33 units of upper-level BUAD courses, 18 units of upper-level e-Business courses as well as the university Core Curriculum requirements. Additionally, the students

must choose one track/concentration from the following: (a) Management Concentration (b) Marketing Concentration or (c) Project Management and Business Analysis Track. In order to assure that students have retained critical information from prior courses, students take a comprehensive examination on business content as part of the capstone course, MNGT 481. The results of this examination serve as 10 percent of the MNGT 481 grade.

Requirements for Admission to the Combined Major in e-Business and Business Administration

Students are admitted to the combined major in e-Business and Business Administration on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to the combined major. Candidates for the combined major in e-Business and Business Administration must satisfy the admission requirements for the e-Business major as well as the Business Administration major.

Each term, the College of Business and Economics (CBE) considers applications for admission to the major in the following term. Degree candidates intending to pursue the combined major in e-Business and Business Administration are designated as "pre-e-Business" (PEBU) until admitted into the majors. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the major and the degree.

Application Procedure

Students who will meet the admission requirements at the end of the term must complete an Application for Admission to the e-Business & Business Administration (XEBBA) major and a change of major declaration form (if they currently are not an e-Business or pre-e-Business major) before registering for upper-level "majors-only" CBE courses (BUSX, EBTM, ECON, ENTR, FIN, LEGL, MKTG and MNGT). The forms are available in the CBE Office of Student Academic Services in Stephens Hall 301 and on our website, www.towson.edu/cbe/Files/advising/Admission_Application_EBUS.pdf. Deadline for spring admission is October 1; summer and fall deadline is March 1.

Lower-Level Required Courses (21 units)

ACCT 201	Accounting Principles I (3) (or ACCT 211)
ACCT 202	Accounting Principles II (3) (or ACCT 212)
ECON 201	Microeconomic Principles (3) (or ECON 203)
ECON 202	Macroeconomic Principles (3) (or ECON 204)
ECON 205	Statistics for Business and Economics I (3) or
MATH 231	Basic Statistics (3) (or MATH 233)
LEGL 225	Legal Environment of Business (3)
MATH 211	Calculus for Applications (3) or
MATH 273	Calculus I (4)
<i>plus</i>	
Passing the Computer Proficiency Exam (CPE) with a minimum passing grade of 70 percent.	

Upper-Level Business Courses (33 units)

BUSX 301	Business Cornerstone (3)*
EBTM 306	Fundamentals of Project Management and Business Decisions (3)
FIN 331	Principles of Financial Management (3)
MKTG 341	Principles of Marketing (3) or
MKTG 342	Department Honors Principles of Marketing (3)
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MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 482	Business Ethics and Sustainability (3)
MNGT 481	Business Strategy and Policy (3)
BUSX 460	Professional Experience (3)

*Note: The Advanced Writing Seminar Course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

e-Business Required Courses (18 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 419	Supply Chain Management (3)
EBTM 431	Advanced e-Business (3)
EBTM 443	Introduction to Project Management (3)
EBTM 454	Business Process Management (3)

Marketing Concentration Required Courses (15 units)

MKTG 425	Buyer Behavior Analysis (3)
MKTG 431	Marketing Information for Decision Making (3)
MKTG 441	Marketing Research (3)
MKTG 445	International Marketing (3)
MKTG 485	Strategic Marketing (3)





The College of Education

Towson University has a distinguished history in the preparation of classroom teachers and education specialists. As the first teacher-training institution in Maryland, Towson University has been preparing men and women for teaching careers for 145 years. Programs of study within the College of Education lead to the baccalaureate degree in education with certification in Early Childhood Education, Elementary Education, Middle School Education and Special Education. In addition, the college offers programs that lead to certification in Secondary Education and K-12 education for those students enrolled in other colleges of the university. Programs of study within the college are constantly assessed and reorganized in order to provide students with three essentials for professional success: 1) a challenging general education in a variety of disciplines; 2) in-depth content knowledge in the field of teaching specialization; 3) and a professional education based upon current research, professional standards, and models of best practice.

The teaching faculty in the College of Education is dedicated to providing a background in research on learning and methods of instruction which prepares teachers and education specialists as facilitators of active learning for diverse and inclusive communities of learners in environments that are technologically advanced. To promote this goal, faculty members are committed to active participation in the academic community as teachers, scholars and advisers. They use methods of instruction which emphasize active student learning through the integration of content knowledge with the study and practice of effective pedagogy.

Raymond P. Lorion, Dean
 Thomas Proffitt, Associate Dean
 Jeffrey Kenton, Assistant Dean

Early Childhood Education
 Elementary Education
 Instructional Technology
 Integrated Early Childhood – Special Education
 Integrated Elementary Education – Special Education
 K-12 Teacher Education (Art, Dance, Health
 Education, Physical Education, Music)
 Middle School Education
 Secondary Education
 Special Education

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www.towson.edu/coe

CERTIFICATION AND ACCREDITATION

The College of Education offers programs of study leading to the baccalaureate degree in education with certification to teach early childhood, elementary, middle school and special education. In addition, the college offers programs that lead to teacher certification in secondary education and K-12 education. Students must be aware that all programs are screened majors; specified admission standards, including Core Curriculum requirements, are included in program-specified descriptions.

Teacher Education programs, based on state and national standards, are approved by the National Council for the Accreditation of Teacher Education and the Maryland State Department of Education. Completion of an approved program qualifies graduates for certification in all states that are members of the Interstate Reciprocity Contract. Applicants for Maryland teaching certificates are required to achieve qualifying scores on the Praxis I—or other identified testing alternative—and II examinations, as determined by the Maryland State Board of Education.

TITLE II—HIGHER EDUCATION ACT

Program Information

1. Students

Total number of students enrolled in
Fall 2010: 4,183

2. Length of Capstone Internship

7.5 hours per day; 5 days per week; minimum
20 weeks;

750 total hours of supervised internship

3. HEA/Title II Institutional Praxis II 2009–2010

Pass Rate: 97 percent

MISSION STATEMENT

The mission for professional education at Towson University is to inspire, educate and prepare educators as facilitators of active learning for diverse and inclusive populations in environments that are technologically advanced. In this process, faculty members assume the responsibility for designing, developing, implementing and assessing academic programs for:

1. entering College of Education freshmen
2. transfer students
3. post-baccalaureate students seeking certification (M.A.T.; approved programs)
4. master's degree students
5. post-master's degree students seeking continuing professional development
6. doctoral students acquiring expertise to shape the future of education

VISION STATEMENT

The vision for professional education at Towson University is to build upon its rich heritage and excellent reputation and to position itself to maintain a leadership role in academic program planning and public policy formulation. By maintaining this leadership role, teacher education can ensure that active learning occurs in diverse and inclusive educational environments where contemporary information resources are available. Thus, teacher education, in collaboration with other public/private agencies, can assist in the readiness of all learners to succeed in a rapidly changing, diverse and highly technical world. In order to achieve this

vision, Teacher Education programs at Towson University are committed to:

1. ensuring the mastery of appropriate content in general studies in the liberal arts and sciences as well as in the specific academic discipline and advanced fields of study
2. reflecting upon and refining best practices—Professional knowledge and skills—to develop a repertoire of instructional and assessment strategies
3. preparing students for diverse and inclusive communities of learners through systematic exposure to heterogeneous populations
4. utilizing appropriate technologies which reflect best practices in education
5. helping develop, internalize and display professional conscience (commitment to professional practice, caring for the success and well-being of all students, and collaboration with colleagues and stakeholders)
6. developing collaborative partnerships with the public/private sector
7. providing leadership in professional education through scholarly endeavors

PROGRAM OUTCOMES

All Teacher Education programs utilize the Interstate New Teacher Assessment and Support Consortium Principles and program-specific professional association standards as performance-based outcomes for teacher candidates.

STANDARDS FOR STUDENTS ENROLLED IN TEACHER EDUCATION PROGRAMS

The Teacher Education Executive Board (TEEB) representing all Teacher Education programs at Towson University adopted the following minimum requirements as conditions for entrance into Teacher Education programs and formal entry into student teaching.

I. Procedures and Requirements for Admission to all Professional Education Programs

- A. Completion of a notarized self-disclosure form of criminal background to be filed in the Center for Professional Practice

II. Procedures and Requirements for Admission to all College of Education Professional Education Programs

- A. Completion of a written application for formal admission to the program
- B. Minimum overall GPA of 2.50 in Secondary Education; minimum overall GPA of 2.75 in Early Childhood, Elementary Education, and Special Education
- C. Completion of speech and hearing screening
- D. Completion of English 102/190 or equivalent course with a grade of "C" or better; Secondary Education also requires an admission essay.
- E. All College of Education departments require a passing score (as determined by the Maryland State Department of Education) on Praxis I, or submit evidence of minimum score on the one of the following standardized tests:

1. SAT taken after 2005, math and critical reading composite score of 1100

2. SAT taken between 4/95 and 2005, math and verbal composite score of 1100;
3. SAT taken prior to 4/95, math and verbal composite score of 1000;
4. ACT composite score of 24;
5. GRE math and verbal composite score of 1000.

F. Students seeking admission to Teacher Education programs (**Art, Dance, Health Education, Music and Physical Education**) must contact their department chair for procedures and requirements for admission to professional education programs.

III. Procedures and Requirements for Entry into Student Teaching for all Professional Education Programs

- A. Completion of a criminal background check. The criminal background check results must be received by the Center for Professional Practice prior to entry into student teaching.
- B. Minimum of 75 units completed for K-12 programs; 90 units completed for Early Childhood Education, Elementary Education, and Special Education; for Secondary Education
- C. Completion of electronic application for student teaching
- D. Minimum GPA of 2.50 in Secondary Education and remaining K-12; 2.75 in Early Childhood Education, Elementary Education, Special Education, and Art Education
- E. Minimum average of 2.75 in academic major applicable only in programs requiring an academic major
- F. Minimum average of 3.00 in professional education courses for Early Childhood Education, Elementary Education, Special Education, and Art Education; 2.75 for Secondary Education and remaining K-12
- G. Prior to applying for student teaching, all K-12 programs require a passing score (as determined by the Maryland State Department of Education) on Praxis I.

IV. Professional Behavior

The Teacher Education Executive Board (TEEB) reserves the right for each department/program to refuse, deny or revoke the application for admission to professional education programs or continuation in professional education programs of any student whose observed conduct is deemed incongruent with established guidelines of professional behavior.

As a professional discipline, education is "vested by the public with a trust and responsibility requiring the highest ideals of professional service." All Teacher Education students agree to accept "the responsibility to adhere to the highest ethical standards of professional behavior."¹ Placing the importance of professional behavior and duties above one's own convenience is the cornerstone of professionalism.

All Teacher Education students are responsible for understanding unit, department- and program-specific professional expectations. In addition to fulfilling all academic requirements, successful completion of all field experiences requires demon-

strated professional behavior including, but not limited to, punctuality, attendance, professional attire, discretion, respect for confidentiality, effective and appropriate communication with university and school-based students and personnel, and acceptance of diversity.

All Teacher Education students must exhibit behavior that is consistent with the university's Code of Conduct, the Unit's Professional Behavior Policy, and established professional practice in educational and clinical settings. Successful completion of all field experiences is a requirement for continuation in the education program.

¹ National Education Association, *Code of Ethics of the Education Profession*, 1975.

The TEEB Standards, including the "Statement of Professional Behavior for Undergraduate and Graduate Teacher Education Students," excerpted from *Towson State University Compass* (1987 Student Handbook), and "NEA Code of Ethics" (1975), was adopted by the College of Education Council in September 1988, and reaffirmed by TEEB in November 1990, and October 1995. The Standards were revised and approved in February 1996, May 1998, February 2000, May 2005, May 2008, and April 2009.

ADMISSION TO TEACHER EDUCATION

Admission to all university Teacher Education programs is governed by the Teacher Education Executive Board "Standards for Students Enrolled in Teacher Education Programs."

The College of Education admits students either as freshmen or as undergraduate transfer students from accredited, post-secondary institutions. During the freshman and sophomore years, students are generally engaged in pre-professional courses or courses that fulfill Core Curriculum requirements, as well as all identified prerequisites (e.g., specific and sequential courses in Core Curriculum) for admission to COE screened majors and programs.

Reflecting commitment to the university's intentional academic advising program, all College of Education undergraduate programs are screened majors. As an integral part of the teaching/learning experience, students work with advisers in a strategic planning process across all years at the university. Accordingly, to support student success, all COE students are required to confer prior to registration each term with their assigned advisers.

Advising and Screening

Students who plan to enter Teacher Education programs must go online and declare a major (www.onestop.towson.edu). The program that was declared will contact the student via e-mail for follow-up directions which include:

- Completion of a criminal history disclosure statement
- Assigning an adviser according to the chosen major
- Obtaining information about the required speech and hearing screening
- Obtaining information about the required Praxis I Tests or other identified standardized tests

Admission to Professional Education Programs

Admission to the professional program requires the following:

- Completion of an application for formal admission to the program
- Minimum overall GPA of 2.50 in Secondary Education; minimum overall GPA of 2.75 in Early Childhood, Elementary Education and Integrated Elementary and Special Education, and Special Education; (Students in Art Education, Dance Education, Health Education, Music Education and Physical Education should contact their department chair for procedures and requirements for admission to these programs.)
- Completion of speech and hearing screening
- Completion of ENGL 102/190 or equivalent course with grade equivalent of 2.00 or higher; Secondary Education also requires an admission essay.
- Successful completion of Praxis I Academic Skills Assessments or other identified standardized test, such as SAT, GRE, ACT; qualifying scores must be submitted to their major program.
- All students applying for admission to a Teacher Education program at Towson University are required to complete a Criminal History Disclosure Form. This form may be obtained from the major departments. The form is to be notarized and kept in the student's folder. Most departments offer a notary.

In addition to the undergraduate program, the College of Education offers approved, post-baccalaureate "certification only" programs for baccalaureate graduates seeking Maryland state certification. "Certification Only" students must document a passing score (as determined by the Maryland State Department of Education) on Praxis I, SAT, GRE, ACT and attain the required GPA prior to admission.

Admission to the Professional Year of Teaching

Students must attend an orientation meeting in preparation for the Professional Year Term 2 Internship. This meeting, scheduled by the Center for Professional Practice, is held early in the term prior to the final term, and provides directions for completing the online Teacher Internship Management System (TIMS) application. All Teacher Education students must successfully complete the Praxis I tests or other identified standardized test, and a speech and hearing screening. All preservice students in Teacher Education programs at TU whose programs of study require an intensive/extensive internship or student teaching experience in a public school setting (pre-K through 12) are required to complete a criminal background check before beginning this experience. The criminal background check must be filed with the Center for Professional Practice. Information is available in the Center for Professional Practice. Because some of TU's Teacher Education programs have selected additional requirements for admission to the teaching internship (student teaching), students should refer to the section of this catalog related to their specific majors.

FIELD AND CLINICAL EXPERIENCE PLACEMENTS

Each Teacher Education student who has reached the appropriate level of competency will have a series of progressively responsible field experiences. TU has implemented a Network of Professional Development Schools to provide all students with an intensive and extensive internship, including on-site course work integrated with "pre-student teaching" and "student teaching" experiences.

Reflecting the Professional Education Mission and Vision statements, *students are assigned* by their department and/or the Center for Professional Practice to field and clinical experience placements that are diverse and inclusive. Placements are made in schools that provide the best experiences for future success as a teacher and that enable the Teacher Education Unit to meet state and national accreditation mandates. All professional year placements will be in identified Professional Development Schools, based on ongoing and systematic PDS partnership agreements with school systems. These mandates and the size and scope of our education program do not always permit personal preference or geographic convenience in placements.

Students enrolled in the professional year internships are charged a lab fee. This fee is used for remuneration to mentor teachers in schools where field experiences are completed.

CENTER FOR PROFESSIONAL PRACTICE OFFICE

Hawkins Hall 303, 410-704-2567

Co-Directors: Karen Schafer, Scott Gehring

The Center for Professional Practice is a resource and service office working with all education programs at Towson University. The major purpose of the center is to assist students and instructors in placing students in a variety of field settings for internship experiences and to develop, support and sustain Professional Development Schools. More specific operations include:

- facilitating school system placements – preservice and teaching-internship, and Professional Development Schools.
- maintaining communication between schools/agencies and university education programs
- coordinating Open Houses
- providing information to Education majors on Praxis I and speech and hearing test administrations
- maintaining education student data
- collecting data that analyzes all education programs

MARYLAND WRITING PROJECT OFFICE

Hawkins Hall 304, 410-704-3593

Director: Barbara J. Bass, 410-704-4573

Co-Director: Katie Hearn, 410-704-4094

The Maryland Writing Project (MWP), a site of the National Writing Project, is housed in Towson University's College of Education. It is supported by the colleges of Education and Liberal Arts. Established in Baltimore in 1981, the MWP is a teacher-driven professional development organization for teachers across the content areas in grades pre-K through university. Its mission is to identify, train and support excellent teachers so that they can share with others their knowledge and experience in teaching writing and in using writing as a learning tool. Teachers participate in an invitational Summer Institute to become Teacher-Consultants. They research, develop and share best writing practices to effect change in their classrooms, schools and school systems.

The MWP offers both undergraduate and graduate courses. MWP Teacher-Consultants serve as instructors for EDUC 301 Writing and Communication Skills for Teachers. They also teach SCED 399 Differentiated Student Teaching, which is offered during the summer in conjunction with a camp for young writers called the Student Writers' Workshop. At the graduate level, MWP-trained Teacher-Consultants teach SCED 605, the 6-unit Summer Teacher Institute; EDUC 734, the Teacher Inquiry Institute; EDUC 667 Writing as Thinking; and EDUC 661 Responding to and Evaluating Writing. They also teach special topics courses at the graduate level throughout the year.

Finally, the MWP offers Maryland State Department of Education-approved, in-service professional development workshops in school systems across the state. The courses range in scope from daylong to yearlong classes.



Department of Early Childhood Education

Professors: Terry Berkeley, Mubina Kirmani, Edyth Wheeler (*Graduate Director*)

Associate Professors: Ocie Watson-Thompson (*Chair*), Judith Cruzado-Guerrero

Assistant Professors: Janese Daniels, Hae Kyoung Kim, Salemawit Tadesse

Lecturers: Hannah S. Cawley, Kathleen Carstensen, Marisa Dudiak, Marcel Hall, Gazell Hughes-Eason, Lisa Marie Mason, Heather A. Skelley, Barbara Steele

OFFICE

Hawkins Hall 019, 410-704-2572

Fax: 410-704-2990

Graduate Information: 410-704-2460

E-mail: ejwheeler@towson.edu

MISSION STATEMENT

The mission of the Teacher Education Unit is to inspire, educate and prepare facilitators of active learning for diverse and inclusive communities of learners in environments that are developmentally appropriate.

PROGRAMS OF THE DEPARTMENT

The Department of Early Childhood Education offers the following programs of study: the major in Early Childhood Education, the major in Elementary Education with eligibility for Early Childhood Education certification, the Master of Arts in Teaching in Early Childhood Education, and the Master of Education in Early Childhood Education. For more information about graduate programs, consult the *Graduate Catalog*.

The Towson University Department of Early Childhood Education faculty prepares teachers to act as advocates for young children and their families, to create and facilitate developmentally appropriate environments for them. The guiding principles are the philosophical and practical basis for departmental programs.

Students entering the Early Childhood Education program are made aware of the sophisticated and demanding work that teachers of young children perform, and they are screened accordingly for admission into the program. Developing teachers are challenged to recognize teaching as one of the highest and most dynamic professional callings to which one can aspire. Faculty members facilitate the developing teacher's respect for, pride in, and commitment to the teaching profession. Faculty members motivate and inspire developing teachers in the most positive avenues, to have a sense of their ability to exert positive influence in learning scenarios as well as exerting a firm sense of professional self-direction and decision-making skills. Faculty members assist developing teachers to become reflective and ever-growing practitioners. From the outset, developing teachers are taught and provided models that only the very best is good enough for young children and their families.

Faculty members work to awaken and support the developing teacher's ability to value and approach children from broad intellectual, academic and social foundations. Developing teachers are prepared to rely upon those foundations in order to support the development of relevant and challenging curricula and to learn to respond to young children's immediate and long-term needs.

Content-appropriate and developmentally appropriate pedagogy facilitates integrated learning experiences and environments for young children. The faculty understands how young children develop and learn; thus, they facilitate in developing teachers content-appropriate pedagogy. The faculty also provide a wealth of experiences, strategies, creativity and resources to enable developing teachers to draw in and inspire young children in content areas.

The Early Childhood Education faculty members help emerging teachers understand how their personal and professional philosophies prompt them to facilitate the development of the "whole child." Integrated knowledge about child development is crucial to understanding children's play, learning and socialization. Faculty members make it apparent to developing teachers that assessing and responding to children's individual differences and developmental needs requires resourcefulness, responsibility and responsiveness. Developing teachers are encouraged to respond to the individual child while recognizing that their responses occur incrementally within the context of meeting the needs of a total group or class.

Faculty members in Early Childhood Education are committed to enabling developing teachers to meet the diverse learning needs of all young children, particularly in terms of their creative and aesthetic development, their learning modalities or styles (visual, auditory, kinesthetic and tactile), and their myriad intelligences (spatial, musical, mathematical, linguistic, kinesthetic and personal). Moreover, the faculty encourages students to become teachers who value the significance of human diversity and the richness, beauty and power that human diversity offers to classrooms and other places where learning takes place. Faculty and developing teachers, therefore, are committed to designing diversity-rich environments that encourage respect for the individuality of teachers and young children. Additionally, faculty members promote respect for families and the importance of family in the lives of children. All of this serves as the ethical foundation of practice, providing a basis for developing teachers to move toward high ideals in their work with young children and their families.

The goals and objectives of the Department of Early Childhood Education reflect the mission and the vision of the College of Education. Students in the program are provided the knowledge and experiences needed to assist in the development of the skills, dispositions and competencies identified by the Maryland State Department of Education (MSDE), the Interstate New Teacher Assessment and Support Consortium (INTASC) Principles, and the National Association for the Education of Young Children (NAEYC) Standards for professionals in Early Childhood Education.

Major in Elementary Education/Early Childhood Certification

In cooperation with Elementary Education, students can select courses that will enable them to seek certification in Early Childhood Education and Elementary Education. Graduates of this program are eligible to teach children from birth through age 13. Interested students should contact the chairs of both departments to plan their program.

Major in Integrated Early Childhood–Special Education

Education majors may elect to become certified in both Early Childhood and Special Education by selecting this integrated major. This program, specially designed to integrate both early childhood education and special education, prepares students as early childhood classroom teachers, as well as infant/primary special education teachers.

The Integrated Early Childhood–Special Education program is provided at Towson University. As a screened program and major, applicants must achieve qualifying scores on Praxis I or SAT/ACT as established by MSDE, a minimum of 2.75 GPA on all prerequisite course work required for the major, and the required speech and hearing screening. The total program equals 130 units. Students must maintain an overall cumulative GPA of 2.75 or higher and a 3.00 GPA or higher in courses for the major.

Refer to the Department of Special Education for specific course requirements.

MAJOR IN EARLY CHILDHOOD EDUCATION

To meet university, college and Maryland State Department of Education certification requirements in Core Curriculum and professional education courses, students must complete a unit program for graduation. Students must have a grade equivalent average of 3.00 or higher in all courses in the major; this includes interdisciplinary courses taken during the final four terms of the program. Students must maintain an overall GPA of 2.75 or higher in all courses from all institutions of higher education in which the student has been enrolled.

All students, beginning with their enrollment in ECED 103 Introduction to Early Childhood Education, will be responsible for compiling and refining a Professional Portfolio. Student portfolios will be assessed and evaluated throughout the program.

Early Childhood Education majors need to confer with an adviser from the department each term to ensure that their planned program of study meets college, university and state requirements. This is particularly important if students are pursuing minors or if they are planning for additional certifications. Students also need to check with their departmental adviser prior to taking a course on a Pass grading option as courses in the major and courses required for certification cannot be taken using the Pass/Fail grading option.

Early Childhood Education Screening Criteria

Early Childhood Education is a screened major. Students apply for the major during their fifth term to begin in their sixth term. Students must complete 65 units of courses in the program, have a cumulative 2.75 GPA and 3.00 GPA in professional

courses from the time they enter the program until the time of graduation. The number of students admitted into the program each term is determined by the number of seats available. Typically there are 50 seats open per term for students meeting all requirements to enter the major.

The following requirements must be met for entry into the major:

1. completion of 65 or more units including ECED 103, ECED 201, ENGL102/190, EDUC 203, MATH 204, MATH 205, MATH 251, and SPED 301 with a grade equivalent of 2.00 or higher.
2. all ECE majors must complete a series of three courses prior to admission to a professional program: Metropolitan Perspective; Teaching and Learning in a Diverse Society; and Education, Ethics and Change.
3. achievement of a cumulative GPA of 2.75; this includes all grades earned in transfer courses and grades earned at Towson University. (A failed course that has been repeated satisfactorily at another institution will be eliminated only from the computation for admission into the Early Childhood Education program. Courses taken at Towson University and repeated at another college or university do not apply to Towson's repeated course policy. See "Transferring Work to Towson" under the Academic Regulations section of this catalog.)
4. completion of the speech and hearing screening. This screening is offered free at the beginning of each term for two days only. Call the Speech-Language-Hearing Clinic in Van Bokkelen Hall or the Department of Early Childhood Education for dates.
5. Praxis I must be completed and meet MDSE-required scores for program admission. The required scores are: Math: 177, Reading: 177, and Writing: 173, or a composite score of 527. However SAT Scores are accepted in lieu of Praxis I Scores.

SAT TAKEN AFTER 2005, MATH & CRITICAL READING	1100
SAT TAKEN BETWEEN 4/95 & 2005, MATH & VERBAL	1100
SAT TAKEN PRIOR TO 4/95, MATH & VERBAL	1000
ACT	24

6. application, including official transcripts from all post-high-school institutions, submitted to the Center for Professional Practice by the announced closing date sent to eligible students each term. (Note: Students are required to submit a "Blue Card" to the department office, Hawkins Hall 019, and to update the information on the card each term. The Blue Card is completed with the assistance of the student's adviser.)
7. meet with the student's Early Childhood Education adviser during the current term and provide an updated Checklist of Degree Requirements including the courses being taken in the current term.

ECED Internship III Criteria

Admission into the Student Teaching Internship III requires a cumulative GPA of 2.75 or higher and a 3.00 or higher in the major.

All interns in Teacher Education programs at Towson University are required to undergo a criminal background check *before* entering the internship. The criminal background check shall be filed with the director of the Center for Professional Practice, where it is kept on file.

To be certified in Maryland as an Early Childhood educator, all interns need to complete two required Praxis II-Subject Assessments/Specialty Area tests. Praxis II specialty tests are Early Childhood: Content Knowledge (0622) with a qualifying score of 160, and Principals of Learning and Teaching: Early Childhood (0521) with a qualifying score of 160.

REQUIRED UNIVERSITY AND DEPARTMENTAL COURSES IN EARLY CHILDHOOD EDUCATION

I. English (9 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
(Core 2)	ENGL 190	Honors Writing Seminar (3)
	ENGL	Any course (3)
(Core 5)	ENGL	Arts and Humanities (3)

II. Social Studies (9 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)
(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	Global Perspective (3)	
	<i>Anthropology, History, Geography, Philosophy, Political Science, Religion (Exception must be approved by ECED chair)</i>	

IV. Mathematics (12 units)

(Core 3)	MATH 204	Math Concepts and Structures I (4)
	MATH 205	Math Concepts and Structures II (4)
	MATH 251	Elements of Geometry (4)

IV. Science (12 units)

(Core 7)	BIOL 115	Biological Science (4)
(Core 8)	PHSC 101	Physical Science I (4)
Science Elective: ASTR, BIOL, CHEM, COSC, GEOL, MATH, PHSC or PHYS (4)		

V. Other Required Courses (15 units)

(Core 4)	Creativity and Creative Development Course (3)	
(Core 1)	Towson Seminar (3)	

The following courses must be taken according to the prerequisites:

(Core 10)	EDUC XXX	Metropolitan Perspectives course (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society (3)
(Core 14)	EDUC XXX	Education, Ethics and Change (3)

VI. Professional Prerequisite Courses (9 units)

ECED 103	Intro to ECED (3)	
ECED 201	Early Childhood Development and Intervention (3)	
SPED 301	Intro to Special Education: K-12 (3)	

Term 5 (Apply to major this term) (15 units)

ECED 315	Infancy and Toddlerhood Development and Intervention (3)
ECED 321	Foundations of Reading and Language Arts (3)
ECED 407	Interactive Technology and the Young Child (3)
ECED 422	Writing Techniques Teachers ECE (Core 9) (3)
ECED 460	Teaching English Language Learners (3)

Term 6 Internship I (17 units)

ECED 341	Preprimary Curriculum (3)
ECED 343	Preprimary PDS Internship (3)
ECED 360	Early Literacy: Best Practices and Materials (3)
ECED 461	Teaching the Integrated Arts (3)
ECED 417	Assessment and Early Identification of L.D. (3)
SCIE 371	Teaching Science in ECE (2)

Term 7 Internship II (15 units)

ECED 342	Primary Curriculum (3)
ECED 361	Teaching Reading in Primary Grades (3)
ECED 429	Principles and Practices of Reading and Language Arts Assessment (3)
ECED 344	Primary PDS Internship (3)
MATH 321	Teaching Mathematics in ECE (3)

Term 8 Internship III (15 units)

ECED 351	Internship: Primary – Internship III (6)
ECED 352	Internship: Preprimary – Internship III (6)
ECED 421	Internship Seminar in Early Childhood Education (3)

ECED PRACTICUMS AND INTERNSHIPS

Consistent with the College of Education policy on appropriate professional experiences, Department of Early Childhood Education pre-majors and interns will be provided a full range of progressively responsible and challenging observation experiences, practicums and internships in environments with students who are culturally varied and academically diverse just as with the range of learners evident in all schools.

Internship decisions are made by the faculty in the Department of Early Childhood Education and in conjunction with the College of Education's Center for Professional Practice. As stated by the College of

Education and supported fully by the Department of Early Childhood Education, placement assignments are made irrespective of the personal preference and/or geographic convenience of interns.

INTERNSHIP III

A maximum of 18 units may be taken during the Internship III term with approval from the chair of the Department of Early Childhood Education.

TRANSFER STUDENT POLICIES

A minimum of 30 units in the major must be completed at TU. SPED 301 Introduction to Special Education is transferable from certain institutions only. Students should contact their advisers for more information. Students are required to take the final 30 units in residence at Towson University. An application process is required to apply to this major, in addition to acceptance to Towson University (September for spring registration; February for fall registration).

OUTCOMES

Students are required to compile and defend orally their Professional Portfolio in order to graduate. The Early Childhood Teacher Education Program utilizes the *Interstate New Teachers Assessment and Support Consortium* (INTASC) principles, and the *Standards of the National Association on the Education of Young Children* as the performance-based outcomes for all teacher candidates and the foundation framework for the portfolio.

MASTER OF ARTS IN TEACHING—EARLY CHILDHOOD EDUCATION

Director: Edyth Wheeler
E-mail: ejwheeler@towson.edu
Hawkins Hall 107-B, 410-704-2460

The Master of Arts in Teaching program is designed to prepare highly qualified students without formal training or experience in the field of education for teacher certification in Pre-kindergarten through grade 3. For more information, see the *Graduate Catalog*.

Department of Educational Technology and Literacy

Professors: Bess Altwerger, Barbara Laster, David Wizer (*Chair*)

Associate Professors: Celestine Cheeks, Sharon Pitcher, William Sadara, Stephen Mogge

Assistant Professors: Jeff Kenton, Frances Luther, Gilda Martinez, Sarah Lohnes, Scot McNary, Jessica Palladino, Rebecca Shargel, Liyan Song

Lecturers: Steven Boone, Suzanne Bourdess, Sharon Brown, Samuel DellaVecchia, Elizabeth Dicembre, Olga Kritskaya, Linda Macaulay, Amy Martin, Patricia McCarthy, Suzanne Obenshain, David Robinson, Cheryl Wood

Director of the Educational Technology Center: Deborah Fuller

OFFICE

Hawkins Hall 216, 410-704-2576

PROGRAMS OF THE DEPARTMENT

The Department of Educational Technology and Literacy is responsible for courses that are not limited to a single teacher education program. The education course listings include core education courses that provide knowledge and skills for general application in teaching and training areas. The instructional technology program offerings also have K-12 applications.

The department coordinates the reading programs and the Reading Clinic, Developmental Reading courses, and Instructional Technology. Graduate programs include the Master of Arts in Teaching and the master's programs in Reading and Instructional Technology.

GRADUATE STUDY IN READING

Co-Director: Barbara Laster
Hawkins Hall 107, 410-704-2556
Co-Director: Stephen Mogge
Hawkins Hall 102P, 410-704-5771

A graduate program specifically designed to improve the teaching of reading at all age levels is available for qualified students seeking Maryland State Certification as Reading Specialist K-12. See the *Graduate Catalog* for details.

THE READING CLINIC

Director: Elizabeth Dicembre
Hawkins Hall 102B, 410-704-4492

This practicum experience is for graduate students in the master's degree program in Reading. The Reading Clinic provides diagnostic and remediation services to individuals in the community who need improvement in reading and writing.



DEVELOPMENTAL READING

Director: L. Steven Boone
Hawkins Hall 205, 410-704-3697

Remediation in reading skills is provided for Towson students through the developmental studies courses in reading scheduled by the Department of Educational Technology and Literacy. See competency requirements for entering students under the Academic Achievement Center section in Academic Resources. Informational sessions for the Praxis are also conducted.

GRADUATE STUDY IN INSTRUCTIONAL TECHNOLOGY

Co-Director: David Wizer
Hawkins Hall 216, 410-704-6268
Co-Director: David Robinson
Hawkins Hall 211, 410-704-6301

The Department of Educational Technology and Literacy offers comprehensive graduate programs that prepare professionals for careers in the instructional media field. The Instructional Development Concentration is intended for those who wish to prepare for training and media positions in business, community and governmental settings. The School Library Media Concentration is intended for the person who plans to direct a School Library Media Center. Persons holding this degree are eligible for certification by the Maryland State Department of Education as an Educational Media Generalist (Level II). The Educational Technology Track is designed for those who wish to integrate technology into classroom teaching, or to coordinate the planning and integration of educational technologies at the school, district or state level. See the *Graduate Catalog* for details.

Department of Elementary Education

Professors: Prisca Martens (*Assistant Chair*),
Karen Robertson (*Chair*)

Associate Professors: Robert Blake, Linda Emerick (*Graduate Director*), Lijun Jin, Morna McNulty

Assistant Professors: Ellen Ballock, Keri Croce, Heather Haverback, Shaun Johnson, Xiaoming Liu, Catherine Maderazo, Cole Reilly, Victoria Russell

Lecturers: Frank Berkey, Kim Bunch, James Cowan, Ann Eustis, Peg Goodson, Faith Hermann, Maryann Hughes, Mary Katsafanas, Linda Miller, Kathy Smith, Amy Schulze, Charla Walls, Elizabeth Wynkoop, P. Gail Connolly

OFFICE

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MISSION STATEMENT

The mission of the Teacher Education Unit is to inspire, educate and prepare facilitators of active learning for diverse and inclusive communities of learners in environments that are technologically advanced.

PROGRAMS OF THE DEPARTMENT

The Department of Elementary Education offers the following programs of study: the major in Elementary Education, the major in Elementary Education with eligibility for Early Childhood certification, the Integrated Elementary Education—Special Education major, the dual major in Elementary Education and Deaf Studies, the Elementary Education major with a minor in selected disciplines, the Master of Arts in Teaching, and the Master of Education in Elementary Education. For more information about the master's programs, consult the *Graduate Catalog*.

The Elementary Education faculty believes that well-prepared elementary school teachers are facilitators of active learning. As reflective practitioners, teachers engage students in the learning process by utilizing research findings and experience-based strategies and practices to make sound, educational decisions. These decisions should be based upon an articulated education philosophy, a thorough knowledge of students' strengths and needs, and an analysis of various learning environments. The Elementary Education program fulfills the goal of preparing such teachers through a program based on a broad liberal arts background and professional preparation, including a planned sequence of courses and field experiences in the Baltimore metropolitan area.

The major in Elementary Education leads to certification to teach grades 1 through 6. The program provides classroom and laboratory

experiences that prepare students for beginning teaching in elementary schools. Candidates who desire a middle school placement must pass the Middle School Praxis subject matter test in the content discipline.

The goals and objectives of the Department of Elementary Education reflect the mission and vision of the College of Education. Students in the program are provided the knowledge, skills and dispositions identified by the Maryland State Department of Education (MSDE), the Interstate New Teacher Assessment and Support Consortium (INTASC) principles, and the Association for Childhood Education International (ACEI) standards for professionals in elementary education. Students are required to demonstrate mastery of the performance-based outcomes in a summative portfolio in order to exit the Elementary Education Program.

Elementary Education Major with Dual Certification in Early Childhood Education (PK-6)

Through the collaboration of the Elementary Education and the Early Childhood Education Departments, interested students can pursue a dual certification program leading to PK-6 certification in Early Childhood and Elementary Education. Interested students should contact either the Early Childhood Department or the Elementary Education Department.

Integrated Elementary Education-Special Education Major

Elementary Education majors may elect to become certified in both Elementary and Special Education by selecting the integrated major. This program, specially designed to integrate both majors, prepares students as elementary classroom teachers and as special education teachers.

The Integrated Elementary Education-Special Education program is provided in three locations: Towson University, Universities at Shady Grove, and at the HEAT Center. The program is a screened program and major. Applicants must achieve qualifying scores on Praxis I/SAT/ACT as established by MSDE; a minimum 2.75 GPA on all prerequisite course work required for the major; and the required speech and hearing screening. The total program equals 131 units.

Combined Major in Elementary Education and Deaf Studies

Students wanting to combine a major in Elementary Education (ELED) with a major in Deaf Studies (DFST) must separately declare the majors with each department. Because the requirements of the ELED major are relatively fixed, students are encouraged to make the decision to complete the combined DFST/ELED major in the freshman year. The Elementary Education major is divided into pre-professional program and professional education courses. Students must apply separately for acceptance into the professional education courses.

Elementary Education Major with a Minor

Elementary Education majors may complete programs with minors in other selected disciplines by arrangement with the chair of Elementary Education and the chair of the other department.

Elementary Education Major with a Mathematics Minor

Elementary Education majors who complete a Mathematics minor will possess the necessary concepts and skills to effectively teach both elementary and middle school mathematics. Special field-based courses are available so that students will experience teaching mathematics (specifically at the middle school level) in addition to the other elementary school subjects. Students in this program should be advised by faculty members in both the Elementary Education Department and the Mathematics Department.

The minor in Mathematics for the Elementary Education major requires 25–26 units, with each course completed with a grade equivalent of 2.00 or higher. Students must also complete requirements for the major as specified by the Department of Elementary Education. The minor requires the six courses listed below, plus at least 3 additional units of upper-division electives in mathematics.

Required Courses (22 units)

MATH 265	Elementary Linear Algebra (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 301	History of Mathematics (3)
MATH 330	Introduction to Statistical Methods (4)
MATH 353	Euclidean and Non-Euclidean Geometry (3)

Upper Division Mathematics Electives (3–4 units)

One course from the following:

MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 377	Mathematical Models (3)
MATH 420	Application of Technology for Secondary Teachers (3)

DECLARING THE ELEMENTARY EDUCATION MAJOR

Students interested in becoming Elementary Education majors must first gain admission to Towson University. *Admission to the university does not guarantee admission to the Elementary Education program.* Students declare majors online at <http://onestop.towson.edu>. On the left hand side of the screen select changing your Major/Minor. Select Change of Major/Minor form and then enter your Towson University username and password. The declaration of major should appear. Complete all questions asked. You will receive an e-mail with the name, location, and e-mail address of your Education adviser.

All students enrolled in a Teacher Education program are required to undergo a criminal background check before participating in any internship placement.

APPLYING FOR THE PROFESSIONAL INTERNSHIPS

The Elementary Education program is divided into a Pre-Professional Program (65 units) and courses in a sequence of Professional Internships (61–62 units) for a total of 126–127 units. Acceptance into the Professional Internships is a competitive process and enrollment is limited by course availability and faculty resources. To submit an *Application for the Professional Internships* to the Department

of Elementary Education, Elementary Education majors must meet the criteria listed below.

Native Towson University students:

- Complete the Pre-Professional Program with a minimum 2.75 GPA. No grade below a grade-equivalent of 2.00 (c) is allowed in prerequisite or Core Curriculum courses.
- Pass the Praxis I test, or meet the following:

SAT TAKEN AFTER 2005, MATH & CRITICAL READING	1100
SAT TAKEN BETWEEN 4/95 & 2005, MATH & VERBAL	1100
SAT TAKEN PRIOR TO 4/95, MATH & VERBAL	1000
ACT	24

- Complete a speech and hearing screening (any time prior to applying).
- Attend a mandatory orientation meeting (dates, times, locations posted outside the Elementary Education Office).

Transfer students with a Maryland-approved Associate of Arts in Teaching (A.A.T.) degree:

- Complete a minimum of 64 units of the Pre-Professional Program with a minimum 2.75 GPA.
- Pass the Praxis I test, or meet the following:

SAT TAKEN AFTER 2005, MATH & CRITICAL READING	1100
SAT TAKEN BETWEEN 4/95 & 2005, MATH & VERBAL	1100
SAT TAKEN PRIOR TO 4/95, MATH & VERBAL	1000
ACT	24

- Complete a speech and hearing screening (within the first two weeks of Level I Internship).
- Attend a mandatory orientation meeting on the Towson University campus (dates, times and location on campus are listed in the *Application for the Professional Internships* available through the community college teacher education coordinator).
- Submit a copy of an official transcript listing the A.A.T. degree upon completion of the degree from the community college.

A.A.T. degree candidates must submit an *Application for the Professional Internships* in the term prior to their anticipated enrollment.

Transfer students with an Associate of Arts degree:

- Complete the Pre-Professional Program with equivalent courses, and a minimum 2.75 GPA.
- Pass the Praxis I test, or meet the following:

SAT TAKEN AFTER 2005, MATH & CRITICAL READING	1100
SAT TAKEN BETWEEN 4/95 & 2005, MATH & VERBAL	1100
SAT TAKEN PRIOR TO 4/95, MATH & VERBAL	1000
ACT	24

- Complete a speech and hearing screening

A.A. degree students may submit an *Application for the Professional Internships* during their first term of enrollment.

Elementary Education majors must have a minimum 2.75 GPA to apply for the Professional Internships. However, applicants may be ranked according to cumulative GPA if the number of applicants exceeds course availability. Therefore, the GPA necessary for admission may exceed the minimum 2.75. Elementary Education majors must maintain a minimum 3.00 GPA each term to remain enrolled in the Professional Internships and must earn a 2.00 or C grade in all courses in the Professional Internships.

Students must submit their *Application for the Professional Internships* to the Department of Elementary Education. Transfer students who are pursuing an Associate of Arts in Teaching degree from a Maryland community college should obtain the *Application for the Professional Internships* from their community college teacher education coordinator and attend a mandatory orientation meeting on the Towson University campus. Dates, times and locations of the orientation meetings are listed in the *Application for the Professional Internships*.

Reflecting the Professional Education Mission and Vision statements, *students are assigned* by their department and/or the Center for Professional Practice to field and clinical placements that are diverse and inclusive. Placements are made that enable the Teacher Education Unit to meet state and national accreditation mandates. All professional year placements will be in identified Professional Development Schools, based on ongoing and systematic PDS partnership agreements with school systems. These mandates and the size and scope of the education program do not permit personal preference or geographic convenience in placements.

Students in Levels III and IV of the Elementary Education Program in fall term will begin the term when elementary school teachers are required to be in their classrooms. This may be before the start of the term at Towson University. Students in Level IV of the Elementary Education Program in spring terms will begin the term on the Towson University calendar. Students in Level III and Level IV of the Elementary Education Program will follow the school district's spring break for their internship classes, and will follow the Towson University calendar for their on-campus classes.

DEGREE REQUIREMENTS FOR ELEMENTARY EDUCATION MAJORS

Pre-professional Program (66 units)

Core Curriculum Courses (42 units)

Fundamentals

1. Towson Seminar	Any Course (3)
2. English Composition	ENGL 102 or 190 (3)
3. Mathematics	MATH 204 (4)
Mathematics	MATH 205 (4)
Mathematics	MATH 251 (4)

Creativity and Creative Development

4. Any course in the category (3)s

Ways of Knowing

5. Any course in the category (different discipline from no. 4 above) (3)
- | | |
|---------------------|----------------------------------|
| 6. PSYC 101 | Introduction to Psychology (3) |
| 7. BIOL 115 | Biology: The Science of Life (4) |
| 8. Science elective | Must be a lab course (4) |
| Science elective | Must be a lab course (4) |

Writing in a Chosen Field

9. ELED 320 Writing Skills for Elementary Teachers (3)

Perspectives

10. Metropolitan perspectives	EDUC 2xx: America's Urban Schools
11. U.S. as a Nation	HIST 145 (3)
12. Global Perspectives	Any geography course in the category
13. Diversity and Difference	EDUC 203
14. Ethical Perspectives	EDUC 2xx: Ethical Perspectives in Education.

EDUCATION PREREQUISITES (24 units)

PSYC 201	Educational Psychology (3)
SPED 301	Introduction to Special Education (3)
ELED 322	Foundations of Reading (3)
ECED 201	Early Child Development and Intervention (3)

Professional Internships (61–62 units)**Level I Internship (14–15 units)**

ELED 320	Writing Skills for Teachers (3)
ELED 323	Principles and Practices of Instruction in Reading and Language Arts (3)
ELED 363	Language and Literacy Internship (3)
EDUC 417	Children's Literature and Other Materials for Teaching Reading and Language Arts (3)

plus one of the following:

ARED 371	Art and the Child (3)
KNES 324	Teaching Physical Education in Elementary School (3)
MUED 305	Methods of Teaching Music in Elementary School (2)

Level II Internship (17 units)

ISTC 301	Integrating Instructional Technology (3)
BIOL 303	Life Sciences (3)
PHSC 303	Earth/Space Science (3)
MATH 323	Teaching Mathematics in Elementary School (3)
MATH 324	Supervised Observation and Participation in Elementary School Mathematics (2)
SCIE 376	Teaching Science in Elementary School (3)

Professional Development School Year-Long Internship Levels III and IV

Elementary Education majors (Interns) follow the school system calendar for the PDS in which they are assigned. In Level III or Level IV (as appropriate), interns begin in August when teachers start the school year and observe the school system calendar instead of the Towson University spring break.

(All courses must be completed before Level III begins)

Level III Internship (15 units)

ELED 311	Child and the Elementary School Curriculum and Assessment (3)
ELED 312	Professional Development School Internship I (3)
ELED 365	Teaching Social Studies in Elementary School (3)
ELED 429	Principles and Practices of Assessment in Reading and Language Arts (3)
SPED 401	Curriculum and Methods of Inclusion (3)

Level IV Internship (15 units)

ELED 468	Professional Development School Internship II (12)
ELED 469	Professional Development School Internship II Seminar (3)

To graduate with a degree in Elementary Education, students must satisfactorily complete *all* courses in the Elementary Education major.

INTEGRATED ELEMENTARY EDUCATION—SPECIAL EDUCATION DUAL CERTIFICATION PROGRAM**Academic Content (total 131 units)**

At least 60 of the following units must be taken before admission to the professional education sequence.

Courses taken before formal admission to the professional education sequence.

I. English (6 units)

(Core 2)	ENGL 102	Writing for Liberal Education (3)
	ENGL elective	(literature course preferred) (3)

II. Social Studies (9 units)

(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)
(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 6)	PSYC 101	Introduction to Psychology (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (12 units)

	MATH 204	Math Concepts and Structures I (4)
(Core 3)	MATH 205	Math Concepts and Structures II (4)
	MATH 251	Elements of Geometry (4)

V. Fine and Performing Arts (6 units)

(Core 4)	Choose one course from Core 4 (3)	
(Core 5)	MUSC 101	Music from Western Heritage (3)

VI. Psychology (6 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)
	PSYC 201	Educational Psychology (3)

VII. Additional Required Courses (19 units)

(Core 10)	EDUC 2XX	History and Contemporary Perspectives on American Urban Schools* (3)
(Core 14)	EDUC 2XX	Education, Ethics and Change* (3)
	SPED 301	Introduction to SPED (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	EESE 468	EESE Field Experience (1)
	ELED 322	Foundations of Reading and Language Arts (3)
(Core 1)	TU Seminar	(3)

*These Core Curriculum courses **must** be taken in a specific sequence: **Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).**

Professional Education Courses**First Term (18 units) (Fall)**

	ELED 363	Language and Literacy Internship (3)
(Core 9)	ELED 320	Foundations of Writing and Other Language Arts (3)
	ECED 201	Infants and Young Children (3)
	or	
	SPED 413	Assistive Technology (3)
	EDUC 417	Children's Literature (3)
	ELED 323	Principles and Practices of Instruction in Reading and Language Arts (3)

Second Term (17 units) (Spring)

	MATH 323	Teaching Mathematics in Elementary School (3)
	MATH 324	Supervised Observation/Participation in Elementary School Mathematics (2)
	BIOL 303	Life Sciences (3)
	or	
	PHSC 303	Earth-Space Science (3)
	SCIE 376	Teaching Science in Elementary School (3)
	SPED 425	Formal Tests and Measurements (3)
	SPED 441	Curriculum Methods of Instruction for Students with Disabilities (K-12) (3)

Third Term (15 units) (Fall)

	EESE 475	Elementary Education/Special Education Internship I (3)
	ELED 311	Child and the Elementary School Curriculum and Assessment (3)
	ELED 429	Principles and Practices of Assessment in Reading and Language Arts (3)
	SPED 429	Curriculum Methods of Classroom Management (3)
	SPED 469	Collaborative Teaching in Elementary Schools (3)

Fourth Term (15 units) (Spring)

	EESE 476	Elementary Education/Special Education Internship II (12)
	EESE 485	Seminar in EESE (3)

COMBINED MAJOR IN DEAF STUDIES AND ELEMENTARY EDUCATION

Students wanting to combine a major in Deaf Studies with a major in Elementary Education (ELED) must separately declare the majors with each department. Because the requirements of the ELED major are relatively fixed, students are encouraged to make the decision to complete the combined DFST-ELED major in the freshman year. The Elementary Education major is divided into a pre-professional program and professional education courses. Students must separately apply for acceptance into the professional education courses. Refer to the Elementary Education major information listed in this catalog for more information.

Degree Requirements**Academic Content**

Courses to be taken before formal admission to the professional education sequence:

Term 1: Fall (16 units)

ENGL 102	Writing for a Liberal Education (3)
HIST 145	History of the U.S. to the Mid-19th Century (3) or
HIST 146	History of the U.S. since the Mid-19th Century (3)
MATH 204	Mathematical Concepts and Structures I (4)
PSYC 101	Introduction to Psychology (3)
DFST 104	American Sign Language I (3)

Term 2: Spring (16 units)

BIOL 115	Biological Science I (4)
DFST 101	Introduction to Deaf Culture (3)
DFST 105	American Sign Language II (3)
GEOG 102	World Regional Geography (3) or
GEOG 105	Geography of International Affairs (3) Towson Seminar

Term 3: Fall (13 units)

DFST 204	American Sign Language III (3)
PSYC 201	Educational Psychology (3)
PHSC 101	Physical Science I (4)
SPPA 350	Language Development and Disorders in Educational Settings (3) or
ECED 201	Intervention and the Young Child (3) or
PSYC 203	Human Development (3)
ELED 201	School and American Society (3)

Term 4: Spring (16 units) (student takes PRAXIS)

DFST 311	Audition: Science and Social Impact (3)
DFST 205	American Sign Language IV (3)
EDUC 203	Teaching and Learning in a Diverse Society (3)
MATH 205	Mathematical Concepts Structures II (4)
ELED 320	Foundations of Writing and Other Language Arts (3)

Term 5: Fall (16 units) (student applies to ELED program this term)

DFST 308	Fingerspelling and Numbers (3)
DFST 304	American Sign Language V (3)
ELED 322	Foundations of Reading and Other Language Arts (3)
MATH 251	Elements of Geometry (4)
SPED 301	Introduction to Special Education K-12 (3)

Students are responsible for ensuring that they meet the content requirements outlined above and the university's Core Curriculum requirements. Students must meet admission requirements for ELED in the term prior to Term 6. DFST 304 should be completed before entering ELED Professional Education Level I. The combined major cannot accommodate scheduling DFST courses at Professional Education Level II or higher with the exception of DFST 410.

Professional Education Courses**Term 6, LEVEL I: Spring (14–16 units)**

DFST 345	Deaf Culture (3)
ELED 323	Principles and Practices in Reading and Language Arts (3)
ELED 363	Language and Literacy Internship (3)
EDUC 417	Children's Literature and Other Materials for Reading and Language Arts in Elementary School (3)
DFST 435	Development of Signed Language and Reading Skills for Deaf Children (3)

Term 7, LEVEL II: Fall (17 units)

BIOL 303	Life Sciences (3) or
PHSC 303	Earth-Space Science (3)
MATH 323	Teaching Math in Elementary School (3)
MATH 324	Supervised Observation/Participation in Elementary School Mathematics (2)
SCIE 376	Teaching Science in the Elementary School (3)
DFST 410	Internship in Deaf Studies (3)

Term 8, LEVEL III: Spring (15 units)

ELED 311	Child and the Elementary School Curriculum and Assessment (3)
ELED 312	Professional Development School Internship (3)
ELED 365	Teaching Social Studies in Elementary Schools (3)
ELED 429	Principles and Practices of Assessment in Reading and Language Arts (3)
ISTC 301	Utilization of Instructional Media (3)

Term 9, LEVEL IV: Fall (15 units)

ELED 468	Professional Development School Internship II (12)
ELED 469	Professional Development School Internship II Seminar (3)

Total units for the entire program, inclusive of all Core Curriculum and all requirements for both majors: approximately 142 units.

Department of Secondary Education

Professors: David Vocke, Gloria Neubert, Jeff Passe (*Chair*), Thomas Proffitt

Associate Professor: Todd Kenreich

Assistant Professors: Theresa A. Adkins, Montana McCormick, Molly Mee

Lecturers: Jack Cole, Stephen Edgar, Keith Harmeyer, Debra Jackson, Allan Starkey

OFFICE

Hawkins Hall 404, 410-704-2562

MISSION STATEMENT

The mission of the Teacher Education Unit is to inspire, educate and prepare facilitators of active learning for diverse and inclusive communities of learners in environments that are technologically advanced.

PROGRAMS OF THE DEPARTMENT

The Department of Secondary Education offers the following programs of study: the major in Middle School Education (grades 4–9) and 13 certification programs in the secondary (grades 7–12) subject areas of biology, chemistry, earth-space science, English, French, geography, German, health, history, mathematics, physics, social science and Spanish.

Programs for teaching kindergarten through grade 12 in Art, Dance, Music and Physical Education are offered by those academic departments. A program for middle school has been submitted for approval. Prospective students should contact the department for more information.

All Teacher Education programs are approved by the Maryland State Department of Education and the National Council for the Accreditation of Teacher Education (NCATE). Upon graduation in one of these programs, students are eligible for certification to teach in Maryland.

The programs of education for middle, junior and high school teachers are designed to bring about close integration between theory and practice. Students are required to apply directly to the Department of Secondary Education. A Secondary Education adviser is required in addition to an adviser in the major for the following majors: English Education, Geography Education, History Education, Mathematics Education, Foreign Language Education, Science (Biology, Chemistry, Earth-Space Science and Physics) Education or Social Science Education. For information, go to Hawkins Hall 404.

DECLARING THE MIDDLE SCHOOL EDUCATION MAJOR

Students interested in becoming Middle School Education majors must first gain admission to Towson University. *Admission to the university does not guarantee admission to the Middle School Education program.* Students declare majors online at <http://onestop.towson.edu>.

All students enrolled in a Teacher Education program are required to undergo a criminal background check before participating in any internship placement.

Creativity. Creative Development (Core 4) Requirement: In addition to the courses listed for Terms 1–5, students must take a course that fulfills the Creativity and Creative Development Core Curriculum requirement. This course can be taken during the fall, spring, summer or Minimester. It is recommended that the course be completed before beginning the Professional Education Courses.

FORMAL ADMISSION TO THE MIDDLE SCHOOL OR SECONDARY EDUCATION PROGRAM

Students should apply for formal admission into the Middle School or Secondary Education Program when they have met the following criteria:

1. completion of at least 45 college units
2. completion of a written application, including an essay
3. a 2.50 cumulative GPA for all postsecondary institutions attended (submit original transcripts)
4. presentation of SCED Score Reporting Form or passing score on Praxis I (Pre-Professional Skills Test: Reading, Writing and Mathematics), SAT, ACT or GRE test to the Center for Professional Practice. Information on these tests and qualifying scores is available in the Department of Secondary Education, Hawkins Hall 413F.
5. All students applying for admission to a Teacher Education program at Towson University are required to complete a Criminal History Disclosure Form. This form is to be notarized and sent to the Department of Secondary Education to be kept on file. (Note: Some subject areas may have a cap on admissions. Prospective students should contact the department for more information.)

Once passing test scores are received, students are permitted to enroll in Principles of Secondary Education and Using Reading and Writing in the Secondary School. Prior to program admission, students are permitted to take only Introduction to Special Education, Historical and Contemporary Perspectives on America's Urban Schools; Teaching and Learning in a Diverse Society; Education, Ethics and Change; Adolescent Learning, Development and Diversity; and Integrating Instructional Technology from the education program.

Information on Praxis testing is available in the Department of Secondary Education and www.ets.org.

After introductory courses in the nature of today's schools and their students and appropriate internships, the prospective middle or secondary teacher enters the full-time internship term which begins prior to the start of classes at TU. Methods, philosophy, techniques and practice are combined to provide a thorough preparation for teaching, and such preparation must be demonstrated prior to student teaching.

Students must secure approval for full-time internship from the department; it is contingent upon successful completion of the required courses, demonstration of acceptable competencies in the tested areas, and meeting GPA requirements (see Requirements for Full-Time Internship).

MAJOR IN MIDDLE SCHOOL EDUCATION

Students who elect to major in Middle School Education must choose two content areas in which to specialize. The content areas can be any combination of English, Mathematics, Science and Social Studies.

Mathematics Required Courses

MATH 225	Algebra and Number Concepts for Middle School Teachers (3)

MATH 235	Statistics and Probability for Middle School Teachers (4)
MATH 255	Geometry for Middle School Teachers (3)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 325	Problem Solving for Middle School Teachers (3)

Science Required Courses

BIOL 115	Biology: The Science of Life (4)
CHEM 105	Chemistry for Allied Health Professions (4)
PHYS 205	Physics for Middle School Teachers (3)
PHSC 206	Earth-Space Science for Middle School Teachers (3)
BIOL 301	Field and Natural Science (3)
SCIE 355	Teaching Engineering Design in Elementary and Middle Schools (2)
GEOG 377	Meteorology (3)

Social Studies Content Required Courses

History

HIST 145	History of the United States to the Mid-19 th Century (3)
HIST 160	World History to 1300 (3)
HIST 161	World History since 1300 (3)
HIST 146	History of the United States since the Mid-19 th Century (3) or
HIST 102	History of European Civilization through the 17 th Century (3)

Economics

ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)

Political Science

POSC 103	American National Government (3)

Sociology

SOCI 101	Introduction to Sociology (3)

Anthropology

ANTH 207	Cultural Anthropology (3) or
ANTH 209	American Culture (3)

Geography

GEOG 109	Human Geography (3)
GEOG 105	Geography of International Affairs (3) or
GEOG 102	World Regional Geography (3)

English Content Required Courses

I. Diversity in American Literature (3 units)

One of the following:

ENGL 233	African-American Literature (3)
ENGL 234	Major Writers in African-American Literature (3)
ENGL 235	Ethnic American Literature (3)
ENGL 236	American Indian Literature (3)
ENGL 239	Jewish Literature of the 19th and 20th Centuries (3)
ENGL 471-477	Topics in Literature (when appropriate) (3)

II. Linguistics and Grammar (6 units)

A. Grammar:

ENGL 251	Applied Grammar (3)
(Students who place out of ENGL 251 must take an upper-division elective in literature, in addition to the course from category B, below.)	

B. One of the following:

ENGL 350	Comparative Grammar (3)
ENGL 351	Historical Linguistics (3)
ENGL 353	History of American English (3)
ENGL 451	History of the English Language (3)

ENGL 452	Structure of the English Language (3)
ENGL 475	Topics in Linguistics (3)

III. World Literature/Non-Western Literature (3 units)

One of the following:

ENGL 243	Introduction to Classical Mythology (3)
ENGL 244	World Folklore (3)
ENGL 248	Literature of the Global Experience (3)
ENGL 341	History and Literature of the Old Testament (3)
ENGL 342	Folklore and Literature (3)
ENGL 343	Myth and Literature (3)
ENGL 347	World Literature Written in English (3)

IV. Advanced Writing (3 units)

One of the following:

ENGL 310	Writing Argument (3)
ENGL 313	Academic Essay (3)
ENGL 315	Literary Essay (3)
ENGL 316	Writing about Literature (3)
WMST 333	Women's Words, Women's Lives (3)

V. Textual Analysis (3 units)

ENGL 463	Semiotics (3)

VI. Adolescent Literature (3 units)

SCED 419	Adolescent Literature (3)

In addition to the two content areas, and satisfying university Core Curriculum requirements, students must complete the courses listed below (which may be integrated into Core Curriculum courses.)

HIST 145	History of U.S. to Mid-19 th Century or
HIST 146	History of U.S. since Mid-19 th Century
COMM 131	Fundamentals of Speech Communication
EDUC 2XX	Historical and Contemporary Perspectives on America's Urban Schools
EDUC 203	Teaching and Learning in a Diverse Society
EDUC 2XX	Education, Ethics and Change

Required Professional Education Courses

A minimum grade equivalent of 2.00 or higher is required for all courses.

SCED 305	Adolescent, Learning, Development and Diversity (3) (Prerequisite: PSYC 101)
ISTC 301	Integrating Instructional Technology (3)
SPED 30	Introduction to Special Education (3)
SCED 342	Principles of Middle School Education (3)
SCED 460	Using Reading and Writing in the Secondary School (4) (taken concurrently with SCED 342 and shares a required field experience)
SCED 499	Internship in Middle School Education (2) (taken at a professional development school the fall or spring term, whichever precedes the full-time internship term, with Methods of Teaching content areas)
SCED xxx	Methods of Teaching First Content Area (3)
SCED xxx	Methods of Teaching Second Content Area (3)
SCED 461	Teaching Reading in the Secondary Content Areas (3) (taken concurrently with SCED 499)
SCED xxx	Student Teaching (12)
SCED 401	Analyzing Student Teaching (2) (taken concurrently with Student Teaching)
SCED 462	Seminar in Teaching Reading in the Content Areas (1) (taken concurrently with Student Teaching)

SECONDARY TEACHER EDUCATION PROGRAM

In addition to majoring in one of the 13 subject-area certification programs and satisfying the university Core Curriculum requirements, students must complete the professional education courses listed below.

Outcomes

The Department of Secondary Education utilizes the *Interstate New Teacher Assessment and Support Consortium (INTASC)* principles and professional association standards as the performance-based outcomes for teacher candidates.

Required Professional Education Courses

A minimum grade equivalent of 2.00 or higher is required for all courses.

ISTC 301	Integrating Instructional Technology (3)
SCED 305	Adolescent Learning, Development and Diversity (3) (prerequisite: PSYC 101)
SPED 301	Introduction to Special Education (3)
SCED 341	Principles of Secondary Education (4)
SCED 419	Young Adult Literature (3) <i>English majors only.</i>
SCED 460	Using Reading and Writing in the Secondary School (4) (taken concurrently with SCED 341 and shares a required field experience)
SCED 499	Internship in Secondary Education (6) (taken at a professional development school the fall or spring term, whichever precedes the full-time internship term, with Methods of Teaching Major Subject and SCED 461)
SCED xxx	Methods of Teaching Major Subject (3)*
SCED xxx	Student Teaching (12)
SCED 461	Teaching Reading in the Secondary Content Areas (3) (taken concurrently with SCED 499)
SOSC 401	Topics in Social Science (3) <i>SS/History/Geography majors only.</i>

Additional requirements to be integrated into Core Curriculum:

HIST 145	History of U.S. to Mid-19th Century (3) or
HIST 146	History of U.S. since Mid-19th Century (3)
COMM 131	Fundamentals of Speech Communication (3)
EDUC 2XX	Historical and Contemporary Perspectives on America's Urban Schools (3)
EDUC 203	Teaching and Learning in a Diverse Society (3)
EDUC 2XX	Education, Ethics and Change (3)

**Note: Some methods courses are offered spring or fall only. Check with your adviser.*

Subject Major

Students cannot major in Secondary Education. Refer to the department under which a specific major is discussed. For instance, those interested in teaching history at the secondary level should refer to the Secondary Education program of the Department of History for specific requirements.

The Professional Year

As part of their yearlong professional internship, all teacher candidates begin their Professional Development School internship prior to the start of the regular Towson University term. This date varies by school system, and candidates must plan appropriately to fulfill their program requirements.

REQUIREMENTS FOR FULL-TIME INTERNSHIP

1. All students must meet the following GPA requirements to be admitted to student teaching: 2.75 GPA in major field and in professional education courses and 2.50 overall GPA, based on transcripts from all institutions of higher learning attended. (Consult with SCED adviser.)
2. All preservice students in Teacher Education programs at Towson University whose program of study requires an intensive and extensive internship or student teaching experience in a

public school setting (pre-K through 12) are required to undergo a criminal background check before entering this experience. The criminal background check must be filed with the Center for Professional Practice.

KINDERGARTEN-12th GRADE TEACHER EDUCATION PROGRAMS

Students may obtain certification to teach the following subjects at both the elementary and secondary levels: art, dance, music and physical education.

Teacher Education programs exist in the following areas:

- Art Education
- Dance Education
- Music Education
- Physical Education

For required courses and special program information, consult the section of this catalog dealing with each particular major.

SPECIAL EDUCATION PROGRAM

Students wishing to major in Secondary Special Education should contact Charles Meyer, Hawkins Hall 120C, 410-704-3595

MASTER OF ARTS IN TEACHING—SECONDARY

Director: Judy Reber
Hawkins Hall 222, 410-704-4935

The Master of Arts in Teaching program is designed to prepare especially qualified post-baccalaureate students for teaching certifications in grades 7 through 12. Consult the *Graduate Catalog* for more information.



Department of Special Education

Department Chair and Clinical Professor:

Elizabeth Neville

Professor: Deborah Gartland

Associate Professor: Darlene Fewster

Assistant Professors: Patricia Doran, Katherine Holman, Lori Jackman, Donna Janney, Kathleen Stein

Lecturers: Elizabeth Berquist, M. Lenore Chapman, Barbara Cheswick, Diane Diven, Kimberly Durkan, Kennon Evans, Toni Guidi, David Hill, Charles Meyer, Jessica Moore, Elizabeth O'Hanlon, Heather Rasmussen, Valerie Sharpe, Debi Tessier, Judith Ann Webster

Clinical Instructor: Rosemary Rappa

OFFICE

Psychology Building 307, 410-704-4984

PROGRAMS OF THE DEPARTMENT

The Department of Special Education is responsible for courses leading to certification in Maryland as a special education teacher. The department offers a major in Special Education, a major in Integrated Elementary Education - Special Education, and a major in Integrated Early Childhood and Special Education. The education course listings include core education courses that provide knowledge and skills for general application in teaching and learning. The instructional technology and special education offerings also have K-12 applications. Reflecting the Professional Education Mission and Vision statements, **students are assigned** by their department and/or the Center for Professional Practice to field and clinical experience placements that are diverse and inclusive. Placements are made that enable the Teacher Education Unit to meet state and national accreditation mandates. All professional year placements will be in identified Professional Development Schools (PDS), based on ongoing and systematic PDS partnership agreements with school systems. These mandates and the size and scope of our education program do not permit personal preference or geographic convenience in placements.

Graduate programs include the Master of Arts in Teaching and the Master of Education.

MAJOR IN SPECIAL EDUCATION

Elementary/Middle Track

Adviser: Charles Meyer
Hawkins Hall 120C, 410-704-3595

Students majoring in Elementary Special Education complete the Elementary Track (grades 1-8). To meet the requirements of the College of Education and the Maryland State Department of Education, students must complete all required Core Curriculum and professional education courses required for the Elementary/Middle Track to earn a total of 124 units. Students must maintain an overall cumulative GPA of 2.75 or higher and a 3.00 GPA or higher in courses for the major.

Secondary/Adult Track*Adviser:* Charles Meyer

Hawkins Hall 120C, 410-704-3595

Students majoring in Secondary Special Education complete the Secondary/Adult Track (grade 6-adult). To meet the requirements of the College of Education and the Maryland State Department of Education, students must complete all required Core Curriculum and professional education courses for their concentration to earn a total of 127–135 units. Students must maintain an overall cumulative GPA of 2.75 or higher and a 3.00 GPA or higher in courses for their major.

Special Education majors must meet with their advisers every term to ensure that their planned programs of study meet university, major and Maryland State Department of Education certification requirements. Students must consult with their advisers prior to taking courses on a Pass grading option. Courses in the major and courses required for Maryland State Department of Education certification may not be taken with this option. All tracks of the Special Education program begin in the fall term.

Exceptions, changes, waivers, and/or substitutions from the program pattern for Special Education majors in content or sequence are permitted only with the written consent of the chair of the Special Education Department.

MAJOR IN INTEGRATED EARLY CHILDHOOD—SPECIAL EDUCATION*Advisers:* Elizabeth O'Hanlon/Ocie Watson-Thompson

Psychology Building 313

Students may elect to become certified in both Early Childhood and Special Education by selecting this integrated major. This program, specially designed to integrate both early childhood and special education, prepares students as early childhood classroom teachers, as well as infant/primary special education teachers.

The Integrated Early Childhood – Special Education program is provided at Towson University. As a screened program and major, applicants must achieve qualifying scores on Praxis I or SAT/ACT as established by MSDE, a minimum of 2.75 GPA on all prerequisite course work required for the major, and the required speech and hearing screening. The total program equals 130 units. Students must maintain an overall cumulative GPA of 2.75 or higher and a 3.00 GPA or higher in courses for the major.

MAJOR IN INTEGRATED ELEMENTARY EDUCATION—SPECIAL EDUCATION*Advisers:* Rosemary Rappa/Darlene Fewster

Psychology Building 310, 410-704-3835

Students may elect to become certified in both Elementary and Special Education by selecting the integrated major. This program, specially designed to integrate both elementary and special education, prepares students as elementary classroom teachers and as special education teachers.

The Integrated Elementary Education-Special Education program is provided at Towson University, the HEAT center, and the Universities at Shady Grove. The program is a screened program and

major. Applicants must achieve qualifying scores on Praxis I or passing ACT or SAT scores as established by MSDE, a minimum 2.75 GPA on all prerequisite course work required for the major, and the required speech and hearing screening. The total program equals 128 units.

PRE-ADMISSION REQUIREMENTS FOR ALL CANDIDATES

Students interested in majoring in Special Education must first gain admission to Towson University. Admission to the university, however, does not guarantee admission to the Special Education, Integrated Elementary Education—Special Education or Integrated Early Childhood—Special Education majors. Students must complete a Declaration of Intended Major Form available online at <http://onestop.towson.edu> at which time they will be assigned a Special Education adviser. All students applying for admission to a Teacher Education program at Towson University are required to complete a Criminal History Disclosure Form. This form is to be notarized and sent to the Department of Special Education to be kept on file.

Screening

Special Education is a screened major. All candidates for the Special Education, Integrated Elementary Education—Special Education and Integrated Early Childhood—Special Education majors will be ranked according to cumulative GPA in all college or university courses (transfer GPA and/or TU GPA).

To receive approval for admission, students are required to:

1. take a speech and hearing screening
2. have a cumulative GPA of 2.75 or higher (which includes grades transferred to and grades earned at TU)
3. have completed ENGL 102 with a grade of C or higher
4. have completed 60 or more units
5. have passing scores on the Praxis I, ACT or SAT at or above the level of standards established by the Maryland State Department of Education (Information on the Praxis tests is available in the Department of Special Education, Psychology Building 307)
6. Submit a writing sample

Screening occurs again for admission into student teaching. Students are required to have a cumulative GPA of 2.75 or higher and a GPA of 3.00 or higher in the major and must have completed a minimum of 90 units. All preservice students in Teacher Education programs at Towson University whose program of study require an intensive and extensive internship experience in a public or private school setting (pre-K through 12), are required to undergo a criminal background check before beginning this experience. The criminal background check must be filed with the Department of Special Education.

Transfer Students

Special Education department personnel are responsive to the transfer student and will accept those credits which are compatible with the Core Curriculum requirements, Special Education, Integrated Early Childhood—Special Education and Integrated Elementary Education—Special Education majors and state certification requirements. Please note: although credits might qualify toward graduation, only an evaluation conducted by the Special Educa-

tion adviser will determine which credits will also apply toward the major. Students must first have their transcripts evaluated by the Office of Admissions before requesting a special education transcript evaluation.

The Professional Year

Special Education majors follow the school system calendar for the Professional Development School to which they are assigned as interns. The professional year starts in August when the teachers begin the school year and follows the school system spring break schedule.

**SPECIAL EDUCATION MAJOR
Elementary/Middle Track****Academic Content (total 124 units)**

At least 60 of the following units must be taken before formal admission to the professional education sequence.

I. English (6 units)

(Core 2)	ENGL 102	Writing for Liberal Education (3)
	or	
	ENGL 190	Honors Writing Seminar (3)
	ENGL	Elective (3)

II. Social Studies (6 units)

(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (12 units)

	MATH 204	Math Concepts and Structures I (4)
(Core 3)	MATH 205	Math Concepts and Structures II (4)
	MATH 251	Elements of Geometry (4)

V. Art/Music (3 units)

(Core 4)	Choose one ART course from Core 4	
	or	
	MUSIC 101	Introduction to Music Western Heritage (3)

VI. Psychology (6 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)
	PSYC 201	Educational Psychology (3)

VII. Additional Required Courses (24 units)

(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 14)	EDUC 2XX	Education, Ethics and Change* (3)
(Core 10)	EDUC 2XX	History and Contemporary Perspectives on American Urban Schools* (3)
(Core 9)	EDUC 301	Writing and Comm. Skills for Teachers (3)
	ELED 322	Foundations of Reading/Other Lang Arts (3)
	SPED 301	Introduction to Special Ed (3)
(Core 13)	EDUC 203	Teaching Learning Diverse Society* (3)
(Core 1)		TU Seminar (3)

*These Core Curriculum courses must be taken in a specific sequence: *Metropolitan Perspectives* (Core 10), *Diversity and Difference* (Core 13), *Ethical Issues and Perspectives* (Core 14).

Professional Education Courses**First Term (15 units) (Fall)**

SPED 413	Assistive Technology (3)
PSYC 203	Human Development (3)

SPED 428	Working with Families of Students with Disabilities (3)
ELED 323	Principles and Practices of Instruction in Reading and Language Arts (3)
ELED 417	Children's Literature (3)

Second Term (15 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
SPED 441	Curriculum/Methods of Instruction for Students with Disabilities K-12 (3)
PSYC 403	Infant and Child Development (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
SPED 427	Curriculum/Methods of Social, Emotional, and Motor Development of Students with Disabilities K-12 (3)

Third Term (14 units) (Fall)

SPED 491	Internship: Students with Disabilities in Elementary/Middle Programs (3)
ELED 429	Principles/Practices of Assessment in Reading and Language Arts (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
MATH 323	Teaching Mathematics in Elementary School (3)
MATH 324	Supervised Observation/Participation in Elementary School Mathematics (2)

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)
SPED 493	Student Teaching Seminar (3)

Secondary/Adult Track

Students majoring in Secondary Special Education must choose one of the following tracks: English, Math (Middle School or High School Concentration), Social Science or Middle School General Science.

English Track**Academic Content (total 130 units)**

At least 60 of the following units must be taken before formal admission to the professional education sequence:

I. English (21 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
	ENGL 221/222	British Literature (3)
	ENGL 233	Survey of African-American Literature (3)
	or	
	ENGL 235	Ethnic American Literature (3)
	ENGL 230	Main Currents in American Literature (3)
	or	
	ENGL 236	American Indian Literature 1772-Present (3)
	ENGL 251	Applied Grammar (3)
	ENGL 283	Intro to Creative Writing (3)
	or	
	ENGL 311	Writing Poetry (3)
	ENGL 300	Literature Research and Applied Criticism (3)

II. Social Studies (6 units)

(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (8 units)

(Core 3)	MATH 204	Math Concepts and Structures I (4)
	MATH 205	Math Concepts and Structures II (4)

V. Art/Music (3 units)

(Core 4)	Choose one ART course from Core 4

VI. Psychology (3 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)

VII. Additional Required Courses (21 units)

(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 9)	EDUC 301	Writing and Comm. Skills for Teachers (3)
	SPED 301	Introduction to Special Education (3)
(Core 14)	EDUC 2XX	Education, Ethics and Change* (3)
(Core 13)	EDUC 203	Teaching Learning Diverse Society* (3)
	SCED 305	Adolescent Learning Development and Diversity (3)

(Core 1)	TU Seminar (3)

*These Core Curriculum courses must be taken in a specific sequence: *Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).*

Professional Education Courses**First Term (16 units) (Fall)**

SPED 413	Assistive Technology (3)
SCED 341	Principles of Secondary Education (3)
SCED 460	Using Reading and Writing in Secondary Education (4)
SPED 428	Working with Families of Students with Disabilities (3)
SPED 441	Curriculum/Methods of Instruction for Students with Disabilities (3)

Second Term (15 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
EDUC 401	Foundations of Education (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
PSYC 404	Adolescent Psychology (3)
SCED 419	Young Adult Literature (3)

Third Term (15 units) (Fall)

SPED 496	Internship: Students with Disabilities in Secondary/Adult Programs (3)
SPED 453	Curriculum/ Methods of Secondary Special Education (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
SCED 357	Teaching English in Secondary Education (3)
ENGL xxx	English elective (3)

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)
SCED 461	Teaching Reading in Secondary Content Areas (3)

Middle School General Science Track**Academic Content (total 128 units)**

At least 60 of the following units must be taken before formal admission to the professional education sequence:

I. English (6 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
	ENGL 233	Survey African American Literature (3)
	or	
	ENGL 235	Ethnic-American Literature (3)

II. Social Studies (6 units)

(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)

III. Science (19 units)*

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)
	PHSC 303	Earth Space Science (3)
	CHEM 110	General Chemistry I (4)
	GEOL 121	Physical Geology (4)

IV. Mathematics (8 units)

	MATH 109	Trans. to Algebra for Applications (4)
(Core 3)	MATH 237	Elementary Biostatistics (4)

V. Art/Music (3 units)

(Core 4)	Choose one ART or MUSC course (3)

VI. Psychology (3 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)

VII. Additional Required Courses (24 units)

	ISTC 301	Utilization of Instructional Media (3)
(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 9)	EDUC 301	Writing and Communication Skills for Teachers (3)
	SPED 301	Introduction to Special Education (3)
(Core 1)	TU Seminar (3)	
(Core 14)	EDUC 2XX	Ethics, Education and Change* (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	SCED 305	Adolescent Learning Development and Diversity (3)

Note: One math course (3-4 units) is taken during second term of the professional sequence. Math units are counted in academic content.

*These Core Curriculum courses must be taken in a specific sequence: *Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).*

Professional Education Courses**First Term (16 units) (Fall)**

SPED 413	Assistive Technology (3)
SCED 341	Principles of Secondary Education (3)
SCED 460	Using Reading and Writing in Secondary Education (4)
SPED 428	Working with Families of Students with Disabilities (3)
SPED 441	Curriculum/Methods of Instruction for Students with Disabilities (3)

Second Term (15 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
EDUC 401	Foundations of Education (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
PSYC 404	Adolescent Psychology (3)
SCIE xxx	Science course chosen from BIOL 115, PHSC 101, PHSC 303, CHEM 110, GEOL 121 (4)

Third Term (16 units) (Fall)

SPED 496	Internship: Students with Disabilities in Secondary/Adult Programs (3)
SPED 453	Curriculum/ Methods of Secondary Special Education and Transition (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
SCIE 380	Teaching Science in Secondary Education (3)
SCIE xxx	Approved science course

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)
SCED 461	Teaching Reading in Secondary Content Areas (3)

Math Track—Middle School Concentration**Academic Content (total 132 units)**

At least 60 of the following units must be taken before formal admission to the professional education sequence:

I. English (6 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
	ENGL 233	Survey African American Literature (3)
	or	
	ENGL 235	Ethnic-American Literature (3)

II. Social Studies (6 units)

(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (27 units)*

(Core 3)	MATH 119	Pre-Calculus (4)
	MATH 204	Math Concepts and Structures I (4)
	MATH 231	Basic Statistics (3)
	MATH 251	Elements of Geometry (4)
	MATH 265	Elements Linear Algebra (4)
	MATH 267	Introduction to Abstract Math (4)
	MATH 273	Calculus I (4)

V. Art/Music (3 units)

(Core 4)	Choose one ART or MUSC course (3)

VI. Psychology (3 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)

VII. Additional Required Courses (24 units)

	ISTC 301	Utilization of Instructional Media (3)
(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 9)	EDUC 301	Writing and Communication Skills for Teachers (3)
	SPED 301	Introduction to Special Education (3)
(Core 1)	TU Seminar (3)	
(Core 14)	EDUC 2XX	Ethics, Education and Change* (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	SCED 305	Adolescent Learning Development and Diversity (3)

Note: One Math course (3-4 units) is taken during both the second and third terms of the professional sequence. Math units are counted in academic content.

**These Core Curriculum courses must be taken in a specific sequence: Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).*

Professional Education Courses**First Term (16 units) (Fall)**

SPED 413	Assistive Technology (3)
SCED 341	Principles of Secondary Education (3)
SCED 460	Using Reading and Writing in Secondary Education (4)
SPED 428	Working with Families of Students with Disabilities (3)
SPED 441	Curriculum/Methods of Instruction for Students with Disabilities (3)

Second Term (15–16 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
EDUC 401	Foundations of Education (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
PSYC 404	Adolescent Psychology (3)
MATH xxx	Math course chosen from MATH 119, MATH 204, MATH 231, MATH 251, MATH 265, MATH 267, MATH 273 (3–4)

Third Term (15–16 units) (Fall)

SPED 496	Internship: Students with Disabilities in Secondary/Adult Programs (3)
SPED 453	Curriculum/Methods of Secondary/Special Education and Transition (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
MATH 323	Teaching Math in Elementary School (3)
MATH xxx	Math course chosen from MATH 119, MATH 204, MATH 231, MATH 251, MATH 265, MATH 267, MATH 273 (3–4)

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)**
SCED 461	Teaching Reading in Secondary Content Areas (3)

***All academic (Core Curriculum) courses must be completed prior to student teaching.*

Math Track—High School Concentration**Academic Content (total 135 units)**

At least 60 of the following Academic Content units must be taken before formal admission to the professional education sequence:

I. English (6 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
	ENGL 233	Survey African American Literature (3)
	or	
	ENGL 235	Ethnic-American Literature (3)

II. Social Studies (6 units)

(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (30 units)*

	MATH 265	Elementary Linear Algebra (4)
	MATH 267	Introduction to Abstract Math (4)
(Core 3)	MATH 273	Calculus I (4)
	MATH 274	Calculus II (4)
	MATH 275	Calculus III (4)
	MATH 301	History of Mathematics (3)
	MATH 330	Intro to Statistical Methods (4)
	MATH 353	Euclidean and Non-Euclidean Geometry (3)

V. Art/Music (3 units)

(Core 4)	Choose one ART or MUSC course (3)

VI. Psychology (3 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)

VII. Additional Required Courses (24 units)

	ISTC 301	Utilization of Instructional Media (3)
(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 9)	EDUC 301	Writing and Communication Skills for Teachers (3)
	SPED 301	Introduction to Special Education (3)

(Core 1)	TU Seminar (3)

(Core 14)	EDUC 2XX	Ethics, Education and Change* (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	SCED 305	Adolescent Learning Development and Diversity (3)

Note: One Math course (3-4 units) is taken during both the second and third terms of the professional sequence. Math units are counted in academic content.

**These Core Curriculum courses must be taken in a specific sequence: Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).*

Professional Education Courses**First Term (16 units) (Fall)**

SPED 413	Assistive Technology (3)
SCED 341	Principles of Secondary Education (3)
SCED 460	Using Reading and Writing in Secondary Education (4)
SPED 428	Working with Families of Students with Disabilities (3)
SPED 441	Curriculum/Methods of Instruction for Students with Disabilities (3)

Second Term (15–16 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
EDUC 401	Foundations of Education (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
PSYC 404	Adolescent Psychology (3)
MATH XXX	Math course from MATH 265, MATH 267, MATH 273, MATH 274, MATH 275, MATH 301, MATH 330, MATH 353 (3–4)

Third Term (15–16 units) (Fall)

SPED 496	Internship: Students with Disabilities in Secondary/Adult Programs (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
SPED 453	Curriculum/Methods of Secondary Special Education and Transition (3)
MATH 423	Teaching Math in Secondary Education (3)
MATH xxx	Math course from MATH 265, MATH 267, MATH 273, MATH 274, MATH 275, MATH 301, MATH 330, MATH 353 (3–4)

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)**
SCED 461	Teaching Reading in Secondary Content Areas (3)

***All academic (Core Curriculum) courses must be completed prior to student teaching.*

Social Science Track**Academic Content (total 127 units)**

At least 60 of the following units must be taken before formal admission to the professional education sequence:

I. English (6 units)

(Core 2)	ENGL 102	Writing for a Liberal Education (3)
	ENGL 233	Survey African American Literature (3)
	or	
	ENGL 235	Ethnic-American Literature (3)

II. Social Studies (24 units)

(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)
(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)

HIST 102	History of European Civilization through 17th Century (3)
HIST 103	History of European Civilization from the 17th Century (3)
ECON 201 or ECON 202	Microeconomic Principles (3)
POSC 103	Macroeconomic Principles American National Government (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (8 units)

(Core 3)	MATH 204	Math Concepts and Structures I (4)
	MATH 205	Math Concepts and Structures II (4)

V. Art/Music (3 units)

(Core 4)	Choose one ART or MUSC course (3)	

VI. Psychology (3 units)

(Core 6)	PSYC 101	Introduction to Psychology (3)

VII. Additional Required Courses (21 units)

(Core 1)	TU Seminar	(3)
(Core 14)	EDUC 2XX	Ethics, Education and Change* (3)
(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 9)	EDUC 301	Writing and Communication Skills for Teachers (3)
	SPED 301	Introduction to Special Education (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	SCED 305	Adolescent Learning Development and Diversity (3)

****Note:** 3 units of Social Studies are taken during both the second and third terms of the professional sequence. Social Studies units are counted under academic content and not recounted under the professional sequence.

***These Core Curriculum courses must be taken in a specific sequence: Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).**

Professional Education Courses**First Term (16 units) (Fall)**

SPED 413	Assistive Technology (3)
SCED 341	Principles of Secondary Education (3)
SCED 460	Using Reading and Writing in Secondary Education (4)
SPED 428	Working with Families of Students with Disabilities (3)

SPED 441	Curriculum/Methods of Instruction for Students with Disabilities (3)

Second Term (15 units) (Spring)

SPED 430	Informal Tests and Measurements of Students with Disabilities K-12 (3)
EDUC 401	Foundations of Education (3)
SPED 425	Formal Tests and Measurements for Students with Disabilities K-12 (3)
PSYC 404	Adolescent Psychology (3)
	Social Science course from GEOG 102, GEOG 105, HIST 145, HIST 146, SOCI 101 (3)

Third Term (15 units) (Fall)

SPED 496	Internship: Students with Disabilities in Secondary/Adult Programs (3)
SPED 453	Curriculum/ Methods of Secondary Special Education (3)
SPED 429	Curriculum/Methods of Classroom Management (3)
SCED 355	Teaching Social Studies in Secondary Education (3)
	Social Science course from ECON 201, ECON 202, GEOG 102, GEOG 105, HIST 102, HIST 103, HIST 145, HIST 146, POSC 103, SOCI 101 (3), SOSOC 401

Fourth Term (15 units) (Spring)

SPED 498	Student Teaching: Special Education (12)
SCED 461	Teaching Reading in Secondary Content Areas (3)

INTEGRATED EARLY CHILDHOOD – SPECIAL EDUCATION MAJOR**Academic Content (total 130 units)**

At least 60 of the following units must be taken before admission to the professional education sequence:

I. English (6 units)

(Core 2)	ENGL 102	Writing for Liberal Education (3)
	ENGL elective	(literature course preferred) (3)

II. Social Studies (9 units)

(Core 12)	GEOG 102	World Regional Geography (3)
	or	
	GEOG 105	Geography of International Affairs (3)
(Core 11)	HIST 145	History of the U.S. to Mid-19th Century
	or	
	HIST 146	History of the U.S. since Mid-19th Century (3)
(Core 6)	PSYC 101	Introduction to Psychology (3)

III. Science (8 units)

(Core 7)	BIOL 115	Biology: The Science of Life (4)
(Core 8)	PHSC 101	Physical Science I (4)

IV. Mathematics (12 units)

	MATH 204	Math Concepts and Structures I (4)
(Core 3)	MATH 205	Math Concepts and Structures II (4)
	MATH 251	Elements of Geometry (4)

V. Creativity and Creative Development (3 units)

(Core 4)	Choose one course from Core 4 (3)	

VI. Additional Required Courses (27 units)

	ECED 103	Introduction to ECED (3)
	ECED 201	Intervention and the Young Child (3)
	SPED 301	Introduction to Special Education (3)
(Core 13)	EDUC 203	Teaching and Learning in a Diverse Society* (3)
	SPPA 350	Language Development in Educational Settings (3)
(Core 5)	COMM 131	Fundamentals of Speech Communication (3)
(Core 1)	TU Seminar	(3)
(Core 14)	EDUC 2XX	Education, Ethics and Change* (3)
(Core 10)	EDUC 2XX	History and Contemporary Perspectives on American Urban Schools* (3)

***These Core Curriculum courses must be taken in a specific sequence: Metropolitan Perspectives (Core 10), Diversity and Difference (Core 13), Ethical Issues and Perspectives (Core 14).**

Major requirements (65 units)**First Term (Fall) (17 units)**

	ECED 321	Foundations of Reading and Language Arts (3)
	ECSE 425	Assessment for Infant/Primary (3)
	ECED 315	Infancy and Toddlerhood Development and Intervention (3)
	ECSE 316	Infant and Toddler Internship (2)
	ECSE 428	Families as Partners in ECSE (3)
(Core 9)	ECED 422	Advanced Writing Techniques (3)

Second Term (Spring) (16 units)

	ECED 461	Teaching in the Integrated Arts (3)
	ECSE 341	Pre-Primary Curriculum and Instruction (3)
	ECSE 343	Field Placement in the Pre-Primary Inclusive Classroom (2)
	ECED 360	Early Literacy (3)
	ECSE 413	Instructional Technology for Young Children (3)
	SCIE 371	Teaching Science: Early Childhood (2)

Third Term (Fall) (17 units)

	ECSE 342	Primary Curriculum and Instruction (3)
	ECSE 344	Field Placement in the Primary Inclusive Classroom (2)
	ECSE 429	Social Competence in Early Education (3)
	ECED 361	Teaching Reading in the Primary Grades (3)
	ECED 429	Reading Assessment (3)
	MATH 321	Teaching Math: Early Childhood (3)

Fourth Term (Spring) (15 units)

	ECSE 351	Internship in ECSE (12)
	ECSE 352	Internship Seminar in ECSE (3)



INTEGRATED ELEMENTARY EDUCATION – SPECIAL EDUCATION MAJOR

Academic Content (total 131 units)

Courses taken before formal admission to the professional education sequence.

I. English (6 units)

- (Core 2) ENGL 102 Writing for Liberal Education (3)
ENGL elective (literature course preferred) (3)

II. Social Studies (9 units)

- (Core 12) GEOG 102 World Regional Geography (3)
or
GEOG 105 Geography of International Affairs (3)
(Core 11) HIST 145 History of the U.S. to Mid-19th Century
or
HIST 146 History of the U.S. since Mid-19th Century (3)
(Core 6) PSYC 101 Introduction to Psychology (3)

III. Science (8 units)

- (Core 7) BIOL 115 Biology: The Science of Life (4)
(Core 8) PHSC 101 Physical Science I (4)

IV. Mathematics (12 units)

- MATH 204 Math Concepts and Structures I (4)
(Core 3) MATH 205 Math Concepts and Structures II (4)
MATH 251 Elements of Geometry (4)

V. Fine and Performing Arts (6 units)

- (Core 4) Choose one course from Core 4 (3)
(Core 5) MUSC 101 Music from Western Heritage (3)

VI. Psychology (6 units)

- (Core 6) PSYC 101 Introduction to Psychology (3)
PSYC 201 Educational Psychology (3)

VII. Additional Required Courses (19 units)

- (Core 10) EDUC 2XX History and Contemporary Perspectives on American Urban Schools* (3)
(Core 14) EDUC 2XX Education, Ethics and Change* (3)
SPED 301 Introduction to SPED (3)
(Core 13) EDUC 203 Teaching and Learning in a Diverse Society* (3)
EESE 468 EESE Field Experience (1)
ELED 322 Foundations of Reading and Language Language Arts (3)
(Core 1) TU Seminar (3)

*These Core Curriculum courses must be taken in a specific sequence: *Metropolitan Perspectives* (Core 10), *Diversity and Difference* (Core 13), *Ethical Issues and Perspectives* (Core 14).

Professional Education Courses

First Term (17 units) (Fall)

- MATH 323 Teaching Mathematics in Elementary School (3)
MATH 324 Supervised Observation/Participation in Elementary School Mathematics (2)
BIOL 303 Life Sciences (3)
or
PHSC 303 Earth-Space Science (3)
SCIE 376 Teaching Science in Elementary School (3)
SPED 425 Formal Tests and Measurements (3)
SPED 441 Curriculum Methods of Instruction (3)

Second Term (18 units) (Spring)

- ELED 363 Language and Literacy Internship (3)
(Core 9) ELED 320 Foundations of Writing and Other Language Arts (3)
ECED 201 Infants and Young Children (3)
SPED 413 Assistive Technology (3)
EDUC 417 Children's Literature (3)
ELED 323 Principles and Practices of Instructional Reading (3)

Third Term (15 units) (Fall)

- EESE 475 Elementary Education/Special Education Internship I (3)
ELED 311 Child and the Elementary School Curriculum Assessment (3)
ELED 429 Principles and Practices of Assessment in Reading and Language Arts (3)
SPED 429 Curriculum Methods of Classroom Management (3)
SPED 469 Collaborative Teaching in Elementary Schools (3)

Fourth Term (15 units) (Spring)

- EESE 476 Elementary Education/Special Education Internship II (12)
EESE 485 Elementary Education/Special Education Internship Seminar (3)

GRADUATE PROGRAM IN SPECIAL EDUCATION

Director: Lori Jackman

Psychology Building 305, 410-704-3122

This Master of Education program prepares currently certified teachers for careers as special educators. The Certification Track meets the requirements for MSDE special education certification at infant/primary, elementary/middle or secondary levels. The Teacher as Leader in Autism Spectrum Disorders (ASD) M.Ed. program is designed to provide specialized instruction in ASD to educators currently certified in special education, related services or related fields. The Master of Arts in teaching offers certification in special education for individuals who hold an undergraduate degree outside of education. See the *Graduate Catalog* for details.





The College of Fine Arts and Communication

The College of Fine Arts and Communication (COFAC) comprises the departments of Art + Design, Art History, Art Education; Dance; Electronic Media and Film; Mass Communication and Communication Studies; Music; and Theatre Arts. Through classroom and experiential preparation, COFAC's programs prepare graduates for exciting careers and/or graduate study. The broad liberal education we offer, along with specialized professional training in their respective fields, enables students to develop creative and analytical abilities tailored to their future aspirations. In fact, we not only provide intensive study for our majors and minors; we also offer all TU students the opportunity to participate in an exciting variety of academic and artistic experiences.

The students and faculty of the College of Fine Arts and Communication are active in Van Bokkelen Hall and the Media Center, which house journalism laboratories, the debate and speech facility, XTSR-AM, radio-television-film laboratories and the television station WMJF-TV. In 2011, the lecture hall in Van Bokkelen, home to film screenings and media festivals, received a major renovation. In 2005, the renovation and addition of the Center for the Arts, home of the departments of Art + Design, Art History, Art Education, Dance, Music and Theatre Arts, was completed. The building project doubled the size of the facilities available to students, adding a music recital hall, an M.F.A. art gallery, an intimate studio theatre, and four state-of-the-art dance studios including a studio-theatre space. The Center for the Arts also houses the Asian Arts & Culture Center gallery and garden, and the Center for the Arts Gallery. Stephens Hall Theatre provides performance space for dance, opera and musicals.

Recognized as a fine arts center for Maryland, the college continues to pursue its mission to enhance communication and the fine and performing arts, and contribute to the cultural life of Towson and Greater Baltimore through an annual program of events that includes more than 90 music performances; at least 100 student films; 10 dance events; numerous debates, lectures and workshops; no fewer than four mainstage plays as well as exciting M.F.A. original works; a daily campus television show; more than 10 art exhibitions; and a variety of festivals.

The college also sponsors international exchange programs with schools in China, Germany, Ireland, Korea, Russia, Italy and the United Kingdom. Please visit our website for more information.

Art + Design
Art Education
Art History
Communication Studies
Dance (B.F.A.)
Dance with K-12 Certification (B.F.A.)
Electronic Media and Film
Mass Communication
Music Composition
Music Education
Music Performance
Theatre

Susan Picinich, Dean
Trudy Cobb Dennard, Associate Dean

COLLEGE OFFICE
Center for the Arts 3001, 410-704-3288
Fax: 410-704-6026
www.towson.edu/cofac

Department of Art + Design, Art History, Art Education

Professors: Christopher Bartlett (*Gallery Director*), Jan Baum, Susan Isaacs, (*Curator, Art History, Honors Coordinator*), Haig Janian, James Paulsen, Stuart Stein (*Chair*), Nora Sturges (*Studio Art Honors Coordinator*), Bridget Sullivan

Associate Professors: Karl Fugelso, Raymond Martens (*M.Ed. Director*), Tonia Matthews (*M.F.A. Director*), Nancy Siegel

Assistant Professors: Kay Broadwater, Amanda Burnham, Jenee Mateer, Jessica Ring, Sujan Shrestha, Amy Sowder, Nahid Tootoonchi

Visiting Assistant Professors: Rich Holt, Trace Miller, Carolyn Norton

Lecturer: Diane Kuthy

Assistant to Chair: Leslie Varga

Administrative Assistant: Ginger Ross

Visual Resource Coordinator: Venetia Zachary

Community Art Center Director: Bonnie Reynolds

Assistant: Mark Cooper

Director and Curator, Asian Arts & Culture Center: Suewei Shieh

Computer Lab Manager: Richard Thomas

OFFICE

Center for the Arts 3103, 410-704-2808

E-mail: artdepartment@towson.edu

www.towson.edu/art

PROGRAMS OF THE DEPARTMENT

The Department of Art + Design, Art History, Art Education (DADAA) offers a comprehensive Art + Design major comprising the following concentrations and tracks: Digital Art and Design, Graphic Design, Illustration, Interdisciplinary Object Design, Metalsmithing and Jewelry, Painting Printmaking and Drawing, Photography, Sculpture, General Fine Arts and General Design Studies. Associated with these concentrations are two degree options: the B.F.A. and the B.S./B.A. plans. The department also offers the major in Art Education, the major in Art History, the Master of Education in Art Education, the Master of Fine Arts in Studio Art and the Post-Baccalaureate Interactive Media Design Certificate Program. A minor is offered in Art History. DADAA offers a comprehensive, full-term travel study abroad program as an integral part of the curriculum. Students register on campus but pursue art courses in a foreign locale under University System of Maryland faculty direction. DADAA offers non-credit art instruction throughout the year for children and adults through the Community Art Center.

FACILITIES

The facilities available to undergraduate and graduate students are extensive. They are designed to encourage and fully support the creative endeavors of students. Each concentration and major has the equipment necessary to ensure that students reach their potential.

MAJOR IN ART + DESIGN

Art majors must complete 45 to 81 units in art, depending on the concentration or track and

degree program option. As part of the total number of units, 36 units are taken in foundations. The First-Level Foundation (21 units) is identical for all majors. The Second-Level Foundation (18 units) is specific to the program option. (See Second-Level Foundation courses listed under separate concentration/track options.) All Art majors must successfully complete all of the first-year foundation courses listed below with a grade of at least a C before enrolling in any other art courses.

First-Level Foundation (21 units)

ART 101	Digital Tools and Concepts (3)
ART 103	2D Process (3)
ART 104	3D Process (3)
ART 211	Drawing: Observation and Invention (3)
ART 212	Visual Concepts (3)
ARTH 221	Survey of Western Art I (3)
ARTH 222	Survey of Western Art II (3)

B.S./B.A. DEGREE OPTIONS IN THE ART + DESIGN MAJOR

General Fine Arts Track (45 units)

The General Fine Arts track offers students a wide exposure to the fine arts disciplines represented in the department, as part of a broad-based liberal arts curriculum. The track's curriculum is designed to give a broad exposure to fine arts disciplines taught in the department, while also allowing students an opportunity for three additional courses in a particular discipline, if they would like a small degree of specialization.

First-Level Foundation (21 units)

Required Courses (15 units)

Choose 5 of the following:

ART 205	Human Figure (3)
ART 218	Jewelry (3)
ART 229	Painting I (3)
ART 234	Photo Imaging – Film (3)
	or
ART 235	Photo Imaging – Creative Workflow (3)
ART 241	Sculpture I (3)
ART 2xx/3xx	Any Ceramics Course (3)
ART 2xx/3xx	Any Printmaking Course (3)
ART 372	Advanced Drawing I (3)

Fine Arts Electives (9 units)

ART 3xx/4xx Any three fine arts courses (9)

General Design Studies Track (45 units)

The General Design Studies track is meant for students who seek to become engaged in design but do not intend to become designers (the Graphic Design and Digital Art and Design tracks in the B.F.A. degree program offer the specialization and professional preparation needed for a career as a designer). General Design Studies is well suited for students who wish to combine study of design with a major in Mass Communication, Computer Science or Business.

First-Level Foundation (21 units)

Required Courses (12 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 234	Photo Imaging – Film (3)
ART 317	Graphic Design I (3)
ART 219	Digital Concepts: Structure (3)

Elective courses must be approved by the faculty adviser.

Design Electives (12 units)

ART 322	Digital Design: Motion (3)
ART 355	Typography I (3)
ART 235	Photo Imaging – Creative Workflow (3)

ART 360	Digital Art 2D (3)
ART 363	Interactive Media: Theory and Application (3)
ART 365	Design for the WWW (3)
ART 377	Exhibit Design (3)
ART 462	Digital Illustration (3)
ART 483	Package Design (3)
ART 300/400	Any 300/400-level ART course (3-9)
ARTH 327	History of Modern Design (3)

Interdisciplinary Object Design Concentration (54 units)

First-Level Foundation (21 units)

Second-Level Foundation (18 units)

ART 218	Metals and Jewelry I (3)
ART 311	Wood: Concept and Process (3)
ART 231	Ceramics I (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 361	Digital Object Design (3)
ARTH 327	History of Modern Design (3)

Required Courses (15 units)

ART 319	Casting: Materials and Process (3)
ART 307	Materials: Concept and Process I (3)
ART 3xx/4xx	Any 3D media course (3)
ART 422	Designing for Production (3)
ART 497	Senior Project (3)

Metalsmithing and Jewelry Concentration (54 units)

First-Level Foundation (21 units)

Second-Level Foundation (18 units)

ART 218	Metals and Jewelry I (3)
ART 241	Sculpture I (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 313	Enameling: Glass on Metal (3)
ART 361	Digital Object Design (3)
ARTH 327	History of Modern Design (3)

Required Courses (15 units)

ART 365	Design for the WWW (3)
ART 318	Metals and Jewelry II (3)
ART 419	Metals and Jewelry III (3)
ART 319	Casting: Materials and Process (3)
ART 497	Senior Project (3)

Painting, Drawing, Printmaking Concentration (57 units)

First-Level Foundation (21 units)

Required Courses (33 units)

ART 229	Painting I (3)
ART 241	Sculpture I (3)
ART 245	Intro to Printmaking (3)
ART 329	Painting II (3)
ART 336	Painting III (3)
ART 372	Advanced Drawing I (3)
ART 402	Life Drawing and Anatomy I (3)

Choose two of the following:

ART 345	New Directions in Printmaking (3)
ART 347	Screen Process I (3)
ART 348	Artist Prints (3)
ART 349	Relief Process I (3)
ART 350	Etching and Intaglio I (3)
ART 353	Lithographic Process I (3)
ART 356	Artist Books (3)

Choose one of the following:

ARTH 324	Modern Art II (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin American Art (3)
ARTH 350	History of Prints (3)

Choose one of the following:

ART 348	Artist Prints (3)
ART 436	Painting IV (3)
ART 447	Screen Process II (3)
ART 472	Advanced Drawing II (3)
ART 4xx	Any 400-level printmaking class (3)

Elective (3 units)

ART 234	Photo Imaging – Film (3)
ART 235	Photo Imaging – Creative Workflow (3)
ART 346	New Directions in Painting, Experimental Media, and Art I (3)
ART 2xx/3xx/4xx	Any 200/300/400-level studio art course (3)

Photo Imaging Concentration (60 units)

First-Level Foundation (21 units)

Second-Level Foundation (9 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 235	Photo Imaging – Creative Workflow (3)
ART 365	Design for the WWW (3)
ARTH 351	History of Photography (3)

Required Courses (30 Units)

ART 259	Photo Imaging – Digital I (3)
ART 359	Photo Imaging – Digital II (3)
ART 236	Photo Imaging – Light (3)
ART 238	Photo Imaging – Motion (3)
ART 334	Photo Imaging – Concepts I (3)
ART 335	Photo Imaging – Concepts II (3)
ART 357	Photo Imaging – Formats (3)
ART 435	Photo Imaging – Portfolio (3)
ART 497	Senior Project (3)

Sculpture Concentration (54 units)

First-Level Foundation (21 units)

Required Courses (24 units)

ART 205	Human Figure (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 241	Sculpture I (3)
ART 311	Wood: Concept and Process (3)
ART 339	Metal: Concept and Process (3)
ART 342	Carving: Concept and Process (3)
ART 361	Digital Object Design I (3)
ART 441	Advanced Sculpture I (3)

Remaining courses to be chosen from either the Fine Art or the Design Option:

Sculpture: Fine Art Option (9 units)

ART 229	Painting I (3)
ARTH 3xx	Any 300-level Art History course, with consent of adviser (3)

Choose one of the following:

ART 218	Metals and Jewelry I (3)
ART 231	Ceramics I (3)
ART 443	Advanced Sculpture II (3)
ART 445	Experimental Directions (3)
ART 3xx/4xx	Any 300/400-level studio art course (3)

Sculpture: Design Option (9 units)

ART 368	Industrial Design I
ART 366	Concept Model Making (3)
ARTH 327	History of Modern Design (3)

BACHELOR OF FINE ARTS DEGREE, MAJOR IN ART + DESIGN (SCREENED PROGRAM)

B.F.A. Screening

Students intending to pursue the B.F.A. must first declare a major in the Art + Design B.S. program, then, when eligible, apply for admission to a concentration in the B.F.A. program. The BFA in Art + Design is a competitive and screened major.

Interested students declare a B.S. concentration in their first year, and undergo screening by the specific B.F.A. concentration at the end of the term in which the screening prerequisites will be completed (usually in the student's fourth term). Admission into Towson University and declaration of an Art + Design B.S./B.A. concentration does not guarantee acceptance into the B.F.A. Program. In some concentrations the number selected will be on a space-available basis. Requirements for application and admission to the B.F.A. program in Art + Design are:

- Successful completion of first-level foundations and second-level foundations or a minimum of 39 units in the major
- A 2.67 GPA in ART courses.
- A portfolio review (students obtain portfolio requirements for each B.F.A. concentration from the department office or their adviser)

Students should obtain application forms, deadlines, and other screening information from the department office (CA 3103) at the beginning of the term in which they will become eligible to apply. Students not granted admission may reapply once.

Digital Art and Design Concentration (81 units)

First-Level Foundation (21 units)

Required Courses (48 units)

ART 234	Photo Imaging – Film (3)
	or
ART 235	Photo Imaging – Creative Workflow (3)
ART 238	Photo Imaging – Motion (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 219	Digital Concepts: Structure (3)
ART 322	Digital Design: Motion (3)
ART 365	Design for the WWW (3)
ART 317	Graphic Design I (3)
ART 355	Typography (3)
ARTH 352	History of New Media (3)
ARTH 327	History of Modern Design (3)
	or
ARTH 324	Modern Art II (3)
ART 360	Digital Art: 2D (3)
ART 362	Digital Art: 3D (3)
ART 363	Interactive Media: Theory and Application (3)
ART 373	Illustration Principles for Designers and Illustrators (3)
ART 466	Design for the WWW II (3)
ART 498	BFA project (3)

AREA OF FOCUS (12 units)

OPTION 1: Game Design Focus

ART 476	3D Animation I (3)
ART 477	3D Animation II (3)
ART 478	Game Design I (3)
ART 463	Interactive Media: Experimental (3)

OPTION 2: Independent Focus

12 units of ART courses determined with consent of Art + Design adviser

Graphic Design Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (18 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 219	Digital Concepts: Structure (3)
ART 365	Design for the WWW (3)

ART 317	Graphic Design I (3)
ART 355	Typography I (3)

Choose one:

ART 229	Painting I (3)
ART 241	Sculpture I (3)
ART 218	Metals and Jewelry (3)
ART 347	Screen Process I (3)
ART 356	Artist Books (3)
ART 377	Exhibit Design (3)

Choose one:

ART 234	Photo Imaging – Film (3)
ART 235	Photo Imaging – Creative Workflow (3)

Required Courses (39 units)

ART 373	Illustration Principles for Designers and Illustrators (3)
ART 417	Graphic Design II* (3)
ART 456	Typography II (3)
ARTH 327	History of Modern Design (3)
ART 466	Design for the WWW II (3)
ART 457	Graphic Design III** (3)
ART 496	Graphic Design: Portfolio (3)
ART 498	BFA Project (3)

Choose one:

ART 490/1/2	Internship in Art (3)
ART 3XX/4XX	Adviser approved upper-level ART course or Special Topics in Art course (3)

Choose one:

ART 465	Graphic Design: Social Issues (3)
ART 483	Package Design (3)

Choose two:

ART 363	Interactive Media: Theory and Application (3)
ART 471	Programming for Designers (3)
ART 463	Interactive Media: Experimental (3)
ART 236	Photo Imaging: Light (3)
ART 237	Photo Imaging: Alternative Process (3)
ART 238	Photo Imaging: Motion (3)
ART 258	Photo Imaging: Digital I (3)
ART 322	Digital Design: Motion (3)
ART 473	Illustration Concepts for Designers and Illustrators (3)

Choose one:

ARTH 324	Modern Art II (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin American Art (3)
ARTH 352	History of New Media (3)
ARTH 350	History of Prints in America (3)

Illustration Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (21 units)

ART 205	The Human Figure (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 219	Digital Concepts: Structures (3)
ART 229	Painting I (3)
ART 236	Painting II (3)
ART 241	Sculpture I (3)
	or
ART 2xx/2xx	Any 200-300-level Crafts course (3)
	Choose one:
ARTH 324	Modern Art II (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin American Art (3)
ARTH 352	History of New Media (3)
ARTH 350	History of Prints in America (3)

Required Courses (21 units)

ART 317	Graphic Design I (3)
ART 373	Illustration Principles for Designers and Illustrators (3)
ART 402	Life Drawing and Anatomy I (3)
ART 473	Illustration Concepts for Designers and Illustrators (3)
ART 474	Advanced Illustration (3)
ART 498	BFA Project (3)
ARTH 327	History of Modern Design (3)

Electives (18 units)

ART xxx	Any Printmaking course (3)
ART 331	Watercolor I (3)
ART 336	Painting III (3)
ART 346	New Directions In Painting I (3)
ART 365	Design for the WWW (3)
ART 372	Advanced Drawing I (3)
ART 412	Life Drawing and Anatomy II (3)
ART 431	Watercolor II (3)
ART 436	Painting IV (3)
ART 446	New Directions In Painting II (3)
ARED 464	Author/Illustrator (3)
ART xxx	Any 300/400-level Digital Imaging course (6)
ART 360	Digital Art: 2D (3)
ART 462	Digital Illustration (3)
ART 362	Digital Art: 3D (3)

Interdisciplinary Object Design Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (9 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 361	Digital Object Design (3)
ARTH 327	History of Modern Design (3)

Required Courses (33 units)

ART 218	Metals and Jewelry I (3)
ART 231	Ceramics I (3)
ART 311	Wood: Concept and Process (3)
ART 320	Fibers: Structures I (3)
ART 307	Materials: Concept and Process I (3)
ART 365	Design for the WWW (3)
ART 340	Modeling: Concept and Process (3)
ART 422	Designing for Production (3)
ART 490	Internship (3)
ART 498	BFA Project (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 485	Craft Seminar (3)

Advanced Materials and Technique Courses (15 units)

Choose 4 from one group and 1 from a second group or all 5 in one group.

ART 318	Metals and Jewelry II (3)
ART 419	Metals and Jewelry III (3)
ART 319	Casting: Materials and Process (3)
ART 313	Enameling: Glass on Metal (3)
ART 413	Electroforming and Enameling (3)
ART 327	Design and Social Entrepreneurship (3)
ART 241	Sculpture I (3)
ART 339	Metal: Concept and Process (3)
ART 342	Carving: Concept and Process (3)
ART 366	Concept Model Making (3)
ART 327	Design and Social Entrepreneurship (3)
ART 232	Ceramics: Surface Decoration (3)
ART 310	Ceramics: Handbuilding (3)
ART 309	Ceramics: The Potters Wheel (3)
ART 409	Ceramics: The Vessel (3)
ART 327	Design and Social Entrepreneurship (3)

ART 326	Fibers: Surfaces I (3)
ART 328	Fibers: Structures II (3)
ART 337	Fibers: Surfaces II (3)
ART 327	Design and Social Entrepreneurship (3)

Elective (3 units)

ART 2xx/3xx/4xx	Any 200, 300, or 400-level studio course (3)

Metalsmithing and Jewelry Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (18 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 218	Metals and Jewelry I (3)
ART 241	Sculpture I (3)
ART 361	Digital Object Design I (3)
ART 318	Metals and Jewelry II (3)
ARTH 327	History of Modern Design (3)

Required Courses (24 units)

ART 365	Design for the WWW (3)
ART 419	Metals and Jewelry III (3)
ART 319	Casting: Materials and Process (3)
ART 307	Materials: Concept and Process I (3)
ART 422	Designing for Production (3)
ART 490	Internship (3)
ART 498	BFA Project (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 485	Craft Seminar (3)

Electives (18 units)

ART 313	Enameling: Glass on Metal (3)
ART 327	Design and Social Entrepreneurship (3)
ART 307	Materials: Concept and Process II (3)
ART 439	Hollowware and Forging (3)
ART 413	Electroforming and Enameling (3)
ART 414	Advanced Studio (3)
ART 2xx/3xx/4xx	Any 200, 300, or 400-level studio course (up to 6 units, no more than 3 units may be 200 level)

Painting, Drawing, Printmaking Concentration (81 units)

First-Level Foundation (21 units)

Required Courses (39 units)

ART 229	Painting I (3)
ART 241	Sculpture I (3)
ART 245	Intro to Printmaking (3)
ART 329	Painting II (3)
ART 336	Painting III (3)
ART 346	New Directions in Painting, Experimental Media and Art I (3)
ART 372	Advanced Drawing I (3)
ART 402	Life Drawing and Anatomy I (3)
ART 498	BFA Project (3)
Choose two of the following:	
ART 345	New Directions in Printmaking (3)
ART 347	Screen Process I (3)
ART 348	Artist Prints (3)
ART 349	Relief Process I (3)
ART 350	Etching and Intaglio I (3)
ART 353	Lithographic Process I (3)
ART 356	Artist Books (3)

Choose two of the following:

ARTH 324	Modern Art II (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin American Art (3)
ARTH 350	History of Prints (3)
ARTH 3xx/4xx	Any 300/400-level ARTH course (3)

Area of Focus Courses (15 units)

Choose courses from one of the following options:

Painting Area of Focus (15 units)

ART 436	Painting IV (6-9)
ART 472	Advanced Drawing II (3)
ART 356	Artist Books (3)
ART 3xx/4xx	Any 300/400-level studio art course (3)

Drawing Area of Focus (15 units)

ART 472	Advanced Drawing II (6-9)
ART 436	Painting IV (3)
ART 356	Artist Books (3)
ART 3xx/4xx	Any 300/400-level studio art course (3)

Printmaking Area of Focus (15 units)

ART 3xx/4xx	Any additional printmaking course (12-15)
ART 356	Artist Books (3)

Electives (6 units)

ART 3xx/4xx	Any 300/400-level studio art course (3-6)
ART 234	Photo Imaging – Film (3)
ART 235	Photo Imaging – Creative Workflow (3)
ART 445	Experimental Directions (3)

Photo Imaging Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (18 units)

ART 2xx/3xx	Any 200-300-level Painting/Printmaking Course (3)
ART 2xx/3xx	Any 200-300-level Sculpture/Craft Course (3)
ART 217	Digital Concepts: Image and Surface (3)
ART 265	Design for the WWW (3)
ARTH 351	History of Photography (3)
ARTH 352	History of New Media (3)

Required Concentration (42 units)

ART 234	Photo Imaging – Film (3)
ART 235	Photo Imaging – Creative Workflow (3)
ART 236	Photo Imaging – Light (3)
ART 237	Photo Imaging – Alternative Process (3)
ART 238	Photo Imaging – Motion (3)
ART 258	Photo Imaging – Digital I (3)
ART 334	Photo Imaging – Concepts I (3)
ART 335	Photo Imaging – Concepts II (3)
ART 357	Photo Imaging – Formats (3)
ART 358	Photo Imaging – Digital II (3)
ART 435	Photo Imaging – Portfolio (3)
ART 498	BFA Project (3)

Electives (6 units)

UD Art Studio/Art History Electives

Sculpture Concentration (81 units)

First-Level Foundation (21 units)

Second-Level Foundation (12 units)

ART 217	Digital Concepts: Image and Surface (3)
ART 205	Human Figure (3)
ART 229	Painting I (3)
ART 241	Sculpture I (3)

Required Courses (24 units)

ART 311	Wood: Concept and Process (3)
ART 339	Metal: Concept and Process (3)
ART 340	Modeling: Concept and Process (3)
ART 342	Carving: Concept and Process (3)
ART 361	Digital Object Design (3)
ART 441	Advanced Sculpture I (3)
ARTH 3xx/4xx	Any 300/400-level Art History course (with consent of adviser) (3)
ART 498	BFA Project (3)
Remaining courses to be chosen from either the Fine Art or the Design Option:	

Sculpture: Fine Art Option (24 units)

ARTH 3xx/4xx	Any 300/400-level Art History course (with consent of adviser) (3)
ART 443	Advanced Sculpture II (3)
ART 445	Experimental Directions (3)
ART 372	Advanced Drawing I (3)

Select four courses from the following electives (12 units):

ART 407	Ceramics: Clay Sculpture (3)
ART 218	Metals and Jewelry I (3)
ART 461	Digital Object Design II (3)
ART 490	Internship (3)
ARTH 3xx/4xx	Any 300/400-level studio art course (3-6)

Sculpture: Design Option (24 units)

ARTH 327	History of Modern Design (3)
ART 461	Digital Object Design II (3)
ART 366	Concept Model Making (3)
ART 36	Theory and Application of Materials and Processes (3)
ART 368	Industrial Design I (3)
ART 490	Internship (3)

Select two courses from the following elective (6 units):

ART 218	Metals and Jewelry I (3)
ART 231	Ceramics I (3)
ARTH 3xx/4xx	Any 300/400-level studio art course (3-6)

MAJOR IN ART HISTORY

Students may select one of two concentrations in Art History:

- 1) Research
or
- 2) Research/Studio

Most students who plan to go on to graduate school in Art History choose the Research Concentration while students planning on a career in the gallery or conservation fields often choose the Research/Studio Concentration. Both concentrations require the two-course capstone experience: Research Methods in Art History and Seminar in Art History. In both of these options, advanced research skills, knowledge of the use of technology in both research and presentation, and well-developed writing skills are required. The optional honors thesis also allows those students with a qualifying grade point average to pursue an individual research project with a faculty adviser which will result in the thesis. Students may also undertake ARTH 498, the Internship in Art History, which allows them the opportunity to gain practical experience in the community. Towson has been successful in placing Art History students in such venues as the Baltimore Museum of Art, the Walters Art Gallery, Maryland Historical Society, Maryland Art Place and the Contemporary Museum. Both concentrations within the Art History major require 15 units of required courses (including two 200-level prerequisites for the 300-level courses). The Research Concentration requires 36 units beyond the 15 units of required courses; the Research/Studio Concentration requires 51 units beyond the 15 units of required courses.

Requirements for the Art History Major**Required Courses for both concentrations (15 units)****Introductory Courses (6 units)**

ARTH 221	Survey of Western Art I (3)
ARTH 222	Survey of Western Art II (3)

Multicultural Requirement (3 units)

Choose one of the following:

ARTH 305	Women in Ancient Art (3)
ARTH 330	East Asian Art and Architecture (3)
ARTH 331	The Art of China (3)
ARTH 333	The Art of Japan (3)
ARTH 335	African American Art (3)
ARTH 339	Latin-American Art (3)
ARTH 341	Women in Art (3)

Capstone Experience (6 units)

ARTH 391	Research Methods in Art History (3)
ARTH 485	Seminar in Art History (repeatable) (3)

Research Concentration

This concentration is for those students who want to work in the curatorial, educational, public relations or registration areas of a museum or gallery or who wish to go on to graduate school in the art history field.

Art History Electives (27 units)

Choose from the following:

ARTH 300	Introduction to Museum Studies (3)
ARTH 301	Origins of Western Art (3)
ARTH 302	Museum and Community (3)
ARTH 303:	Myths and Legends in Greek Art (3)
ARTH 305:	Women in Ancient Art (3)
ARTH 306	Art and Architecture of the Classical World (3)
ARTH 307	Medieval Art (3)
ARTH 309	Italian Renaissance Art and Architecture (3)
ARTH 311	Northern Renaissance Art and Architecture (3)
ARTH 313	Baroque Art and Architecture (3)
ARTH 323	Modern Art I (3)
ARTH 324	Modern Art II (3)
ARTH 325	History of Modern Architecture (3)
ARTH 326	History of Interiors (3)
ARTH 327	History of Modern Design (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 330	East Asian Art and Architecture (3)
ARTH 331	Art of China (3)
ARTH 333	Art of Japan (3)
ARTH 335	African American Art (3)
ARTH 337	Art and Architecture of the U.S. I (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin-American Art (3)
ARTH 341	Women in Art (3)
ARTH 350	History of Prints in America (3)
ARTH 351	History of Photography (3)
ARTH 352	History of New Media (3)
ARTH 370-379	Special Topics (3)
ARTH 485	Seminar in Art History (repeatable) (3)
ARTH 494	Study Abroad (3-9)
ARTH 495-97	Independent Study in Art History (3-9)
ARTH 498	Internship in Art History
ARTH 499	Honors Thesis in Art History (4)

Upper-Level Courses (9 units)

Upper-level courses in allied disciplines such as Anthropology, English, History and Philosophy in consultation with adviser.

Foreign Language

Two years of either German or French are strongly recommended but not required.

Research/Studio Concentration

This concentration is for those students who plan to pursue careers in art conservation, museum exhibition preparation and exhibition design, museum-education and gallery work. Students following the Research/Studio Concentration must take both studio and advanced art history courses.

Electives (24 units)

Choose from the following:

ARTH 300	Introduction to Museum Studies (3)
ARTH 301	Origins of Western Art (3)
ARTH 302	Museum and Community (3)
ARTH 303:	Myths and Legends in Greek Art (3)
ARTH 305:	Women in Ancient Art (3)
ARTH 306	Art and Architecture of the Classical World (3)
ARTH 307	Medieval Art (3)
ARTH 309	Italian Renaissance Art and Architecture (3)
ARTH 311	Northern Renaissance Art and Architecture (3)
ARTH 313	Baroque Art and Architecture (3)
ARTH 323	Modern Art I (3)
ARTH 324	Modern Art II (3)
ARTH 325	History of Modern Architecture (3)
ARTH 326	History of Interiors (3)
ARTH 327	History of Modern Design (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 330	East Asian Art and Architecture (3)
ARTH 331	Art of China (3)
ARTH 333	Art of Japan (3)
ARTH 335	African American Art (3)
ARTH 337	Art and Architecture of the U.S. I (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin-American Art (3)
ARTH 341	Women in Art (3)
ARTH 350	History of Prints in America (3)
ARTH 351	History of Photography (3)
ARTH 352	History of New Media (3)
ARTH 370-379	Special Topics (3)
ARTH 485	Seminar in Art History (repeatable) (3)
ARTH 494	Study Abroad (3-9)
ARTH 495-97	Independent Study in Art History (3-9)
ARTH 498	Internship in Art History
ARTH 499	Honors Thesis in Art History (4)

Studio Courses (27 units)

ART 101	Digital Tools and Concepts (3)
ART 103	2D Process (3)
ART 104	3D Process (3)
ART 211	Drawing: Observation and Invention (3)
ART 212	Visual Concepts (3)
ART 2xx/3xx	Printmaking or Crafts Course (3)
ART 229	Painting I (3)
ART 234	Photo Imaging – Film (3)
	or
ART 235	Photo Imaging – Creative Workflow (3)
ART 241	Sculpture I (3)

MINOR IN ART HISTORY**Introductory Courses (6 units)**

ARTH 221	Survey of Western Art I (3)
ARTH 222	Survey of Western Art II (3)

Electives (12 units)

Choose from the following:

ARTH 300	Introduction to Museum Studies (3)
ARTH 301	Origins of Western Art (3)
ARTH 302	Museum and Community (3)
ARTH 303	Myths and Legends in Greek Art (3)
ARTH 305	Women in Ancient Art (3)
ARTH 306	Art and Architecture of the Classical World (3)
ARTH 307	Medieval Art (3)
ARTH 309	Italian Renaissance Art and Architecture (3)
ARTH 311	Northern Renaissance Art and Architecture (3)
ARTH 313	Baroque Art and Architecture (3)
ARTH 323	Modern Art I (3)
ARTH 324	Modern Art II (3)
ARTH 325	History of Modern Architecture (3)
ARTH 326	History of Interiors (3)
ARTH 327	History of Modern Design (3)
ARTH 328	Art, Culture and Politics (3)
ARTH 330	East Asian Art and Architecture (3)

ARTH 331	Art of China (3)
ARTH 333	Art of Japan (3)
ARTH 335	African American Art (3)
ARTH 337	Art and Architecture of the U.S. I (3)
ARTH 338	Art and Architecture of the U.S. II (3)
ARTH 339	Latin-American Art (3)
ARTH 341	Women in Art (3)
ARTH 350	History of Prints in America (3)
ARTH 351	History of Photography (3)
ARTH 352	History of New Media (3)
ARTH 370-379	Special Topics (3)
ARTH 485	Seminar in Art History (repeatable) (3)
ARTH 494	Study Abroad (3-9)
ARTH 495-97	Independent Study in Art History (3-9)
ARTH 498	Internship in Art History
ARTH 499	Honors Thesis in Art History (4)

Capstone Experience (6 units)

ARTH 391	Research Methods in Art History (3)
ARTH 485	Seminar in Art History (repeatable) (3)

**MAJOR IN ART EDUCATION
(SCREENED MAJOR)**

Students in the Art Education program receive dual certification enabling them to teach art in Maryland in grades K-12. In addition to meeting the Core Curriculum requirements (45 units), students complete art education and professional education requirements for 97 units. The entire program is approximately 142 units and takes five years to complete. The art education block is taken in the last three terms of the program. Requirements for admission are as follows:

1. Junior standing
2. An overall GPA of 2.75
3. A GPA of 3.00 in the major
4. An interview and portfolio review with the art education faculty
5. Permission of the education department

To continue within the professional sequences and be eligible to student teach, students must fulfill the following requirements:

1. Receive a grade of B or better in all art education courses
2. Maintain a 2.75 average in the professional course sequence
3. Pass the Praxis I (reading, writing and math) prior to enrollment in Media and Techniques courses (ARED 381-383)
4. Undergo a criminal background check and speech and hearing test prior to student teaching

First-Level Foundation (18 units)

ART 101	Digital Tools and Concepts (3)
ART 103	2D Concepts (3)
ART 104	3D Concepts (3)
ART 211	Drawing: Observation and Invention (3)
ARTH 221	Survey of Western Art I (3)
ARTH 222	Survey of Western Art II (3)

Second-Level Foundation (18 units)

ART 229	Painting I (3)
ART 234	Photo Imaging: Film (3)
	or
ART 235	Photo Imaging: Creative Workflow
ART 217	Digital Concepts: Image and Surface (3)
ART 241	Sculpture I (3)
ARTH 3xx/4xx	Any 300-400-level Art History Course (6)

Studio Requirements (12 units)

ART 231	Ceramics I (3)
ART 2xx-3xx	Any 200-300-level Printmaking course (3)
ART 2xx-3xx	Any 200-300-level Studio Electives (6)

Art Education Courses (31 units)**First Term of the Art Education Block (6 units)**

ARED 381*	Media and Techniques for Art Teachers: Elementary (3)
ARED 383	Media and Techniques for Art Teachers: Secondary (3)

Second Term of the Art Education Block (10 units)

ARED 467	Field Experience in Art Education: Elementary (2)
ARED 468	Field Experience in Art Education: Secondary (2)
ARED 475	Methods of Teaching Art: Elementary (3)
ARED 479	Methods of Teaching Art: Secondary (3)

Third Term of the Art Education Block (15 units)

ARED 481	Student Teaching in Art: Elementary (6)
ARED 483	Student Teaching in Art: Secondary (6)
ARED 485	Professional Seminar in the Teaching of Art (3)

Professional Courses (19 units)

PSYC 201	Educational Psychology (3)
SCED 341	Principles of Secondary Education (4)
SPED 301	Introduction to Special Education (3)
EDUC 401	Foundations of Education (3)
ARED 463	Author-Illustrator: Elementary (3)
ARED 464	Author-Illustrator: Secondary (3)

Additional Required Courses (taken as Core Curriculum)

PSYC 101	Introduction to Psychology (3)
HIST 145	U.S. History to the Mid-19th Century (3)
	or
HIST 146	U.S. History since the Mid-19th Century (3)
COMM 131	Fundamentals of Speech Communication (3)

*Prerequisite: passing score on Praxis I.

TRANSFER CREDIT POLICY

The Department of Art + Design, Art History, Art Education accepts art credits from other accredited colleges and universities. Portfolio evaluation and transfer credit sheets form a basis for course evaluation. Admission into Towson University and declaration of a Art + Design B.S./B.A. concentration does not guarantee acceptance into screened programs.

**DEPARTMENT OF ART + DESIGN,
ART HISTORY, ART EDUCATION
HONORS PROGRAMS****Art + Design Honors Program**

Art + Design offers majors the opportunity to complete a departmental honors program. Interested students typically apply to the program during the second term of the junior year. Students spend one year completing an honors project that is focused on a theme or idea of investigation. Successful completion of the project and paper allows students to create a body of work, build a strong portfolio and train for graduate school. Completion of the honors program will be noted on the student's diploma.

Requirements

- overall GPA of 3.25
- major GPA of 3.5
- Sequential courses: ART 414, 415 or 416 Advanced Studio (3 units) and ART 499 Senior Honors Thesis (4 units)
- Honors-level work

- Substantial body of work and exhibition of body of work
- Written paper, 8-10 pages in length
- Defense
- Committee consisting of faculty adviser, honors department coordinator or Honors College representative, a departmental faculty member, and usually someone outside of the department/university

For more information, contact the Art + Design-Honors Faculty Coordinator, Nora Sturges.

Art History Honors Program

Art History offers majors the opportunity to complete a departmental honors program. Interested students typically apply to the program during the second term of the junior year. Students spend one year completing an honors research and writing project that is focused on an avenue of investigation. Successful completion of the paper, along with the defense, allows students to learn advanced research and writing skills, train for careers in art history, and prepare for graduate school. Completion of the honors program will be noted on the student's diploma.

Requirements

- overall GPA of 3.25
- major GPA of 3.50
- Sequential courses: ARTH 495, 496 or 497 Independent Study (3 units) and ARTH 499 Senior Honors Thesis (4 units)
- Honors level work
- Written research paper, 30 pages in length
- Defense
- Committee consisting of faculty adviser, honors department coordinator or Honors College representative, a departmental faculty member, and usually someone outside of the department/university

For more information, contact the Art History Honors Faculty Coordinator, Dr. Nancy Siegel.

CAREER OPPORTUNITIES

Towson University's Department of Art + Design, Art History and Art Education has a long tradition of preparing students as highly qualified teachers, designers and professional artists. The department, in conjunction with the Career Center, has developed internships with various studios, schools, colleges, design firms and museums. These internships provide students with the experience necessary for achieving success in their fields, including Web page design, graphic design, illustration, advertising, photography, and metalsmithing and jewelry. Design is at the crux of many professional opportunities.

Department of Dance

Professors: Susan Haigler (*Chair*), Jaye Knutson, Susan Mann

Associate Professors: Catherine Horta-Hayden, Vincent Thomas

Assistant Professors: Linda-Denise Fisher-Harrell, Sandra Perez

Lecturers: Runguo Du, Nancy Wanich-Romita

Production Coordinator and Lighting Designer: Rebecca Wolf

Educational Director of the TU Children's Dance Division: Candace Webster

Administrative Assistant II: Sidney Pink

Adjunct Faculty: Jayne Bernasconi, Angela Foster, Marissa Guerrero, Lester Holmes, Dana Martin, Nicole Martinell, Betsy Romer, Kendra Shapanus, Paul Shapanus, Malcolm Shute

Musicians: Jason Baker, John "Zak" Fuscillo, William Goffigan, Vera Karpushova, Larissa Rotnitskaya, Dominic Bouma "Shodekeh"

Recent Guest Artist Faculty: Omo Ache, Juan Carlos Blanco, City Dance, Leah Cox, Dianna Cuattro, Carlos Dannon, Astad Deboo, Rose Eichenbaum, Chris Elam, Stephen Greenston, Naoko Maeshiba, Cassie Meador, Jerrilyn Pilarski, Stewart Pimsler, Troy Powell, Stephanie Powell, Ragamala Indian Music and Dance, Scott Rink, Rockettes, Matthew Rushing, Glenn Sales, Bonnie Schulman, Donald Shorter Jr., Sylvia Soumah, Samantha Speis, Helanius Wilkins, Anton Wilson, Dion Wilson, Kristine Windom, Tim Veach and Columbus Dance Theatre

OFFICE

Center for the Arts 1002, 410-704-2760

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www.towson.edu/dance/



PROGRAMS OF THE DEPARTMENT

The Towson University Dance Department advocates *Dancing for a Lifetime* by challenging students to examine and refine their approaches to the arts of dancing, choreography and dance education. The Department of Dance offers a Bachelor of Fine Arts degree in Dance accredited by the National Association of Schools of Dance since 1982. For students who are interested in teaching, there is an optional teacher certification program available.

As stated in the NASD Standards for Accreditation Handbook 2006: page 41 VIII.A.2 Purpose for all Professional Baccalaureate Degrees in Dance: "B.F.A. Students enrolled in professional undergraduate degrees in dance are expected to develop the knowledge, skills, concepts and sensitivities essential to the artist in the field of dance. To fulfill various professional responsibilities, the dance artist must exhibit not only technique competence, but also broad knowledge of dance and dance repertory, the ability to integrate dance-related knowledge and skills, sensitivity to dance and musical styles, and an insight into the role of dance intellectual, education and cultural alike."

Auditioned Dance majors may elect to take courses that will enable them to meet university, college and Maryland teacher certification requirements in K-12 education.

The Department of Dance offers opportunities in leadership, entrepreneurial partnerships and internships.

ADMISSION TO THE SCREENED MAJOR

The Department of Dance accepts pre-Dance majors who have passed one of the auditions in October, November, February or April.

Students missing the auditions, choosing not to audition or not passing the audition by May 1 will be moved to the category of "undecided" or "undeclared." These students will be encouraged to take non-major dance classes and audition or re-audition in their freshman year to join a cohort with first-year Dance majors.

Foundational First-Year Experience include the following courses:

Fall Term

DANC 125	Introduction to Dance: Overview (3)
DANC 223	Ballet Foundational Technique I (2)
DANC 227	Modern Foundational Technique I (2)
DANC 245	Scientific Bases for Movement Analysis I (3)
ENGL 102	Writing for a Liberal Education (3)
DANC 216	Crew (1)

Spring Term

DANC 224	Ballet Foundational Technique I (2)
DANC 228	Modern Foundational Technique I (2)
DANC 345	Scientific Bases for Movement Analysis II (3)
DANC 126	Musical Concepts for Dancers (3)
DANC 235	Composition I (3)
DANC 216	Crew (1)

Dance Company (3) and Repertory (3) courses are popular, encouraged, and count as electives for graduation.

Dr. Susan Haigler is the First-Year Adviser for newly auditioned first-year and transfer pre-Dance majors. The Foundational courses encompass knowledge in dance technique, performance, history, music, anatomy/kinesiology, and production.

A student must earn a 3.00 GPA (B average) or better in the Foundational courses (total 24 units), as highlighted above.

After the Foundational First Year, Dance majors must maintain a 2.50 GPA in dance courses to be eligible for graduation with a major in Dance.

Acceptance into the university is required for acceptance into the major. Applications for audition can be accessed via the website. Applications for a certain audition date are accepted on a first-come, first-served basis.

Students may only audition twice for the major. If students are accepted into the Dance major and do not attend the following fall, they must petition the faculty for later acceptance.

TRANSFER CREDIT POLICY

Students transferring from other institutions must complete a minimum of 20 units of their dance course requirements at Towson University.

B.F.A. MAJOR IN DANCE

The major in Dance Performance leads to the Bachelor of Fine Arts degree. Students in the major must complete 65 units of required dance courses, 6 units of required interdisciplinary courses, 15 units of dance electives, 3 units of other electives, and the performance requirements outlined below. A grade equivalent of 2.50 or higher is required for all courses in the major.

Requirements for the Major

*Courses with two asterisks (**) are Foundational courses.*

Dance Courses (65 units)

DANC 125**	Introduction to Dance: Overview (3)
DANC 216	Sophomore Crew (1)
DANC 220	Using Information Effectively in Dance (3)
DANC 223-4**	Foundational Ballet (4) (2 per term)
DANC 227-8**	Foundational Modern (4) (2 per term)
DANC 235	Composition I (3)
DANC 245**	Scientific Bases for Movement Analysis I (3)
DANC 263	Dance Design and Production (3)
DANC 316	Junior Crew (1)
DANC 321	Responding to Dance (3)
DANC 323-4	Level II Ballet (6) (3 per term)
DANC 327-8	Level II Modern (6) (3 per term)
DANC 335	Composition II (2)
DANC 336	Composition III (2)
DANC 345**	Scientific Bases for Movement Analysis II (3)
DANC 423-4	Level III Ballet (3)
DANC 427-8	Level III Modern (3)
DANC 436	Composition IV (2)
DANC 437	Composition IV: For the Camera (3)
DANC 480	Senior Project: Seminar (2)
DANC 491	Senior Project: Concert (3)

Performance majors must take 9 units of Level III and must include courses in either or both ballet and modern techniques. Majors in Dance Performance K-12 certification must take 6 units of Level III in either or both disciplines.

Interdisciplinary Courses (6 units)

DANC 126	Musical Concepts for Dance (3)
THEA 101	Acting I (3)

Dance Electives (12 units)

DANC 101	The Alexander Technique (3)
DANC 105	Movement Skills Enhancement for Men (3)
DANC 109	Jazz Dance I (2)
DANC 209	Jazz Dance II (2)
DANC 111	Tap Dance I (2)
DANC 211	Tap Dance II (2)
DANC 201	Developmental Movement (3)

DANC 251	Methods of Teaching Dance (3)
DANC 310	Jazz Dance III (2)
DANC 341	Pointe Technique I (2)
DANC 351	Teaching Dance Technique (3)
DANC 370-379	Special Topics in Dance (1-3)
DANC 383	Modern Dance Repertory (3)
DANC 384	Ballet Repertory (3)
DANC 451	Dance Education and Public Policies (3)
DANC 481	Dance Company (3)
DANC 492	Practicum in Dance Technique (variable)
DANC 495	Independent Study in Dance (1-3) (used for Internships)

Technique classes taken after completing major requirements are strongly encouraged.

At least 6 units of electives must be in Modern Repertory, Ballet Repertory or Dance Company.

Other Electives (3 units)

Performance Requirements for Majors

To fulfill performance requirements for graduation, Dance majors must audition for the TU Dance Company a minimum of two times during their tenure at Towson and must fulfill one of the following:

1. Perform with the TU Dance Company (3 units—audition required) or Ballet or Modern Repertory (3 units each) for a minimum total of 6 units, and 9 additional units of works in sections of Dance Composition III and IV for a total of 15 performance units.
or
2. Transfer students must consult with the chairperson of the Department of Dance to arrange equivalent performing experiences.

Juries

As a mechanism for assessing progress toward the degree, all Dance majors will be evaluated by a jury of faculty members at the end of the spring term of the sophomore year. The jury will consider a video portfolio of each student. Written and verbal assessment will be given to each student in relation to the expected student outcomes of the program.

Special note: All majors are required to be enrolled in a ballet and modern class each term prior to their scheduled jury.

Crews

All Dance majors are required to register for and complete both a Sophomore Crew (DANC 216) and Junior Crew (DANC 316). These assignments are made annually by the department. Successful completion of one crew course is a requirement prior to registering for DANC 480. Both crew courses and DANC 263 are required for graduation with the B.F.A.

B.F.A. MAJOR IN DANCE WITH K-12 CERTIFICATION OPTION

Dance majors may elect to obtain State Teacher Certification to teach dance at the elementary and secondary levels. Students in this program receive certification to teach dance in grades K-12 in the public schools in Maryland and reciprocal states. The program leads to the Bachelor of Fine Arts degree in Dance with K-12 Certification.

Admission to the K-12 Certification Option and student teaching requires: 1) admission to the university; 2) admission to the major; 3) a personal interview; 4) completion of a Criminal

Background Disclosure Form that must be notarized and kept on file in the Center for Professional Practice (CPP); 5) completion of a criminal background check that must be kept on file in the CPP before the student enters into an intensive/extensive internship or student teaching experience in a public or private school setting (pre-K through 12); 6) Required standardized test scores reflecting one of the following: a passing score on Praxis I (as determined by the Maryland State Department of Education); SAT taken after 2005, math and critical reading composite score of 1100; or ACT composite score of 24. 7) successful completion of the speech and hearing test by spring term of first year, and 8) Education Psychology taken by fall of second year. All eight items listed above are prerequisites for the internship application. Continuance in the program requires the maintenance of an overall GPA of 2.50 and a GPA of 2.75 in major classes each term, the maintenance of a current membership in the National Dance Education Organization, and maintenance of behaviors and attitudes set forth by Towson University's Conceptual Framework for Professional Education.

Students whose GPA falls below the minimum requirement will be given one term to improve their GPA. Failure to do so may result in suspension from the program.

The Teacher Education Executive Board (TEEB) reserves the right to refuse, deny or revoke the application for admission to professional education programs or entry into student teaching of any student whose observed conduct is deemed incongruent with established guidelines of student demeanor for those planning to enter the teaching profession as excerpted from the "Statement of Professional Behavior for Undergraduate and Graduate Teacher Education Students," in the Towson State University Compass (1987 Student Handbook), and "NEA Code of Ethics" (1975), adopted by the College of Education Council in September 1988, and reaffirmed by TEEB in November 1990, October 1995, February 1996 and February 2000.

Students must complete the required Dance and Interdisciplinary courses set forth for the major, the Performance Requirements for Majors listed below, jury and crew requirements, and an additional 33 units of professional education components listed below. Students must also be placed by the faculty in Level III Modern or Level III Ballet.

DANC 201	Developmental Movement (3)
DANC 251	Methods of Teaching Dance (3)
DANC 391	Student Teaching in Elementary School (6)
DANC 392	Student Teaching in Secondary School (6)
DANC 451	Dance Education and Public Policies (3)
PHED 183	Ballroom/Folk/Square Dancing (1)
PSYC 201	Educational Psychology (3)
ELED 324	Integrated Reading K-12 Certification (3)
EDUC 2xx	Historical and Contemporary Perspectives on America's Urban Schools (3)
SPED 301	Introduction to Special Education K-12 (3)
DANC 493	Pro-Seminar in the Teaching of Dance (1)(to be taken concurrently with DANC 391 and DANC 392)

Performance Requirements for Majors

To fulfill performance requirements for graduation, K-12 Certification Dance majors who choose the

Education Certification Option must audition for the TU Dance Company a minimum of two times during their tenure at Towson and must fulfill one of the following:

1. Perform with the TU Dance Company (3 units—audition required) or Ballet or Modern Repertory (3 units each) for a minimum total of 3 units, and 12 additional units of works in sections of Dance Composition III and IV for a total of 15 performance units.
or
2. Transfer students must consult with the chairperson of the department to arrange equivalent performing experiences.

Post-baccalaureate Certification Option

For students who have completed a bachelor's degree in dance, the Department of Dance offers a post-baccalaureate program leading to Maryland K-12 certification in dance. Prospective students interested in this option need to contact the department to set up an appointment with the program coordinator to have their transcript(s) analyzed and a program of study developed based upon state certification and departmental requirements.

SCHOLARSHIPS

To qualify for a dance recruitment scholarship, or for a COFAC Dean's scholarship, students must audition, be accepted into the major, be full-time Dance majors, and be nominated by a dance faculty member.

The terms/criteria for automatic renewal of Dance Recruitment and COFAC Dean's scholarships offered to Dance majors at Towson University are as follows:

- 1) For the Foundational First-Year Courses, a GPA of a 3.00 or higher must be maintained.
- 2) For the B.F.A. in Dance Performance a 2.50 GPA in Dance major courses must be maintained.
- 3) For the B.F.A. in Dance Performance and Education (K-12) an overall GPA of 2.75 and a GPA of 3.00 in the major. Students whose GPA falls below this minimum requirement will automatically lose all scholarship awards. Once students have re-established an overall GPA of 2.75 and a GPA of 3.00 in the major, the remainder of their scholarships from that date forward to graduation will be reinstated.
- 4) Perform a minimum of once per year and be registered in DANC 481, The Towson University Dance Company.
- 5) Demonstrate and exemplify a behavioral understanding of the relationship between rights and responsibilities within the classroom, rehearsal, and all other aspects of the profession.
- 6) Participate fully in all aspects of the major.
- 7) Annual scholarship renewal evaluation by the Department of Dance faculty.

Department of Electronic Media and Film

Professors: Greg Faller (*Chair*), Peter Lev

Associate Professors: Elsa Lankford,

John MacKerron, Daniel Mydlack, Brian Plow, Dave Reiss, John Turner

Assistant Professor: Michael Angelella

Lecturers: Caryn Clippert, Jennifer Lackey

Part-time Faculty: Cary Anderson, Carol Appleby-Vanko, James Armstrong, Matthew Bainbridge, Chris Casamassima, Dominic DeLauney, Michael Duffy, Nikki Harvey, Douglas Hessler, Michael Kang, Suzanne Lea, Steve Libowitz, Jaimes Mayhew, Rhett Murphy, Breanna Sisk, Raissa Snyder, Michael Starling

Staff: Travis Holden, Clayton Zook

Administrative Assistant: Yvonne Eder

OFFICE

Media Center 103, 410-704-3184

Fax: 410-704-3337

www.towson.edu/emf

PROGRAMS OF THE DEPARTMENT

The Electronic Media and Film major is an undergraduate degree program that balances liberal arts with professional training. The program leads to either the Bachelor of Arts or Bachelor of Science degree and is designed to prepare students for career positions in film, television, video, radio, audio, and other media—as well as graduate studies.

The Electronic Media and Film major focuses on the aesthetics, history, theory, and production of film, television, digital media, audio and radio. The major is divided into three concentrations: Film/Video/Digital Media, Radio/Audio, and Film and Media Studies. Within the concentrations, students are encouraged to develop skills in storytelling and writing, criticism and analysis, and media production.

The Department of Electronic Media and Film strives to inspire creativity and foster talent and skills in a constantly changing digital world. Students are encouraged to create collaborative and interdisciplinary partnerships; to discover real-world experiences through internships and service-learning opportunities; to explore artistic, social and cultural diversity through civic engagement; and to grow as enterprising and self-directed individuals who can practice creative entrepreneurship.

ADMISSION TO THE EMF DEPARTMENT

Admission Requirements

Admission to the EMF major is granted only by the department. Admission to the university does not constitute or guarantee admission to the major.

Students should file a Declaration of Major Form with the department and list themselves as a pre-EMF major (PEMF).

1. All students, before being considered for admission to the major, must attain a 3.00 GPA in the following three required courses:

- EMF 120 Concept and Story
- EMF 140 Introduction to Electronic Media and Film
- EMF 221 Principles of Film and Media Production

Transfer students may complete the equivalent courses at their previous college or university, but they must attain the overall 3.00 GPA in the equivalent courses.

2. Students who have completed the required three courses with a 3.00 GPA must complete and submit a Declaration of Eligibility Form in the EMF office to become part of the student major pool. Successful completion of the EMF required courses does not guarantee admission to the EMF major. Admission to the EMF major is competitive and is determined by the satisfactory completion of the required courses, the cumulative GPA and the evaluation of a submitted creative essay. This policy will apply to native and transfer students.
3. Admission to the EMF major is based on:
 - The number of majors that the department can reasonably accept without compromising the quality of its educational experience. No fewer than 75 students will be admitted to the EMF major within an academic calendar year.
 - The satisfactory completion of the required admission courses, the student's cumulative GPA and submitted creative essay. The candidates with the highest ranking GPA from the pool of applicants will be selected
 - Creative Essay: As part of the admission process, students will be required to write a creative essay. All transfer students will also be required to submit an essay. Please tell us why you want to pursue a course of study in Electronic Media and Film. How have your life experiences, creative interests and professional goals influenced your choice of this major? Compose and attach on separate pages the essay (no more than 500 words or approximately two pages double spaced, printed with 12-point font). The EMF Admissions Committee will use your essay to determine your ability to organize your thoughts and express yourself clearly. The committee evaluates the essays for originality, clarity, personal insight and creativity. The essay will be used to make decisions in cases where the applicant's cumulative GPA is marginal. In such cases, it will be used to provide an additional means of evaluation for those who might not otherwise be admitted to the major. This policy is in effect for students entering Towson University as of July 1, 2007.

Graduation Requirements

All major requirements must be completed with a grade equivalent of 2.00 or higher. The Pass grading option is not available for courses applicable toward the major. Only 12 units, in any combination of internship and/or directed study, can be applied toward graduation. Of these 12 units, 3 units may also be applied toward the Film/Video/Digital Media concentration; 6 units may also be

applied toward the Radio/Audio concentration; and 6 units may also be applied toward the Film & Media Studies concentration.

Bachelor of Arts Degree Option

Students may earn a Bachelor of Arts degree in Electronic Media and Film by completing the intermediate (200) level of a foreign language.

MAJOR IN ELECTRONIC MEDIA AND FILM

The Electronic Media and Film major requires the student to choose a concentration. The Electronic Media and Film major requires 42–48 units. Twenty-one units must be upper-division courses. Students cannot have more than one concentration in the EMF major. The major requires 9 units of common introductory courses and depending upon the concentration, 33–39 units of courses distributed between required courses and electives.

Students are reminded that it is their responsibility to check all prerequisites before registering for any course.

Required Courses for All Majors (9 units)

EMF 120	Concept and Story (3)
EMF 140	Introduction to Electronic Media (3)
EMF 221	Principles of Film and Media Production (3)

Upon completion of the required courses, students must fulfill the requirements in one of the three concentrations outlined below:

Film/Video/Digital Media Concentration (39 units)

Required Courses (18 units)

EMF 222	Film/Video Production (3)
EMF 265	Audio Production I (3)
EMF 275	Principles of Film and Video Editing (3)
EMF 377	Broadcast/Film Writing (3)
EMF 311	History of Electronic Media (3)
	or
EMF 313	History of Film (3)
EMF 367	Narrative Filmmaking: Sync Sound Techniques (3)
	or
EMF 373	Electronic Field Production (3)

Media Electives (6 units)

Choose two of the following:

EMF 205	Women and Gender in Film and Media (3)
EMF 331	Broadcast/Cable Programming (3)
EMF 355	EMF Law and Regulation (3)
EMF 364	Aesthetics of Film and Electronic Media (3)
EMF 368	Genre Theory and Criticism (3)
EMF 463	Topics in International Cinema (3)
EMF 475	Film and Media Analysis (3)
EMF 476	Special Topics in EMF (If appropriate to Media Studies) (3)
EMF 485	Seminar in Digital Studies (3)
EMF 311	History of Electronic Media* (3)
	or
EMF 313	History of Film (if not used as a Required Course) (3)
PHIL 330	Philosophy and Film (3)

Intermediate Production (6 units)

Choose two of the following:

EMF 340	Lighting for Film and Video (3)
EMF 351	TV Station Operations (3)
EMF 371	Live Multi-Camera Production (3)
EMF 366	Sound in Media (3)
EMF 380	Visual Effects I (3)

EMF 367	Narrative Filmmaking: Sync Sound Techniques * (3) or
EMF 373	Electronic Field Production* (3) (* if not used as a Required Course)
EMF 387	Developing the Screenplay (3)

Advanced Production (6 units)

Choose one of the following:

EMF 370	Electronic Media News Production (3)
EMF 375	Broadcast Performance (3)
EMF 403	Sportscasting (3)
EMF 405	Screenwriting (3)
EMF 430	The Media Producer (3)
EMF 455	Directing for Film and Video (3)
EMF 470	Producing Online Video (3)
EMF 476	Special Topics (3) (If appropriate to production)

Choose one of the following:

EMF 437	Corporate Video (3)
EMF 461	Documentary Film and Video (3)
EMF 462	Experimental Film and Video (3)
EMF 473	Seminar in Narrative Filmmaking (3)
EMF 481	Television News (3)
EMF 486	Dance for the Camera (3)
EMF 487	Visual Effects II (3)

Elective (3 units)

Choose any 3 units in EMF. We recommend, but do not require:

EMF 460	Internship in EMF (1-6) or
EMF 495	Directed Study in EMF (1-6)

Radio/Audio Concentration (39 units)

Requirements (15 units)

EMF 265	Audio Production I (3)
EMF 311	History of Electronic Media (3)
EMF 355	EMF Law and Regulation
EMF 365	Audio Production II (3)
EMF 377	Broadcast/Film Writing (3)

Electives (24 units)

Choose 18 units from the following courses, at least 9 units of which must be EMF courses; plus 6 additional units of any other EMF courses:

EMF 100	Using Information Effectively in EMF (3)
EMF 331	Broadcast/Cable Programming (3)
EMF 360	Audio Documentary (3)
EMF 366	Sound in Media (3)
EMF 370	Electronic Media News Production (3)
EMF 375	Broadcast Performance (3)
EMF 385	Radio, Culture, and Society (3)
EMF 403	Sportscasting (3)
EMF 421	Radio Station Operations (3)
EMF 460	Internship in EMF (1-6)
EMF 476	Special Topics in EMF (3)
EMF 495	Directed Study in EMF (1-6)
MCOM 440	Advertising Media Sales (3)
MUSC 281	Recording Techniques I (3)
MUSC 305	Survey of the Music Industry (3)
MUSC 482	Recording Techniques II (3)
THEA 209	Sound Design (3)

Film and Media Studies Concentration (33 units)

Requirements (9 units)

EMF 311	History of Electronic Media (3)
EMF 313	History of Film (3)
EMF 364	Aesthetics of Film and Electronic Media (3)

Media Studies Electives (6 units)

Choose two of the following:

EMF 368	Genre Theory and Criticism (3)
EMF 377	Broadcast/Film Writing (3)
EMF 385	Radio, Culture and Society (3)

EMF 463	Topics in International Cinema (3)
EMF 475	Film and Media Analysis (3)
EMF 485	Seminar in Digital Studies (3)

Production Requirement (3 units)

Choose one of the following:

EMF 222	Film/Video Production (3)
EMF 265	Audio Production I (3)
EMF 275	Principles of Film and Video Editing (3)

Electives (15 units)

Choose three of the following, two of which must be upper division. Options not taken in Media Studies electives (above) may also be taken.

CLST 201 or 202	Introduction to Cultural Studies (3)
CLST 307	Visual Culture (3)
COMM 377	Intercultural Communication (3)
EMF 100	Using Information Effectively in EMF (3)
EMF 205	Women and Gender in Film and Media (3)
EMF 355	Electronic Media and Film Law and Regulation (3)
EMF 387	Developing the Screenplay (3)
EMF 405	Screenwriting (3)
MCOM 352	Media Criticism (3)
MCOM 385	Mass Media and Society (3)
PHIL 330	Philosophy and Film (3)

Choose two additional courses in Electronic Media and Film.

We recommend, but do not require:

EMF 460	Internship in EMF (1-6) or
EMF 495	Directed Study in EMF (1-6)

DEPARTMENTAL HONORS

The department sponsors departmental honors where students pursue directed study leading to the completion of a thesis. Students interested in departmental honors should consult the chair of the department no later than the first term of their junior year. Honors are indicated on the graduate's transcript and diploma.

TRANSFER CREDIT POLICY

Transfer students are required to complete 21 units in residence toward the Electronic Media and Film major. The department will accept up to 15 credits of compatible transfer courses.

MINOR IN ELECTRONIC MEDIA AND FILM

The Electronic Media and Film minor requires a total of 24 units: 9 units in required courses, 3 units in media writing, 3 units in production and 9 units in elective courses. Six (6) of these 9 units in electives must be upper division.

Required Courses (9 units)

EMF 120	Concept and Story (3)
EMF 140	Introduction to Electronic Media and Film (3)
EMF 221	Principles of Film and Media Production (3)

Writing Requirement (3 units)

Choose one from the following:

EMF 311	History of Electronic Media (3)
EMF 313	History of Film (3)
EMF 377	Broadcast/Film Writing (3)

Production Requirements (3 units)

Choose one from the following:

EMF 222	Film/Video Production (3)
EMF 265	Audio Production I (3)

Electives (9 units)

Choose 9 units from the following courses, or any courses not taken in the requirements listed above:

EMF 205	Women and Gender in Film and Media (3)
EMF 331	Broadcast/Cable Programming (3)
EMF 355	Electronic Media and Film Law and Regulation (3)
EMF 364	Aesthetics of Film and Electronic Media (3)
EMF 368	Genre Theory and Criticism (3)
EMF 385	Radio, Culture and Society (3)
EMF 387	Developing the Screenplay (3)
EMF 405	Screenwriting (3)
EMF 430	The Media Producer (3)
EMF 463	Topics in International Cinema (3)
EMF 475	Film and Media Analysis (3)
EMF 485	Seminar in Digital Studies
EMF 495	Directed Study in Electronic Media and Film (3)

- 1) The Pass grading option is not available for these courses.
- 2) No more than 3 units of Directed Study can be applied to the Electronic Media and Film minor.
- 3) The department will transfer into the minor up to 9 units of compatible courses.

INTERNSHIPS

Internship eligibility requirements for Electronic Media and Film are as follows:

1. Junior or senior status
2. Admitted to the EMF major
3. Completion of courses related to the area of internship concentration, specifically:
 - EMF 140 and EMF 222 prior to any video or television broadcast journalism-related placement
 - EMF 221 and EMF 222 prior to any film placement
 - EMF 140 and EMF 265 prior to any radio or radio broadcast journalism-related placement
 - Cumulative GPA requirement: 2.75 overall; 3.00 in the major. Waivers are considered by the department. Of the 12 units of internship (and/or directed study) that can be applied toward graduation, only 3 units may also be applied toward the Film/Video/Digital Media concentration; only 6 units may also be applied toward the Radio/Audio concentration; and only 6 units may also be applied toward the Film and Media Studies concentration.

For additional information, contact the Department of Electronic Media and Film.

SCHOLARSHIPS

The Department of Electronic Media and Film offers several scholarships for majors. For more information, contact the department, 410-704-3184.

DEPARTMENTAL ACTIVITIES

Department activities include Annual Fall Film Series, the Annual Student Media Arts Festival, WAMM, Media Active, and other media events. Students are encouraged to participate in organizations such as Cineaste, TAPS, Lambda Kappa Tau, NBS-AERho, XTSR radio, WMJF-TV, and the Digital Media Labs.

Department of Mass Communication and Communication Studies

Chairperson: Cynthia Cooper

Professors: Beth Haller, Thom Lieb, Richard Vatz

Associate Professors: Meg Algren, Cynthia Cooper, Kwangmi Kim, Jung-Sook Lee, Audra McMullen, Sandy Nichols

Assistant Professors: Jacqueline Barnett, Amy Becker, Teodora Carabas, Dionne Clemons, Hua Jiang, John Kirch, Ying Kong, Jennifer Potter, Erich Sommerfeldt, Stacy Spaulding, Alexandra Vilela, Lingling Zhang

Lecturers: Jenny Atwater, Garry Bolan, JoAnne Broadwater, Maggie Lears, Jillian Marty, Carol Norton, Lester Potter, Elizabeth Skinner, Lisa Turowski

Part-time Faculty: Robert Allen, Karen Amos, Stephen Ang, Chris Baron, Jerry Bemby, Scott Borgerding, Rebecca Brunelle, Meghan Carbine, Vicki Cohen, Karen Cullen, Randy Cullen, Lauren Custer, Brian Decker, Brian Feeney, Mark Fernando, Richard Frank, Carol Galladian, Zack Germroth, Megan Gilbert, Sharon Goldstein, Kimberly Graham, Julie Hester, Tia Howard, Carl Hyden, Stephen Janis, John Kastner, Marcy Lighfoot, Monica Lopossay, Adam Marton, Tony Mastromatteo, Paul McMullen, Greg Rienzi, Sam Rubin, Elena Russo, Glen Schorr, Mark Seaman, Evan Serpick, Charlena Shrieves, Mark Sullivan, Eric Sundell, Christopher Thacker, William Toohey, Ann Weir Ventre, Becky Verzinski, Trevor Villet, Alicia Williams, Charles Yankovich

Administrative Assistants: Mary Hickey, Donna Warrington

Computer Lab Technician: Richard Ellsberry

Assistant to the Chair: Kathy Marsalek

Advising Coordinator: Jim Armstrong

OFFICE

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www.towson.edu/mccs

PROGRAMS OF THE DEPARTMENT

The Department of Mass Communication and Communication Studies offers the following programs of study: the Communication Studies major, the Mass Communication major, minors in both Communication Studies and Mass Communication, combined majors in Political Science and Communication Studies and Political Science and Mass Communication, an interdisciplinary cooperative program with the department of Marketing, a certificate in Broadcast Journalism, a Master of Science in Communication Management, and a graduate certificate in Strategic Public Relations and Integrated Communication. In addition, the department participates in a multidisciplinary program offering a Master of Science in Human Resource Development.

The department focuses on the study of the structure, processes, aesthetics, functions and effects of human communication and mass media. In this, one of the most broad-based programs in Maryland

and the region, students have the opportunity and flexibility to gain knowledge and skills in a wide array of communication fields. In addition, the study of human communication and mass media involves a strong practical content.

At the undergraduate level, the department seeks to contribute to a broad, liberal education for majors and non-majors by raising their level of oral, visual and written communication literacy, as well as their critical thinking abilities, by developing their understanding and appreciation of human message exchanges, and by recognizing how mass media and speech influence social, political, artistic and cultural existence. In addition, the department seeks to provide knowledge as well as skill needed for future employment in print and broadcast journalism, new media, advertising, and public relations and/or in business, law, government, education and consulting wherein communication skills are essential.

The faculty members of the department are committed to scholarly research and/or creative productions in the department's various areas of expertise. As part of a metropolitan university's role in serving the region, the department is pledged to provide service to the university and to a larger community in a variety of ways, such as through its speech and debate program, affiliation with Lambda Pi Eta, American Advertising Foundation, Public Relations Group, Society of Professional Journalists, as well as faculty and student presentations, workshops and professional networking.

MAJOR IN COMMUNICATION STUDIES

Communication Studies courses give students a foundation in communication theories and their interrelated contexts, the application of theories to contemporary issues and the scholarly methods of studying communication. The Communication Studies major has a three-fold function: First, it allows students a greater understanding of the role that communication plays in shaping culture and identity. Second, it looks at the ways in which the process of meaning-making (whether through the use of words, images, symbols or technology) is used strategically to influence human judgment and actions. Third, it sharpens students' critical thinking abilities, thus enabling them to become ethical producers and consumers of messages. This three-fold function is accomplished through a theoretical and practical focus on argument development and through a close examination of the ways ideas are discussed, advocated and circulated in public and private life. These emphases give students the opportunity to develop speaking, writing and analytical thinking skills that will allow them to become better ethical participants in the process of creating, critiquing and disseminating meaning.

Graduates with majors in Communication Studies have gone on to graduate school or careers in the public sector, private industry, non-governmental organizations and education. Communication Studies alumni work in areas such as public affairs, corporate relations, law, religion, sales, lobbying, entertainment, human resources, conference and meeting management, training and development, health communication, teaching and consulting.

Graduation Requirements

All major requirements must be completed with a grade equivalent of 2.00 or higher. The Pass grading option is not available for courses applicable toward the major.

Bachelor of Arts Degree Option

Students may earn a Bachelor of Arts degree by completing the intermediate (202) level of a foreign language.

Requirements for the Major

The Communication Studies major requires a total of 36 units; 9 units of lower-level courses, 15 units of upper-level courses and 12 units of electives as listed below.

Required Core Courses (24 Units)

Lower-Level Courses (9 Units)

COMM 131	Fundamentals of Speech Communication (3)
COMM 201	Communication Theory (3)
COMM 215	Interpersonal Communication (3)

Upper-Level Courses (15 Units)

COMM 311	Rhetorical Theory and Criticism (3)
COMM 331	Advocacy and Argument (3)
COMM 377	Intercultural Communication (3)
COMM 419	Organizational Communication (3)
COMM 480	Research Methods (3)

Electives (12 units)

COMM 231	Nonverbal Communication (3)
COMM 249	Speech and Debate I (1.5)
COMM 250	Speech and Debate II (1.5)
COMM 303	Advanced Public Speaking (3)
COMM 304	Persuasion (3)
COMM 315	Business and Professional (3)
COMM 349	Speech and Debate III (1.5)
COMM 350	Speech and Debate IV (1.5)
COMM 440	Communication and Gender (3)
COMM 418	Training and Development (3)
COMM 420	Communication in the Legal Process (3)
COMM 422	Conference and Meeting Management (3)
COMM 470	Special Topics in Communication (3)
COMM 490	Internships (1-6)*
COMM 495	Independent Studies (1-6)*
MCOM 352	Media Criticism (3)

*No more than 3 units of independent study and/or internships can be applied toward the Communication Studies major.

TRANSFER CREDIT POLICY

The department will accept up to 15 credits of compatible transfer courses.

COMBINED MAJOR IN COMMUNICATION STUDIES AND MASS COMMUNICATION

Students who wish to complete a combined major in Communication Studies and Mass Communication may apply up to 9 units simultaneously toward fulfillment of both majors.

MAJOR/MINOR IN COMMUNICATION STUDIES AND MASS COMMUNICATION

Students who wish to major in Communication Studies and minor in Mass Communication may apply up to 6 units simultaneously toward fulfillment of both major and minor.

COMBINED MAJOR IN COMMUNICATION STUDIES AND POLITICAL SCIENCE

Students electing to major in both Communication Studies and Political Science must complete the requirements for both majors. Students can complete the two majors with 69 units of Communication Studies and Political Science courses. Completing these two majors separately requires a minimum of 75 units (36 in COMM and 39 in POSC).

The Department of Political Science will accept two of the following communication studies courses (6 units) toward fulfillment of the electives in the Political Science major:

COMM 304	Persuasion (3)
COMM 331	Advocacy and Argument (3)
COMM 377	Intercultural Communication (3)
COMM 420	Communication in the Legal Process (3)
COMM 479	Special Topics (3)*

*Topic to be approved by the POSC department

The Department of Mass Communication and Communication Studies will accept two of the following political science courses (6 units) toward fulfillment of the electives in the Communication Studies major:

POSC 301	Political Research I
POSC 340	Comparative Public Policy
POSC 375	Public Administration
POSC 381	Presidency
POSC 383	Congress
POSC 417	Political parties
POSC 459	Simulation and Games
POSC 470-479	Special Topics (3)*

*Topic to be approved by the MCCS department

MINOR IN COMMUNICATION STUDIES

The Communication Studies minor requires 24 units: completion of the 9 units of lower-level courses and any 15 additional units in the major.

Minor Graduation Requirements

All minor requirements must be completed with a grade equivalent of 2.00 or higher. The Pass grading option is not available for courses applicable toward the minor.

Minor Transfer Credit Policy

The department will accept up to 9 units of compatible transfer courses toward the minor.

COMBINED MINOR WITH MASS COMMUNICATION MAJOR

Students who wish to minor in Communication Studies and major in Mass Communication may apply up to 6 units simultaneously toward fulfillment of both major and minor. Note: No more than 3 units of independent study and/or internships can be applied toward the Communication Studies minor.

MINOR TRANSFER CREDIT POLICY

The department will accept up to 9 units of compatible transfer courses toward the minor.

PRE-MASS COMMUNICATION MAJOR

Students interested in becoming undergraduate Mass Communication majors must first become Pre-Mass Communication majors (PMCO) and enroll in three required screening courses:

ENGL 102	Writing for a Liberal Education (3)
COMM 131	Fundamentals of Speech Communication (3)
MCOM 101	Introduction to Mass Communication (3)

Students cannot apply for MCOM as a major until they have completed these courses.

Note: This requirement applies to incoming freshmen, transfer students, currently enrolled Towson University students and students working on a second bachelor's degree.

Admission to the MCOM major is highly competitive. Students are eligible to apply for admission to the Mass Communication (MCOM) major after completing at least 30 units at Towson University or elsewhere, and upon completion of the three courses named above earning a minimum GPA of B (3.00) in these courses. In addition, the overall GPA of all TU courses at the time of application must be B (3.00) or above. No more than one of the screening courses can be repeated for the purpose of determining eligibility. After the completion of the above courses, students should declare MCOM as their major by completing an application and submitting the application to the department main office or the undergraduate advising coordinator. An unofficial transcript should be included. To obtain an application, go to the main office or contact one of the department's advisers. Several times a year, a group of eligible candidates will be able to declare Mass Communication as a major. Students who are denied may re-apply. Appeals may be addressed to the department's Executive Committee. All appeals should be in the form of a letter accompanied by a transcript

MAJOR IN MASS COMMUNICATION

The Mass Communication major enables students to learn the practical application, structure, processes, aesthetics, responsibilities and effects of the mass media. The objectives of the Mass Communication major are 1) to provide students with appropriate training for careers in mass communication and 2) to help students become more critical consumers of the media.

Mass Communication majors are expected to develop and refine their visual and written skills; to think critically about ways in which the mass media influence society; and, to recognize and appreciate the need for a broad and diverse liberal arts education.

Students who complete the Mass Communication major will have many career options, especially in the broadly defined fields of print and broadcast journalism, new media, advertising, strategic public relations and integrated communications. Majors are expected to learn how the various fields in mass communication are structured and function and to understand how the media are converging and the consequences of that convergence.

Students who complete the Mass Communication major are expected to:

- understand and apply relevant theories of mass communication

- understand and utilize research in mass communication
- understand legal issues, statutes and regulations affecting mass communication
- understand and apply ethical principles that can be used to prevent and resolve potential conflicts and dilemmas in the operation of the mass media
- demonstrate proficiency in writing for the mass media
- demonstrate competence in the student's chosen track within the major

Graduation Requirements

All major requirements must be completed with a grade equivalent of 2.00 or higher. The Pass (PS) grading option is not available for courses applied to the major. Students must complete at least 18 units of upper-level courses in the major.

Bachelor of Arts Degree Option

Students may earn a Bachelor of Arts degree by completing the intermediate (202) level of a foreign language.

Requirements for the Major

1. Mass Communication majors complete 36 units: 9 units in required courses and 27 units in track courses. Students must fulfill the requirements of one of the following tracks: Journalism and New Media, Advertising, or Strategic Public Relations and Integrated Communication. Students are reminded that it is their responsibility to check all prerequisites before registering for any course.
2. No more than 6 units of independent study and/or internships can be applied to the Mass Communication major.
3. Students who wish to double major in Mass Communication and Communication Studies may apply up to 9 units simultaneously for satisfaction of both majors. Students who wish to major in Mass Communication and minor in Communication Studies may apply 6 units simultaneously for satisfaction of both major and minor.
4. Transfer students are required to take 21 units in residence in their major area. The department will transfer up to 15 credits of compatible transfer courses.

Required Courses for All Three Tracks in the Major (9 units)

MCOM 101	Introduction to Mass Communication (3)
MCOM 490	Mass Communication Research (3)
MCOM 350	Media Law (3)
	or
MCOM 433	Media Ethics (3)

Journalism and New Media Track (27 units)

Note: To begin this track, students should enroll in MCOM 257 Journalism/New Media I.

Required Basic Courses (15 units)

MCOM 257	Journalism/New Media I
MCOM 258	Journalism/New Media II
MCOM 341	Digital Publishing
MCOM 358	News Editing (3)
MCOM 407	Writing for New Media (3)

Required Professional Skills Writing Courses (3 units)

Choose one of the following:

MCOM 356	Feature Writing (3)
MCOM 373	News Reporting (3)

MCOM 381	Broadcast Journalism I (3)
MCOM 409	Literary Journalism (3)

Track Electives (9 units)

Choose from the following "skills" category and from any courses not already chosen in the above listings:

MCOM 359	Magazine Publishing (3)
MCOM 391	Photojournalism I (3)
MCOM 402	Sports Writing (3)
MCOM 415	Mass Media Graphics (3)
MCOM 457	Photojournalism II (3)
MCOM 460	Internship in Journalism (1-6)
MCOM 481	Broadcast Journalism II (3)
MCOM 479	Special Topics in Journalism (3)
MCOM 496	Independent Study in Journalism (1-6)

Certificate in Broadcast Journalism

Mass Communication majors or minors completing the Journalism and New Media Track are eligible for a *Certificate in Broadcast Journalism* by taking the following four courses in the Mass Communication major and achieving at least a 3.00 average in these courses:

MCOM 381	Broadcast Journalism I (3)
MCOM 481	Broadcast Journalism II (3)
MCOM 391	Photojournalism I (3)
MCOM 460	Journalism internship of 3 units or more at a radio, television or cable station, or multi-media news website

Students need to apply for the certificate with documentation of eligibility at least 90 days before graduation.

Advertising Track (27 units)

Note: To begin this track, students should enroll in MCOM 214 *Principles of Advertising*.

Required Basic Courses (12 units)

COMM 131	Fundamentals of Speech Communication (3)
MCOM 214	Principles of Advertising (3)
MCOM 323	Advertising Media Planning (3)
MCOM 447	Advertising Campaigns (3)

Required Professional Skills Writing Courses (6 units)

MCOM 325	Advertising Copywriting (3)
Choose one of the following:	
MCOM 255	News Writing (3)
MCOM 357	Public Relations Writing (3)

Track Electives (9 units)

The following groupings are designed to help students in their selection of electives. Students may choose any combination of 9 units within the same group or across different groups, or any courses not already chosen in the required courses.

Advertising

MCOM 440	Advertising Media Sales (3)
MCOM 443	International Advertising and Public Relations (3)
MCOM 460	Internship in Mass Communication (1-6)
MCOM 478	Special Topics in Advertising and Public Relations (3)
MCOM 496	Independent Study in Mass Communication (1-6)

Strategic Public Relations and Integrated Communication

MCOM 253	Principles of Strategic Public Relations and Integrated Communication (3)
MCOM 451	Public Relations for Nonprofit Organizations (3)
MCOM 453	Strategic Public Relations and Integrated Communication Campaigns (3)
MCOM 459	Professional Issues in Public Relations, Advertising and Integrated Communication (3)

MCOM 478	Special Topics in Advertising and Public Relations (3)
COMM 419	Organizational Communication (3)
COMM 422	Conference and Meeting Management (3)

Electronic Media and Film

EMF 221	Principles of Film and Media Production (3)

Journalism

MCOM 356	Feature Writing (3)
MCOM 415	Mass Media Graphics (3)

Media Analysis

MCOM 411	Communication Process (3)
One of the following three:	
MCOM 352	Media Criticism (3), or
MCOM 385	Mass Media and Society (3), or
MCOM 477	Special Topics in Mass Communication (3)
COMM 304	Persuasion (3)

Communication Studies

COMM 201	Communication Theory (3)
COMM 315	Business and Professional Communication (3)
COMM 377	Intercultural Communication (3)

Strategic Public Relations and Integrated Communication Track (27 units)

Note: To begin this track, students should enroll in MCOM 253 *Principles of Strategic Public Relations and Integrated Communication*.

Required Basic Courses (12 units)

COMM 131	Fundamentals of Speech Communication (3)
MCOM 253	Principles of Strategic Public Relations and Integrated Communication (3)
COMM 419	Organizational Communication (3)
MCOM 453	Public Relations and Integrated Communication Campaigns (3)

Required Professional Skills Writing Courses (6 units)

MCOM 357	Public Relations Writing (3)
Choose one of the following:	
MCOM 255	News Writing (3)
MCOM 325	Advertising Copywriting (3)

Track Electives (9 units)

The following groupings are designed to help students in their selection of electives. Students may choose any combination of 9 units within the same group or across different groups, or any courses not already chosen in the required courses.

Strategic Public Relations and Integrated Communication

COMM 422	Conference and Meeting Management (3)
MCOM 451	Public Relations for Nonprofit Organization (3)
MCOM 459	Professional Issues in Public Relations, Advertising and Integrated Communication (3)
MCOM 460	Internship in Mass Communication (1-6)
MCOM 478	Special Topics in Advertising and Public Relations (3)
MCOM 496	Independent Study in Mass Communication (1-6)

Advertising

MCOM 214	Principles of Advertising (3)
MCOM 323	Advertising Media Planning (3)
MCOM 440	Advertising Media Sales (3)
MCOM 443	International Advertising and Public Relations (3)
MCOM 447	Advertising Campaigns (3)
MCOM 478	Special Topics in Advertising and Public Relations (3)

Electronic Media and Film

EMF 221	Principles of Film and Media Production (3)

Journalism

MCOM 356	Feature Writing (3)
MCOM 415	Mass Media Graphics (3)

Media Analysis

MCOM 411	Communication Process (3)
One of the following three:	
MCOM 352	Media Criticism (3), or
MCOM 385	Mass Media and Society (3), or
MCOM 477	Special Topics in Mass Communication (3)
COMM 304	Persuasion (3)

Communication Studies

COMM 201	Communication Theory (3)
COMM 315	Business and Professional Communication (3)
COMM 377	Intercultural Communication (3)

COMBINED MAJOR IN MASS COMMUNICATION AND POLITICAL SCIENCE

Students electing to major in both Mass Communication and Political Science must complete the requirements for both majors. Following the outline below, students can complete the two majors with 69 units of Mass Communication and Political Science courses. Completing these two majors separately requires a minimum of 75 units (36 units in Mass Communication and 39 units in Political Science).

I. Mass Communication

- Required Lower-Level Courses (9 units)
- Required Track Courses (12 units)
- Required Professional Skills Writing Courses (6 units)
- Electives (9 units)

Note: The department will accept two of the following Political Science courses (6 units) toward fulfillment of the electives in the Mass Communication major:

POSC 301	Political Research I (3)
POSC 340	Comparative Public Policy (3)
POSC 375	Public Administration (3)
POSC 381	Presidency (3)
POSC 383	Congress (3)
POSC 417	Political Parties (3)
POSC 459	Simulation and Games (3)
POSC 470-479	Special Topics (3)*

* Topic to be approved by the Department of Mass Communication and Communication Studies

II. Political Science

- Required Courses in Political Science (21 units — see the Department of Political Science)
- Elective Courses in Political Science (18 units)

Note: The Department of Political Science will accept two of the following Mass Communication courses (6 units) toward fulfillment of the electives in the Political Science major:

MCOM 350	Media Law (3)
MCOM 352	Media Criticism (3)
MCOM 385	Mass Media and Society (3)
MCOM 431	Public Opinion and the Press (3)
MCOM 433	Media Ethics (3)
MCOM 477-479	Special Topics (3)*

* Topic to be approved by the Department of Political Science

MINOR IN MASS COMMUNICATION

Students minoring in Mass Communication must complete 24 units of MCOM courses with a grade equivalent of 2.00 or higher in each course, including MCOM 101 Introduction to Mass Communication (3 units), 6 units of 200-level courses, 3 units of upper- or lower-level courses, and 12 units of upper-level courses. No specific courses or blocks of courses are stipulated for the minor; each student designs a coherent and purposeful individual program. The following majors-only courses are *not open* to minors.

Not open to minors

MCOM 323	Advertising Media Planning
MCOM 325	Advertising Copywriting
MCOM 350	Media Law
MCOM 433	Media Ethics
MCOM 447	Advertising Campaigns
MCOM 453	Strategic Public Relations and Integrated Communication Campaigns
MCOM 460	Internship in Mass Communication
MCOM 490	Mass Communication Research

Combined Minor with Communication Studies

Students who wish to minor in Mass Communication and major in Communication Studies may apply up to 6 units simultaneously toward fulfillment of both major and minor.

MINOR TRANSFER CREDIT POLICY

The department will accept up to 9 units of compatible transfer courses toward the minor.

INTERNSHIP PROGRAM GUIDELINES

The department has a highly successful internship program. Students who meet the requirements for participation are encouraged to consider taking an internship.

Students are eligible for an internship when they meet the following academic requirements:

- Earned units: 60 or more (junior/senior status)
- Overall GPA: 2.75 or higher
- Major GPA: 3.0 or higher
- MCOM students: Acceptance into the major (Pre-MCOM students not eligible)
- COMM students: Declared major in Communication Studies
- Successful completion (C or better grade) of the "gateway" course in the track or major in which the student intends to earn internship units. The courses are:
 - Advertising track: Principles of Advertising (MCOM 214)
 - Public Relations track: Principles of Public Relations (MCOM 253)
 - Journalism track: Journalism/New Media II (MCOM 258)
 - Communications Studies major: completion of 12 units in Communication Studies

Visit the department Web site for the internship sites that have been pre-approved. Any other internship worksite must be approved by the appropriate unit coordinator.

DEPARTMENTAL SCHOLARSHIPS

The Mass Communication and Communication Studies department is fortunate in being able to offer its majors a number of scholarship opportunities.

The Patrick John O'Connell Memorial Scholarship is available for Mass Communication students with a special interest in broadcast journalism, journalism, advertising or public relations. Other scholarships include the Eddie Ballard Award for Journalism, the Richard T. Bolan Scholarship, the Chrystal Marie Clifford Memorial Scholarship, the Sam Lacy Sports Communication Scholarship, the Steven and Laura Murfin Scholarship, the O'Connor Radio Broadcasting Scholarship, the Jamie Parker Memorial Scholarship, the George F. Rogers Jr. Memorial Scholarship, the Elizabeth Wainio Memorial Scholarship, the Public Relations Society of America Scholarship, the Reg Murphy Scholarship and speech and debate program scholarships. For scholarship information and deadlines, contact the department scholarship coordinator or visit the department website.

DEPARTMENTAL ACTIVITIES

Department activities include support for the following student organizations: Speech and Debate Team, Pi Kappa Delta (national honorary forensic society), Lambda Pi Eta (national honorary society in communication), the American Advertising Federation Chapter, the Public Relations Student Group, and the Society for Professional Journalists.

HONORS PROGRAM

Through its departmental honors program, the mass communication faculty recognizes students for academic excellence. Mass Communication majors with an overall GPA of 3.25 and a 3.50 in their major are eligible to participate in the program. To graduate with honors in Mass Communication, students must complete 6 units in MCOM Independent Study and MCOM 499 Honors Thesis. In addition, the student is required to make an oral presentation to the Thesis Committee, which is open to the public. At graduation, students will be recognized for honors both on the diploma and permanent transcript. Students interested in departmental honors should consult with the department's honors coordinator no later than the first term of their junior year.

GRADUATE PROGRAM

Information regarding the various graduate programs is included in the *Graduate Catalog*. The department offers a master's degree in Communications Management, and a certificate in Strategic Public Relations and Integrated Communications.

Department of Music

Professors: Cecylia Barczyk, Leneida

Crawford (*Chair*), Michael Decker, Luis Engelke, Terry B. Ewell, Michael Jothan, William Kleinsasser, Cristina Magaldi, Gerald Phillips, Reynaldo Reyes, Dana Rothlisberger, Carl B. Schmidt

Associate Professors: James Anthony, David Ballou, Phillip Collister, Karen Kennedy, Jonathan Leshnoff, Marguerite Levin, Diane Luchese, Eva Mengelkoch, Alicia Mueller

Assistant Professors: Jeffrey N. Howard, Kalin S. Kirilov, Brenda Leach, Natalie Mannix, Melissa McCabe, Patrick Roulet

Full-time Lecturers: Theresa Bickham, Troy King, James McFalls

Part-time Faculty: Yekaterina Afonasyeva, Alicia Barksdale, Darryl Brenzel, Joe Davis Brown, Douglas Buchanan, Michael Bunn, Patricia Burt, Jennifer Casey Cabot, Julia Cooke, Christopher Corelli, Mark Craig, Lawrence Crawford, Fatma Daglar, Keith Derrickson, John Dierker, Christopher Dillon, Richard Disharoon, Victor Dvoskin, Terry Eberhardt, Kyle Engler, Gabrielle Finck, Samuel Fine, Nelson Fritts, Steve Herberman, Rene Hernandez, Lonnie Hevia, Michael Holmes, Ah Hong, Lori Hultgren, Michelle Humphreys, Bernard Hynson, Mark Lackey, Tom Lagana, Nancy Larson, Terri Matthews, Leah Inger Murphy, Timothy Murphy, Ronald Mutchnik, Sara Nichols, Sherrie Norwitz, Michael Poissant, Jeremy Ragsdale, Will Redman, Jeff Reed, N. Scott Robinson, Frank Russo, Aaron Sheehan, Angelina Smith, Zoltan Szabo, Edward Tetreault, Eric Trudel, Gran Wilson, Jeffrey Winfield, Jonathan Yanik, Stephen Zolper

Assistant to the Chairperson: Mary Ann Criss
Computer/Audio Manager: John Spivey

OFFICE

Center for the Arts 3095, 410-704-2839
Fax: 410-704-2841
www.towson.edu/music

ADMISSION TO THE DEPARTMENT

Degree programs in music are fully accredited with the National Association of Schools of Music and the National Council for Accreditation of Teacher Education.

The Music major is a screened major. Admission to the Music major is granted only by the department, contingent upon a performance audition. Admission to the university does not guarantee acceptance as a Music major or minor. Further, continuance in the major is contingent on a number of evaluative processes established by the department. Proper course planning and regular meetings with advisers are key to timely completion of the programs in four years. Students are responsible for determining the progress and completion of their degree programs.

PROGRAMS OF THE DEPARTMENT

The Department of Music offers two professional degree programs, the Bachelor of Music and Bachelor of Science in Music Education; and one liberal arts degree program, the Bachelor of Science in Music. The concentrations within the two professional degree programs are outlined on the following pages.

Although there are courses common to all degree programs and concentrations within those programs, each program is designed with its own special requirements, especially in the junior and senior years. Those requirements are found on the following pages.

A Music minor is available for those students who desire to pursue music studies as a secondary field.

REQUIREMENTS OF THE DEPARTMENT

Private Vocal or Instrumental Lessons and Master Classes

Every Music major must enroll for private lessons on an instrument or in voice with an instructor provided by the university. All students enrolled for private vocal or instrumental lessons are required to attend a weekly master class. Activities in master classes range from topics concerning the instrument, prevention of performance injuries, pedagogy and performances by students, faculty and guest artists.

Progress toward a degree in music will, under normal circumstances, require the student to take at least one unit of lessons every term in their major area until the terminal degree recital is successfully completed. Students who let their lessons lapse one regular term or more are subject to re-auditioning in order to continue as a music major or minor (performance track). Students who do not pass the re-audition may, at the discretion of the Department of Music, be excluded from their degree program or required to take additional lessons before being fully reinstated.

Evaluative Processes Comprising the Screened Major

The following items comprise the various evaluative processes students must successfully negotiate if they are to continue in and complete the Music major.

Progress in the Music Major

Students are expected to show regular progress completing required courses in the areas of theory, musicianship, music history and methods.

- No more than three MUSC or MUED courses may be repeated.
- No more than one of these courses may be repeated a second time after an approved petition to the department chair.

Additionally, the Department of Music considers any prior registration in a MUSC or MUED course when issuing seat permits. If a student has remained registered for a MUSC or MUED course after the end of the university's official change of schedule period and is attempting a third registration, a special permit/seat assignment will be issued on a space-available basis ONLY after all other students have requested a seat.

Juries and Upper-Division Juries

All students must perform before a faculty jury at the end of each term in which they are enrolled in private vocal or instrumental lessons.

To enroll in 300-level private lessons, students must complete the upper-division, double-length jury examination.

Keyboard Proficiency

Music majors must reach the level of keyboard proficiency established for their specific degree and concentration. For Music Education majors, the Keyboard Proficiency Examination is given the first Friday of fall and spring terms and the first Wednesday of Final Examinations. (Students are only eligible to take this exam once per term.)

The Bachelor of Music degree allows students to satisfy the Keyboard Proficiency requirement by passing Piano Class I (MUSA 190), Piano Class II (MUSA 191), and Piano Class III (MUSA 290).

Keyboard Performance majors, however, are exempt from Piano Class I, Piano Class II, and Piano Class III, but must satisfy the keyboard proficiency requirement by passing Keyboard Harmony and Sight Reading I (MUSC 313) and Keyboard Harmony and Sight Reading II (MUSC 314).

Recital Attendance

Department convocations and daytime honors recitals are mandatory attendance.

Degree Recitals

The Music Education Concentrations and the Composition Concentration require a senior recital. The Performance Concentrations require both junior and senior recitals. Students pursuing a Bachelor of Science in Music may choose to perform a recital as their capstone experience.

Students must enroll in private lessons the term they present a recital. Senior recital may not be taken during the same term as student teaching.

Ensembles

All Music majors are required to participate in ensembles. Students are limited to enrolling in three ensembles per term. Ensembles will be varied in both size and nature. Each degree program and/or concentration has its own set of expectations. These are listed on the following pages.

Contact the Department of Music for information concerning times and requirements for ensemble auditions. Most auditions are scheduled during the first week of classes. If a student registers for an ensemble and is not selected, it is the student's responsibility to officially drop the ensemble from his or her schedule through the university's Office of the Registrar.

Graduation Requirements

Majors must earn a grade equivalent of 2.00 or higher in all Music major courses, ensembles and lessons. This includes foreign languages and Music Education courses required of degree programs. The Pass grading option is not available for courses applied to the major.

In addition to the required Core Curriculum Music major courses, students must fulfill the requirements found in the University Curriculum section in this catalog. University regulations require

students to accrue no fewer than 32 upper-division (300–400) units for graduation.

The department also supports the Early Childhood and Elementary Education programs by offering individual Methods of Teaching Music for each instructional level. In addition, a specific section of Music Fundamentals is offered for majors in the Department of Dance.

TRANSFER CREDIT POLICY

Transfer of major credit is based upon an audition, a review of transcripts and an interview with the department chairperson. Transfer students must meet with the department chairperson immediately after matriculating.

All Music majors must complete a minimum of 24 major units at Towson University, all of which are upper-level (300–400) courses.

All Music minors must complete a minimum of 12 units at Towson University that meet the upper-division electives requirement in Section II of the Minor in Music section in this catalog.

MAJOR IN MUSIC EDUCATION—BACHELOR OF SCIENCE DEGREE

Students majoring in Music Education are required to complete the courses listed below, the Music Education Professional Core Courses and the Core Curriculum. Students choose either the Instrumental Music Education Concentration or the Vocal-General Music Education Concentration.

Successful completion of the program certifies students to teach Music at the P-12 level in Maryland Public Schools (and other states with reciprocal agreements). Certification requires admission to the Music Education Program, successful completion of courses and requirements in the Music Education degree program, passing the Praxis examination Parts I and II, completing a notarized criminal disclosure statement, completing a state and FBI criminal background check, and passing the speech and hearing screening.

Requirements for Admission to the Music Education Program

After admission to the Department of Music, there are two additional steps that a student must complete to become a candidate for the Music Education degree. The first is a "Progress Check to Obtain Full Admission into the Music Education Major," which is completed during the fourth term Music Education Advising Session. The second is the "Program Interview for Admission to Candidacy for the Music Education Degree." This is completed in the student's sixth term while enrolled in Choral Conducting (MUSC 327) or Instrumental Conducting (MUSC 329).

Requirements for Intensive Term with Field Experience and Student Internship in Music Education

The last full year of study for the degree (fall term 7 and spring term 8) will consist of these two experiences. Some degree requirements may be completed after the spring term. However, the Student Internship must be completed during the spring term immediately following the fall Intensive Term with Field Experience to graduate from a Maryland Approved Teacher Education Program.

The Intensive Term with Field Experience provides partial fulfillment of the requirement for field experiences, essential for approved program status granted by the Maryland State Department of Education (MSDE). To retain this designation, all students must have a minimum of 100 full days of field experience distributed over two consecutive terms. During this term, students will be involved in field experiences in local P-12 schools two full days a week, Wednesdays and Fridays. Satisfactory completion of all aspects of this term is required for enrollment in the following term.

The Student Internship in Music Education is the capstone experience of the Bachelor of Science in Music Education degree. To be eligible for the Student Internship in Music Education, all students must have been admitted to the Music Education Program and successfully completed the Intensive Term with Field Experience.

Instrumental Music Education Concentration Requirements (66 units)

MUSA xxx	Private Lessons in one instrument or percussion area (7)
MUSA xxx	Ensembles (8.5)
	Wind and Percussion students: two terms in lower-division Symphonic Band or Orchestra (2); three terms in upper-division Symphonic Band or Orchestra (3); one term in ensemble other than Symphonic Band, Marching Band, or Orchestra (1); two terms in Marching Band (2); one term in Conducting Lab Ensemble (.5)
	String students: three terms in lower-division Symphonic Band or Orchestra (3); three terms in upper-division Symphonic Band or Orchestra (3); one term in ensemble other than Symphonic Band, or Orchestra (1); one term in any ensemble (1); one term in Conducting Lab Ensemble (.5)
MUSA 498	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 329	Instrumental Conducting (3)
MUSC 335	Choral and Instrumental Arranging (3)
MUSC 405	Western Music from 1914 to the Present (3)
MUED 201	Brass Class I (1)
MUED 202	Brass Class II (1)
MUED 203	Lower String Class (1)
MUED 204	Upper String Class (1)
MUED 205	Woodwind Class I (1)
MUED 206	Woodwind Class II (1)
MUED 207	Percussion Class I (1)
MUED 208	Percussion Class II (1)
MUED 210	Voice Class (1)
MUED 220	Percussion Workshop (percussion students only) (1)
MUED 301	Marching Band Techniques (.5)
MUED 306	Methods of Teaching Instrumental Music in the Elementary School (4)
MUED 308	Methods of Teaching Instrumental Music in the Secondary School (2)

Music Education Professional Courses (30 units)

SCED 200	Foundations of Education (3)
ELED 324	Integrating Literacy in K-12 Content Areas (3)
MUED 310	Introduction to Music in Special Education (3)
MUED 391	Student Internship in Elementary School-Music (6)
MUED 392	Student Internship in Secondary School-Music (6)
MUED 401	Enhancing Literacy in the Music Classroom (3)
PSYC 101	Introduction to Psychology (3)
PSYC 201	Educational Psychology (3)

Vocal-General Music Education Concentration Requirements (59–61 units)

MUSA xxx	Private lessons in one area (7)
MUSA xxx	Ensembles (7–8)
	Keyboard students: (8 terms): four in Choral or Choral Society; one in Music for the Stage; and three selected from Chamber Singers, Early Music Ensemble, Jazz Ensemble-Vocal, Jazz Ensemble-Combo, World Music Ensemble, Music Theatre Chorus; and Solo and Ensemble Accompanying
	Vocal students: (7 terms): three in Choral or Choral Society; one in Music for the Stage; one selected from Chamber Singers, Early Music Ensemble, Jazz Ensemble-Vocal, Jazz Ensemble-Combo, World Music Ensemble, Music Theatre Chorus; and 2 elective units from any of the above (only one of which may be in Music for the Stage)
	Guitar students: (8 terms): three in any vocal ensemble (including Music for the Stage); four in Guitar Ensemble (MUSA 275/475); one in any ensemble
MUSA 498	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 327	Choral Conducting (3)
MUSC 335	Choral and Instrumental Arranging (3)
MUSC 405	Western Music from 1914-Present (3)
MUED 209	Teaching Guitar in the Classroom (2)
MUED 210	Voice Class (guitar and keyboard students only) (1)
MUED 307	Methods of Teaching Vocal-General Music in the Elementary School (4)
MUED 309	Methods of Teaching Vocal-General Music in the Secondary School (2)
MUED 337	Teaching Choral Music in the Elementary and Secondary School (2)

Music Education Professional Courses (30 units)

SCED 200	Foundations of Education (3)
ELED 324	Enhancing Literacy in K-12 Content Areas (3)
MUED 310	Introduction to Music in Special Education (3)
MUED 391	Student Internship in Elementary School-Music (6)
MUED 392	Student Internship in Secondary School-Music (6)
MUED 401	Enhancing Literacy in the Music Classroom (3)
PSYC 101	Introduction to Psychology (3)
PSYC 201	Educational Psychology (3)

MAJOR IN MUSIC—BACHELOR OF MUSIC DEGREE

Students concentrating in Composition, Jazz/Commercial Performance, Jazz/Commercial Composition, or Performance are required to complete the courses listed below and the Core Curriculum requirements.

Composition Concentration Requirements (83 units)

MUSA xxx	Private lessons in a single medium (6)
MUSA xxx	Ensembles—Students should register for a diversity of size and style in ensembles with a minimum of two different ensembles. The choice and availability of ensembles will depend on the particular performance area and level of each student. (8)
MUSA 100	Private Composition lessons (4)
MUSA 190	Piano Class I (1)
MUSA 191	Piano Class II (1)
MUSA 200	Private Composition lessons (4)
MUSA 290	Piano Class III (1)
MUSA 300	Private Composition lessons (4)
MUSA 400	Private Composition lessons (4)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 281	Recording Techniques I (3)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 327	Choral Conducting (3)
	or
MUSC 329	Instrumental Conducting (3)
MUSC 335	Choral and Instrumental Arranging (3)
MUSC 405	Western Music from 1914 to the Present (3)
MUSC 414	Counterpoint (3)
MUSC xxx	Upper-division MUSC electives (9)
	MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Guitar Performance Concentration Requirements (82 units)

MUSA xxx	Private guitar lessons (16)
MUSA xxx	Ensembles (12)
	4 units Guitar Ensemble (MUSA 275); 4 units Guitar Ensemble (MUSA 475); 2 units any vocal ensemble; 2 units any ensemble
MUSA 190	Piano Class I (1)
MUSA 191	Piano Class II (1)
MUSA 290	Piano Class III (1)
MUSA 399	Junior Recital (1)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)

MUSC 305	Survey of the Music Industry (3)
MUSC 327	Choral Conducting (3) or Instrumental Conducting (3)
MUSC 329	Western Music from 1914 to the Present (3)
MUSC 405	History and Literature of Guitar, Lute and Vihuela (3)
MUSC 409	Guitar Pedagogy (3)
MUSC 462	Upper-division MUSC electives (9)
MUSC xxx	MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Jazz/Commercial Composition Concentration Requirements (78 units)

MUSA xxx	Private lessons in a single medium (6)
MUSA xxx	Ensembles—4 terms among a minimum of two different jazz ensembles, 4 terms in other ensembles (8)
MUSA 100	Composition Lessons (4)
MUSA 190	Piano Class I (1)
MUSA 191	Piano Class II (1)
MUSA 200	Composition private lessons (2)
MUSA 290	Piano Class III (1)
MUSA 300	Composition private lessons (4)
MUSA 400	Composition private lessons (4)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 305	Survey of the Music Industry (3)
MUSC 320	Jazz Theory and Improvisation I (3)
MUSC 329	Instrumental Conducting (3)
MUSC 335	Choral and Instrumental Arranging (3)
MUSC 426	Jazz History (3)
MUSC 427	Jazz Arranging (3)
MUSC xxx	Upper-division MUSC elective (3) MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Jazz/Commercial Performance Concentration Requirements (82 units)

MUSA xxx	Private lessons (16)
MUSA xxx	Saxophone majors—8 units jazz/commercial saxophone and 8 units in at least one woodwind double; bass majors—8 units acoustic, 8 units electric; guitar majors—8 units jazz/commercial guitar, 8 units classical or other fretted instruments; percussion majors—8 units drum set, 8 units mallets, timpani, multiple percussion; other instruments—8 units of jazz/commercial in primary instrument, 8 units of 100- and 200-level classical lessons in primary instrument; voice majors—8 units in jazz/commercial voice, 8 units in 100- and 200-level voice lessons
MUSA xxx	Ensembles—8 terms among a minimum of three jazz ensembles; 6 terms of other ensembles (14)
MUSA xxx	Ensembles for Guitar Students—8 terms among a minimum of three jazz ensembles; 6 terms in other ensembles (of the above

MUSA 190	ensembles, guitar students are required to take 8 terms of Guitar Ensembles: 4 terms of MUSA 275/283 and 4 terms of MUSA 475/483)
MUSA 191	Piano Class I (1)
MUSA 290	Piano Class II (1)
MUSA 399	Piano Class III (1)
MUSA 499	Junior Recital (1)
MUSC 131	Senior Recital (1)
MUSC 132	Theory I (2)
MUSC 133	Theory II (2)
MUSC 134	Musicianship I (2)
MUSC 201	Musicianship II (2)
MUSC 231	Music in the U.S.; Analytic Emphasis (3)
MUSC 232	Theory III (2)
MUSC 233	Theory IV (2)
MUSC 234	Musicianship III (2)
MUSC 301	Musicianship IV (2)
MUSC 302	Western Music to 1750 (3)
MUSC 305	Western Music from 1750–1914 (3)
MUSC 320	Survey of the Music Industry (3)
MUSC 322	Jazz Theory and Improvisation I (3)
MUSC 329	Jazz Theory and Improvisation II (3)
MUSC 426	Instrumental Conducting (3)
MUSC 427	Jazz History (3)
MUSC 443	Jazz Arranging (3)
MUSC xxx	Instrumental Pedagogy (1) Upper-division MUSC elective (3) MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Keyboard Performance Concentration Requirements (Piano) (83 units)

MUSA xxx	Private piano lessons (16)
MUSA xxx	Private pipe organ, harpsichord or voice lessons (2)
MUSA xxx	Ensembles—5 terms in Solo/Ensemble Accompanying, 2 units in any other ensemble (7)
MUSA 399	Junior Recital (1)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 313	Keyboard Harmony and Sight Reading I (2)
MUSC 314	Keyboard Harmony and Sight Reading II (2)
MUSC 327	Choral Conducting (3) or Instrumental Conducting (3)
MUSC 329	Choral and Instrumental Arranging (3)
MUSC 335	Western Music from 1914 to the Present (3)
MUSC 405	Counterpoint (3)
MUSC 414	Keyboard Literature (3)
MUSC 419	Piano Pedagogy (3)
MUSC 460	Upper-division MUSC electives (9)
MUSC xxx	MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Keyboard Performance Concentration Requirements (Pipe Organ) (81 units)

MUSA xxx	Private pipe organ lessons (16)
MUSA xxx	Private piano lessons (2)
MUSA xxx	Ensembles—six terms in choral ensembles, one in any other ensemble (7)
MUSC 399	Junior Recital (1)
MUSA 499	Senior Recital (1)
MUED 210	Voice Class (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 313	Keyboard Harmony and Sight Reading I (2)
MUSC 314	Keyboard Harmony and Sight Reading II (2)
MUSC 327	Choral Conducting (3) or Instrumental Conducting (3)
MUSC 329	Choral and Instrumental Arranging (3)
MUSC 335	Western Music from 1914 to the Present (3)
MUSC 405	Counterpoint (3)
MUSC 414	Keyboard Literature (3)
MUSC 419	Upper-division MUSC electives (9)
MUSC xxx	MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Voice Performance Concentration Requirements (83 units)

MUSA xxx	Private voice lessons (16)
MUSA xxx	Ensembles—4 units in Choral or Choral Society, 4 units in Music for the Stage, and 4 units in any vocal ensemble (12)
MUSA 190	Piano Class (1)
MUSA 191	Piano Class II (1)
MUSA 290	Piano Class III (1)
MUSA 399	Junior Recital (1)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 245	Diction for Singers I (English and Italian) (2)
MUSC 246	Diction for Singers II (French and German) (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 327	Choral Conducting (3)
MUSC 405	Western Music from 1914 to the Present (3)
MUSC 406	Survey of Solo Voice Literature (3)
MUSC 442	Vocal Pedagogy (3)
MUSC xxx	Upper-division MUSC electives (9) MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

Elementary level of two of the following: German, French or Italian (12) OR Intermediate level in German, French or Italian (12)

Winds, Strings, Percussion Performance Concentration Requirements (84 units)

MUSA xxx	Private lessons in one instrument or percussion area (16)
MUSA xxx	Ensembles—eight terms in either Symphonic Band or Orchestra; eight terms of other instrumental ensembles (16)
MUSA 190	Piano Class I (1)
MUSA 191	Piano Class II (1)
MUSA 290	Piano Class III (1)
MUSA 399	Junior Recital (1)
MUSA 499	Senior Recital (1)
MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 234	Musicianship IV (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)
MUSC 305	Survey of the Music Industry (3)
MUSC 329	Instrumental Conducting (3)
MUSC 335	Choral and Instrumental Arranging (3)
MUSC 405	Western Music from 1914 to the Present (3)
MUSC 443	Instrumental Pedagogy (1)
MUSC xxx	Upper-division MUSC electives (9)
	MUSC 493 Independent Research in Music may be taken for a maximum of 3 elective units only by successful petition to the department chairperson.

MAJOR IN MUSIC—BACHELOR OF SCIENCE DEGREE

The Bachelor of Science in Music is designed for students seeking a liberal arts degree in music. The curriculum of this program is designed to assure that students receive a solid grounding in the fundamentals of music theory and history, take individual instruction in applied music, and will participate in musical ensembles appropriate to their area of musical training. The Department of Music strongly recommends the completion of the intermediate level of a foreign language. Students are encouraged to pursue a minor in a related or complementary field of study.

All students pursuing the Bachelor of Science degree in Music must take one course in one of the arts outside of music (visual arts, theater, or dance) either within their Core Curriculum units or within their 30 elective units.

Students must also undertake one of the following 3-unit capstone experiences demonstrating mastery of some area of their study. Selection of this capstone experience and approval by appropriate faculty must be completed by the end of the junior year. Students must have completed all required courses through the 300 level before enrolling in the capstone experience.

Music Performance and Senior Recital

Students who choose music performance as their principal area of competency must complete at least 2 units of applied music at the upper-division level and complete the 1-unit course MUSA 497 (Senior Recital for Bachelor of Science in Music Degree). (Students must be enrolled for applied lessons concurrently with Senior Recital.) Approval of the recital option must be granted by the faculty jury at the time of the upper-division jury.

Senior Thesis/Project

Students may choose to write a senior thesis or complete another approved research project under the direction of a faculty adviser. In order to be approved for a Senior Thesis/Project, a student must have passed MUSC 302 Western Music from 1750–1914 with the grade of B or better. The proposal for the project must be approved by the department chair who will assign appropriate faculty advisers by the end of the second term of the junior year. The completed project must be juried by at least two faculty members. These candidates must successfully complete MUSC 495 Senior Thesis/Project for the Bachelor of Science in Music Degree.

Music Internship

Students who pursue training in a cognate area such as music business, arts administration, or some other appropriate professional field must demonstrate competence in that field through the successful completion of MUSC 497 Internship in Music. Students must have a 2.75 general GPA and a 2.50 in Music courses to enroll in MUSC 497 Internship in Music. Internships must be approved by the department internship coordinator and the Career Center internship coordinator by the end of the junior year.

Degree Requirements

Total minimum units to complete the major in Music – Bachelor of Science degree are 120.

Music Requirements (32 units)

MUSC 131	Theory I (2)
MUSC 132	Theory II (2)
MUSC 133	Musicianship I (2)
MUSC 134	Musicianship II (2)
MUSC 201	Music in the US: Analytic Emphasis (3)
MUSC 231	Theory III (2)
MUSC 232	Theory IV (2)
MUSC 233	Musicianship III (2)
MUSC 301	Western Music to 1750 (3)
MUSC 302	Western Music from 1750–1914 (3)

One course in American or World Music selected from the following (3 units):

MUSC 421	Music in the U.S. (3)
MUSC 426	Jazz History (3)
MUSC 471	Special Topics in World Music (3)

MUSC xxx Two upper-division MUSC courses (excluding other American/World Music courses, MUSC 493, and MUSC 497) (6 units)

Applied and Music Elective Requirements (17 units)

MUSA xxx	Private Lessons (6)
MUSA xxx	Ensembles (4 units over 4 terms)
MUSA 190	Piano Class I (1)

MUSC (may not duplicate a course applied toward Core Curriculum Requirements), MUSA (ensembles only), or MUED electives (3 units) MUSC or MUSA Capstone Experience (3 units)

Total Music Units: 49

Core Curriculum Requirements (38–40 units) and free electives (no MUSC, MUED or MUSA courses) (30 units)

Combined—68–70 units minimum.

MINOR IN MUSIC

The Music minor, available for students who desire to pursue music studies as a secondary field, requires 24–25 units. Music minors are required to

have a department adviser to assist with building meaningful schedules. The minor consists of two tracks: Music Performance and Music Literature. Students who intend to minor in Music are advised to so declare in their freshman year. Acceptance to the Performance Track is by prior audition only. Students accepted into this track must discuss with their applied teacher how they will logically progress to the final recital. Students in the Literature Track must apply to the department and complete all lower-division requirements before moving to upper-division courses. MUSC 131 and MUSC 133 must be taken concurrently.

Students must attain a grade equivalent of 2.00 or higher for courses applied to the minor. The Pass grading option is not available for courses applied to the minor.

Performance Track (24–25 units)

MUSA xxx	Private lessons in one discipline (at least two at the upper-division level) (8)
MUSA xxx	Ensembles (3)
MUSA 399	Junior Recital (1)
MUSC 101	Introduction to Music of the Western Heritage (3)
	or
MUSC 106	Honors Introduction to Music of the Western Heritage (3)
MUSC 105	Music Theory for Non-Majors (3)
	or
MUSC 131	Theory I (2)
	and
MUSC 133	Musicianship I (2) (must be taken concurrently with MUSC 131)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)
MUSC 305	Survey of the Music Industry (3)

Literature Track (25 units)

MUSC 131	Theory I (2)
	and
MUSC 133	Musicianship I (2) (must be taken concurrently with MUSC 131)
MUSC 132	Theory II (2)
MUSC 101	Introduction to Music of the Western Heritage (3)
	or
MUSC 106	Honors Introduction to Music of the Western Heritage (3)
MUSC 201	Music in the U.S.; Analytic Emphasis (3)

One course selected from the following (3):

MUSC 110	Honors Introduction to World Music (3)
MUSC 112	World Music: The Americas, Africa and West Europe (3)
MUSC 113	World Music: East Europe, Asia and the Middle East (3)

One course selected from the following (3):

MUSC 123	Jazz History for Non-Majors (3)
MUSC 125	Honors Jazz History for Non-Majors (3)
MUSC 127	Elements and History of Rock Music (3)
MUSC 205	Women in Western Music (3)

Upper-division electives selected from the following (one from each group) (6):

Group I

MUSC 301	Western Music to 1750 (3)
MUSC 402	Music of the Baroque Period (3)
MUSC 403	Music of the Classical Period (3)
MUSC 404	Music of the Romantic Period (3)

Group II

MUSC 406	Survey of Vocal Literature (3)
MUSC 411	Survey of Opera (3)
MUSC 413	Symphonic Literature (3)

MUSC 421	Music in the U.S. (3)
MUSC 426	Jazz History (3)
MUSC 471–479	Special Topics (3)
MUSC 493	Independent Research in Music (written paper) (1)

CORE CURRICULUM REQUIREMENTS

The department also offers courses for non-Music majors. These courses are primarily taken to satisfy Core Curriculum requirements.

Visit www.towson.edu/core for information on MUSC Core Curriculum courses.

PERFORMING ENSEMBLES

Non-Music majors/minors are encouraged to audition for performing ensembles at the beginning of each term. A complete list of ensemble offerings can be found under Course Descriptions for “Music Applied (MUSA) – Ensembles” in this catalog. (No audition is required for MUSA 150/350 Choral Society, MUSA 160/360 Marching Band or MUSA 170/370 World Music Ensemble.) For further information, contact the department at 410-704-2836.

GRADUATE PROGRAM

The Department of Music offers two graduate degrees: a Master of Science in Music Education and a Master of Music in either Performance or Composition. A Certificate of Music is also offered. A Certificate in Music: Dalcroze-Orff-Kodaly emphasis may be completed during summer sessions.

Other areas of emphasis may involve the fall, spring and Minimester terms. Entrance requirements and programs of study are available from the department’s graduate program directors and are outlined in the *Graduate Catalog*.



Department of Theatre Arts

Professors: Thomas Cascella, Tom Casciero, Daniel Ettinger, Jay Herzog (*Chair*), Robyn Quick, Juanita Rockwell

Associate Professors: Naoko Maeshiba, Diane Smith-Sadak, Steve Satta, Peter Wray

Assistant Professors: Julie Heneghan, Stephen Nunns (*M.F.A. Director*), David White

Adjunct Faculty: Steve Bauer, Marsha Becker, Frank Brault, Rosiland Cauthen, Ryan Clark, Brett Crawford, Temple Crocker, Donna Fox, Meg Kelly, Michael Klima, Michele Minnick, Margaret Penniman, Dian Perrin, Kyle Prue, Anthony Rosas, Susan Rotkovitz, Tom Shade, Michael Shleifer, Barry Smith, Marianne Wittelsberger, Steve Yeager

Adjunct Professor: Philip Arnoult

Distinguished Visiting Professor of Acting: John Glover

Administrative Assistants: Michele Madden, Marie Robertson

Technical Director: Anthony Rosas

Assistant Technical Director/Electrician: Brandon Ingle

Costumier: Cheryl Partridge

Costume Shop Assistant: Julie Gerhardt

OFFICE

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PROGRAMS OF THE DEPARTMENT

The guiding principle of the Department of Theatre Arts is that our energies and resources remain devoted to the development of our students as creative, cooperative and humanistically educated theatre practitioners. We strive to give our students maximum opportunity to use our theatres, shops and studios to develop their craft.

The undergraduate program is intentionally eclectic, including in its productions as many forms and styles of theatre as possible. The graduate program is specifically focused on the creation of original works that explore interdisciplinary and intercultural techniques.

During the academic year, the Department of Theatre Arts offers the campus and community a full season of plays in its three theatres and in the Dreyer MFA Lab. The department maintains a policy of casting only undergraduate student actors in undergraduate productions.

Specific goals of the undergraduate program are:

- to educate the whole person through the study of theatre as an academic and artistic discipline within the context of liberal arts
- to prepare students for the rigors and demands of professional theatre while also supporting theatre training for students with alternative career aspirations

- to provide an ongoing mentoring relationship between faculty and students designed to nurture a student’s unique artistic voice and passionate point of view
- to foster an appreciation of social, cultural and aesthetic diversity via academic and artistic opportunities

Specific goals of the graduate program are:

- to prepare the artist as a producer of original works, either solo or in small ensembles, who will shape the theatre of the future
- to explore the definition of theatre through interdisciplinary and intercultural studies and experimentation
- to maintain significant participation in the international discussion of new theatre forms and pedagogies

Both programs are committed to interdisciplinary collaborations within the university and in the community. Both strive to maintain and enhance their reputations through active participation in regional, national and international organizations.

Theatre majors receive either a Bachelor of Arts or a Bachelor of Science degree in Theatre. Majors must complete one of three tracks: Acting (Audition required), Design and Production, or Theatre Studies. Students may also minor in Theatre, or double major in another field. All students are assigned advisers in the appropriate areas. The theatre program is time consuming and physically demanding, often requiring participation in evening and weekend activities. Students considering a career in the theatre should recognize that the field is extremely competitive. The Department of Theatre Arts strives to prepare its students for the challenges of professional theatre and encourages versatility through a sound liberal arts education. All degree programs in Theatre are fully accredited by the National Association of Schools of Theatre.

MAJOR IN THEATRE

Theatre majors must complete: 46 units in theatre (at least 18 units at the 300–400 level), 28 units of required courses and 18 elective units in one of the three tracks.

Majors should work with a faculty adviser to select courses in their track. Students must attain a grade equivalent of 2.00 or higher in courses applied to the major. All courses within the acting track require a grade of 3.00. The Pass grading option is not available for courses applied to the major. Students are expected to take lower-division prerequisites before attempting the required upper-division electives.

TRANSFER CREDIT POLICY

Transfer students majoring in Theatre are required to complete a minimum of 20 units of theatre courses at Towson University, with at least 12 units at the upper (300–400) level. Majors need a total of 18 upper-level theatre units, including transfer courses.

Transfer students minoring in Theatre must complete at least 12 units of theatre courses at Towson University, with at least 6 at the upper level. Minors need a total of 12 upper-level theatre units, including transfer courses.

Applicability of transfer work is determined by the department chair. Prospective transfer students should schedule an appointment with the chair at their earliest opportunity.

REQUIREMENTS FOR ALL MAJORS

Theatre Courses (28 units)

THEA 125	Script Analysis (3)
THEA 142	Introduction to Theatre Design (3)
THEA 211	History of Theatre and Drama I (3)
THEA 212	History of Theatre and Drama II (3)
THEA 213	History of Theatre and Drama III (3)
THEA 201	Scene Design I (3)
	or
THEA 255	Lighting Design I (3)
	or
THEA 353	Costume Design I (3)
THEA 331	Directing I (3)
THEA 499	Special Project in Theatre Research (3)
<i>Plus four of the following theatre production courses, as defined by track:</i>	
THEA 492	Theatre Production: Acting (1)
THEA 494	Theatre Production: Scenic Elements (1)
THEA 495	Theatre Production: Lighting, Sound (1)
THEA 496	Theatre Production: Costume (1)
THEA 497	Theatre Production: Running Crew (1)
THEA 498	Theatre Production: Administration (1)

ACTING TRACK (18 UNITS)

Audition/Interview required for entry into this track. Please see www.towson.edu/theatre/auditions for details. The Acting Track is for students who are seeking rigorous preparation for graduate study or for entry-level opportunities in the acting profession. Students may be asked to repeat courses or to take acting elective courses before advancing to the next level. A minimum of 18 units is required to complete the track. Most students elect to take more than the minimum.

Required Courses (18 units)

THEA 105	Movement for the Actor (3)
THEA 110	Acting I for Acting Track (3)
THEA 111	Voice for the Actor I (3)
THEA 202	Acting II (3)
THEA 322	Voice for the Actor II (3)
THEA 335	Impulse Improvisation (3)

Required Theatre Production Courses (4 units)

THEA 492	Theatre Production: Acting (1)
THEA 497	Theatre Production: Running Crew (1)

Plus two of the following:

THEA 494	Theatre Production: Scenic Elements (1)
THEA 495	Theatre Production: Lighting (1)
THEA 496	Theatre Production: Costume (1)
THEA 498	Theatre Production: Administration (1)

Electives

Please refer to the Course Descriptions section of this catalog for a full list of Theatre courses.

Credit for Performance

Students cast in theatre productions sponsored by the Department of Theatre Arts may earn up to 3 units per show by enrolling in THEA 490 Performance Practicum. The number of units allowed per role is determined by the director of the production. Eligible productions are determined by the department. Students may earn a maximum of 9 units of THEA 490.

DESIGN AND PRODUCTION TRACK (18 UNITS)

The Design and Production Track also prepares students for graduate study and/or entry into the theatre professions. Faculty mentors guide qualified students through design and production projects of increasing responsibility, culminating

in mainstage designs and leadership production positions for the most advanced students. The Design and Production Track has an excellent record of internship and career placements.

Required Courses (18 units)

THEA 109	Acting I for Design/Production and Theatre Studies (3)
THEA 201	Scenic Design I (3)
THEA 251	Stagecraft I (3)
THEA 255	Lighting Design I (3)
THEA 353	Costume Design I (3)
<i>One of the following (3 units):</i>	
THEA 351	Stagecraft II (3)
THEA 355	Lighting Design II (3)
THEA 361	Scenic Design II (3)
THEA 453	Costume Design II (3)

Required Theatre Production Courses (4 units)

THEA 494	Theatre Production: Scenic Elements (1)
THEA 495	Theatre Production: Lighting (1)
THEA 496	Theatre Production: Costume (1)
THEA 497	Theatre Production: Running Crew (1)

Electives

THEA 209	Sound Design (3)
THEA 241	Costume, Dress and Society: Egyptian to Elizabethan (3)
THEA 242	Costume, Dress and Society: Elizabethan to 1950 (3)
THEA 245	Makeup Design I (3)
THEA 246	Makeup Design II (3)
THEA 257	Stage Management (3)
THEA 357	Hand Drafting for the Theatre (3)
THEA 358	Property Design and Construction (3)
THEA 433	Advanced Study in Stage Management (1-9)
THEA 443	Structural Design and Safety (3)
THEA 445	Scene Painting (3)
THEA 463	Period Styles for Design (3)
THEA 480	Advanced Study in Theatre Design (1-9)
THEA 487	Professional Theatre Seminar (1-12)
THEA 492	Theatre Production: Acting (1)
THEA 498	Theatre Production: Administration (1)

THEATRE STUDIES TRACK (18 UNITS)

The Theatre Studies Track integrates academic inquiry and performance exploration through a comprehensive study of the art of theatre in relation to multiple communities, from local to global. The track consists of THEA 109, four courses from required categories of study and one elective in an area of individual interest. This well-rounded curriculum will provide a strong foundation for graduate study or entry-level professional work to students with interests in areas such as directing, dramaturgy, theatre administration or stage management. It is also an excellent choice for students who wish to apply their theatre skills to other fields such as education, law or business.

In addition to the courses required of all majors, students in the Theatre Studies Track must complete:

THEA 109	Acting I for Design/Production and Theatre Studies <i>Plus</i> 15 additional units as described below:

One of the following courses in performance creation:

THEA 317	Ensemble Theatre Laboratory (3)
THEA 314	Playwriting (3)

One of the following courses in dramaturgy and theory:

THEA 303	Cultural Diversity in Contemporary Theatre (3)
THEA 307	Theories of Theatre (3)

THEA 380	Topics in Diversity (3)
THEA 491	Production Dramaturgy (3)
<i>One of the following courses in community engagement:</i>	
THEA 310	Theatre for Social Change (3)
THEA 316	Theatre of Crossing Cultures (3)
THEA 401	Community Outreach in Theatre (3)
<i>One of the following courses in theatre organization and administration:</i>	
THEA 257	Stage Management (3)
THEA 306	Theatre Organization and Administration (3)

Required Theatre Production Courses (4 units)

THEA 497	Theatre Production: Running Crew (1)
<i>Plus three of the following:</i>	
THEA 492	Theatre Production: Acting (1)
THEA 494	Theatre Production: Scenic Elements (1)
THEA 495	Theatre Production: Lighting (1)
THEA 496	Theatre Production: Costume (1)
THEA 498	Theatre Production: Administration (1)

Electives

One additional theatre course from student's area of interest.

AREAS OF OPPORTUNITY

Directing

Students who have successfully completed Script Analysis and Directing I may propose to direct a Studio Project under the supervision of a faculty member.

Dramaturgy

The department provides students with the opportunity to serve as production dramaturgs on mainstage shows. Working individually or in teams, students help to analyze the script, provide research to the production team and create outreach projects for audience members.

Movement Theatre

There are opportunities for majors to explore movement theatre in depth.

Stage Management

Students interested in stage management have excellent opportunities to stage-manage studio and then mainstage productions. The stage managing course is offered every fall.

Theatre Arts Administration

Students interested in box office, house managing, publicity and other aspects of theatre administration have the opportunity to gain work experience through independent study and paid positions in the College of Fine Arts and Communication. Internships with local theatres are often available. Students with this interest often complete a Business Administration minor.

Musical Theatre

The Department of Theatre Arts produces a mainstage musical once every two years. Some students may take private voice lessons with the Department of Music, and dance classes with the Department of Dance.

MINOR IN THEATRE

The Theatre minor requires students to take 26 units in theatre. At least 12 of these units must be at the upper division (300 and above).

Required Courses (8 units)

One Acting Course (3)

One Design and Production Course (3)

Two of the following courses:

THEA 492	Theatre Production: Acting (1)
THEA 494	Theatre Production: Scenic Elements (1)
THEA 495	Theatre Production: Lighting or Sound (1)
THEA 496	Theatre Production: Costume (1)
THEA 497	Theatre Production: Running Crew (1)
THEA 498	Theatre Production: Administration (1)

Electives (18 units)

Students are encouraged to discuss a course of study with their adviser.

MEETING CORE CURRICULUM REQUIREMENTS

The Department of Theatre Arts offers courses designed for students who are not majors or minors. These courses are primarily taken to satisfy Core Curriculum requirements. Please see the Core Curriculum requirements in the **University Curriculum** section of this catalog.

CAREER OPPORTUNITIES

Career opportunities in theatre include professional acting, directing, technical theatre, costume, makeup, light and set design, stage managing, theatre management and administration. Theatre alumni have also found careers in related areas such as clothing design, computer-aided design, casting agencies, business management, personnel work, promotional agencies, film and television. Many of our graduates go on to graduate school in theatre, either in preparation for professional theatre careers or college teaching. Towson University does not currently offer a program in theatre education. Students wishing to teach drama in high school should major in one of Towson's accredited secondary education subjects (such as English) and should pursue a minor in Theatre. It is also possible, with careful scheduling, to double major in Theatre and a secondary education program in another major.

SCHOLARSHIPS

A limited number of scholarships are available for continuing students. These include named scholarships such as the Askew, the Charles S. Dutton, the Gillespie/Loeschke, the John Glover, the Audrey Herman, the Nina Hughes, the Walter F. Kramme, the Christopher Legg, the Steve Yeager and the Peter Wray scholarships.

GRADUATE PROGRAM

The Master of Fine Arts in Theatre at Towson University is an experimental, self-directed graduate program designed to challenge, expand and develop participants' artistic vision. Focusing on original solo and ensemble work, it aims to reconstruct a theatre suited to the challenges of the 21st century. Our curriculum includes residencies and workshops by nationally and internationally recognized guest artists and encourages its students to collaborate on interdisciplinary and cross-cultural projects. For more information, see the *TU Graduate Catalog*, call 410-704-3851 or visit www.towson.edu/theatre/grad.





The College of Health Professions

The College of Health Professions enrolls more bachelor's and master's health care and sport-related professional students than any other institution in the state of Maryland and has one of the largest enrollments in the mid-Atlantic region. Our mission is to provide the highest quality of undergraduate and graduate learning experiences in a wide range of health care and sport-related professions that promote and enhance health and human performance. Graduates exhibit the highest ethical principles and professional behaviors in the application of knowledge and critical thinking, the proficient use of skills, the effective use of communication and the meaningful use of technology.

As a college, we emphasize the key values of:

- Excellence
- Ethical and moral conduct
- Collaboration
- Promotion of wellness across the life span
- Worth and dignity of all people
- Lifelong learning

The programs in the college prepare graduates to assume roles in a variety of clinical, teaching, community and sport-related settings. Each program integrates this professional preparation with a rigorous grounding in the liberal arts and sciences. Faculty members support students' development to assure that graduates possess the knowledge, attitudes and skills necessary for career success. Internships and clinical experiences are an essential part of each student's education.

Programs in the college are accredited by appropriate professional and educational accrediting agencies. Graduates of the baccalaureate programs of Athletic Training and Nursing, and the combined bachelor's/master's program in Occupational Therapy are eligible to sit for their respective licensure or certification examinations. In addition to providing courses for students majoring in each of the departments, each department provides courses that are available to all Towson University students.

Charlotte E. Exner, Dean
Marcie Weinstein, Associate Dean

Allied Health
Allied Health/Respiratory Therapy
Athletic Training
Deaf Studies
Exercise Science
Gerontology
Health Care Management
Health Science
 Community Health
 School and Community Health Education
 School Health – Teacher Education
Nursing
Occupational Therapy
Physical Education – Teacher Education
Physical Therapy Preparation
Speech-Language Pathology and Audiology
Sport Management
Optimizing Wellness For Life

COLLEGE OFFICE
Towson Center 337, 410-704-2132
Fax: 410-704-3479
www.towson.edu/chp

Allied Health Program

Associate Professor: Marcie Weinstein (*Collaborative Programs*)

Assistant Professor and Program Director:
Nadine Braunstein

Clinical Assistant Professors: Tamara Burton,
Linda Caplis

OFFICE

Burdick Hall 101, 410-704-4049
www.towson.edu/chp/alliedhealth

PROGRAMS

The Allied Health program offers two undergraduate degree programs designed to prepare allied health clinicians to work effectively in a competitive health care environment. They are: Allied Health, designed for transfer students with completed associate's degrees in an allied health field; and Allied Health/Respiratory Therapy, designed for students without associate's degrees in an allied health field.

ALLIED HEALTH PROGRAM DESCRIPTION

The Allied Health program is designed to give practicing health care professionals the opportunity to advance their careers by expanding their skills in the health care marketplace. Students enter the program with a completed associate's degree from a regionally accredited institution in an allied health field. The program builds on their existing associate's degrees and clinical backgrounds and prepares them to assume additional responsibilities through advanced learning in health care administration and management, organization and funding, ethical and professional issues, and research findings that affect best practice. Graduates are better positioned for promotions, movement into related positions or job expansion.

The Bachelor of Technical or Professional Studies (B.T.P.S.) in Allied Health is a recognized bachelor's degree program designed to facilitate maximum transfer of academic credit for associate's degree graduates from a variety of health and health-related programs. Frequently, graduates from associate's degree allied health programs entering baccalaureate degree programs are not able to transfer health discipline-specific courses to the baccalaureate program. This is not the case with the Allied Health program since most or all of the health discipline-specific courses, up to 64 transfer credits, transfer to the bachelor's degree program. Students may also be able to transfer in other applicable course work that has been taken at other four-year institutions, for a combined total of 90 transfer credits.

Associate's degree graduates of the disciplines listed below are eligible for enrollment in the Allied Health program. Graduates of associate's degree health programs receive a number of different degrees—A.A.S., A.S., A.A., etc.—all of which are eligible for participation in the program.

Cardiovascular technologist
Clinical laboratory technician
Dental hygienist
Diagnostic medical technologist
Dietetic technician
Emergency medical technician – paramedic
Health information technician
Massage therapist

Medical assistant
Nuclear medicine technologist
Nurse
Occupational therapy assistant
Physical therapist assistant
Physician assistant
Radiation therapy technologist
Radiographer
Respiratory therapist
Surgical technologist
Veterinary technologist

ADMISSION REQUIREMENTS

Program applicants must have an earned associate's degree in an allied health discipline and a minimum 2.00 GPA upon transfer. If you hold an associate's degree in a health discipline that is not listed above, please contact the Allied Health program director for further information. You may be eligible for admission.

Program Objectives

The Allied Health degree program is designed to prepare students to:

- assume managerial, supervisory and/or clinical education roles within their respective areas of health practice
- enhance their use of ethically grounded and culturally sensitive practices in their administration and delivery of health services
- effectively use technology and scientific inquiry to support and guide their roles as health practitioners and administrators
- understand, evaluate and influence societal, economic and political forces that impact health practices at the individual, regional and national levels
- communicate effectively with clients, colleagues, agencies and the community in their roles as health practitioners and administrators

Program Requirements

The Allied Health degree program requires the completion of a minimum of 120 units. Lower-division courses from your community college will be applied, as appropriate, up to a maximum of 64 units. A minimum of 32 units must be in upper-division courses at Towson University. The overall program structure follows:

Core Curriculum Requirements

Students must complete Towson University's Core Curriculum requirements as specified in this catalog. In general, a graduate from one of the Maryland community college associate's degree programs included in the Allied Health Program will need to complete several Core Curriculum courses in addition to those that are transferred. Some of the required Core Curriculum courses will be satisfied through program core and track requirements.

Required Courses (18 units)

All students must complete 18 units of required courses in the program. Italicized courses are available online.

HILTH 207	<i>Health Care in the U.S. (3)</i>
AHLT 310	<i>Management for the Allied Health Professional (3)</i>
	or
AHLT 311	<i>Human Resource Management for the Allied Health Professional (3)</i>

AHLT 320	<i>Understanding Evidence Based Practice (3)</i>
AHLT 440	<i>Technical and Professional Issues in Allied Health (3)</i>
AHLT 445	<i>Research Methods in Allied Health (3)</i>
NURS 416	<i>Multicultural Health Care (3)</i>

Tracks (18 units)

Students choose one of six tracks; descriptions and courses that satisfy each track are listed below. Other course selections are possible, subject to the approval of the program director. Each student's program of study and the courses he or she chooses must be approved by an Allied Health adviser.

Students are required to take a capstone course (AHLT 4XX) at or near the end of their Towson studies. This course is required among the 18 units of the track. Students are also required to take an ethics class in their track.

Students are able to pursue a minor in a number of different areas along with the Allied Health major by selecting specific tracks. Minors in Health Care Management and Family Studies are examples. Note: students may have additional units to complete beyond the 18 required to earn the minor. Students may also select the Science and Professional Preparation track if planning to attend graduate school, selecting courses within the track that help satisfy requirements for their graduate program.

Lists of courses in the tracks below are representative, not comprehensive. Students in any track may also complete units as AHLT 495/496 Allied Health Independent Study.

Administration/Management (18 units)

Students may choose from a broad array of courses in the fields of healthcare management, accounting, management, marketing, finance and related areas. (This track may be taken completely online. Courses which may be taken online are *italicized*.)

Required for track:

HCMN 441	<i>Legal and Ethical Issues in Health Administration (3)</i>
AHLT 4XX	<i>Capstone (3)</i>

Course possibilities include:

AHLT 310	<i>Management for the Allied Health Professional (3)</i>
AHLT 311	<i>Human Resource Management for Allied Health Professionals (3)</i>
AHLT 313	<i>Clinical Program Planning and Evaluation (3)</i>
AHLT 315	<i>Financial Management for Allied Health Professionals (3)</i>
AHLT 495/496	<i>Allied Health Independent Study (3)</i>
ECON 339	<i>Health Economics (3)</i>
ENGL 319	<i>Organizational Communications (3)</i>
HCMN 415	<i>Financing and Organization of Health Care Services in the U.S. (3)</i>
HCMN 441	<i>Legal and Ethical Issues in Health Administration (3)</i>
HCMN 305	<i>Community Health Administration (3)*</i>
HCMN 413	<i>Services and Housing for the Long-Term Care Consumer (3)*</i>
HCMN 419	<i>Long-Term Care Administration (3)*</i>
MNGT 361	<i>Principles of Management (3)</i>
MKTG 341	<i>Principles of Marketing (3)</i>

*Health Care Management minor status required

Students choosing this track may be able to earn a minor in Health Care Management.

Education (18 units)

Courses in health education or other areas of education may be selected to focus on clinical patient education or academic teaching.

Required for track:

PHIL 361	Biomedical Ethics (3)
AHLT 4XX	Capstone (3)

Course possibilities include:

EDUC 401	Foundations of Education (3)
ENGL 319	Organizational Communications (3)
HLTH 311	Chronic and Communicable Disease (3)
HLTH 222	Foundations of Health Education and Health Behavior (3)
HLTH 315	Curriculum and Planning in Health Education (3)
HLTH 425	Instructional Methods in Health Education (3)
HLTH 430	Organization, Implementation and Management of Health Education Programs (3)
HLTH 432	Measurement and Evaluation in Health Education (3)
PSYC 305	Psychology of Learning (3)

Health Promotion, Wellness, Prevention and Community Health Education (18 units)

Appropriate courses in health science, kinesiology, occupational therapy and other departments may be selected.

Required for track:

PHIL 361	Biomedical Ethics (3)
AHLT 4XX	Capstone (3)

Course possibilities include:

AHLT 313	Clinical Program Planning and Evaluation (3)
GERO 310	Social Issues in Human Lifestyle Technology (3)
GERO 330	Community Planning for an Aging Society (3)
GERO 367	Death, Dying and Bereavement (3)
HLTH 311	Chronic and Communicable Disease (3)
HLTH 331	Nutrition for Health Professionals (3)
KNES 301	Introduction to Recreation and Leisure (3)
KNES 455	Physical Activity Programming for the Older Adult (3)
OCTH 205	Alternative and Complimentary Healthcare (3)
OCTH 301	Genetics, Health and Society (3)
PSYC 311	Behavior Modification (3)
PSYC 315	Motivation (3)
PSYC 405	The Psychology of Aging (3)
PSYC 419	Humanistic Psychology (3)
SOCI 359	Social Gerontology (3)
WMST 336	Women and Medicine (3)

Family Studies (18 units)

Family studies is an interdisciplinary area that includes courses from the family studies (FMST) program as well as a variety of courses from other departments in the university.

Required for track:

PHIL 361	Biomedical Ethics (3)
AHLT 4XX	Capstone (3)

Course possibilities include:

FMST 301	Family Relationships (3)
FMST 302	Theories of Family Functioning (3)
FMST 303	Trends in Contemporary Family Life (3)
FMST 340	The Hospitalized Child and family (3)
FMST 380	Family Law (3)
FMST 387	Community Services for Families (3)
GERO 367	Death, Dying and Bereavement (3)
PSYC 405	The Psychology of Aging (3)
PSYC 451	Introduction to the Exceptional Child (3)

WMST 335	Women, Work and Family (3)
WMST 336	Women and Medicine (3)

Science and Professional Preparation (18 units)

Students interested in pursuing graduate study in a health profession or science-related area may wish to use this track to complete additional coursework in the natural sciences, mathematics, and related areas that may be required for graduate school or professional school preparation. These courses must be approved by the student's faculty adviser.

Required for track:

PHIL 361	Biomedical Ethics (3)
AHLT 4XX	Capstone (3)

Course possibilities include:

BIOL 190	Introductory Biology for Health Professionals (4)
BIOL 213	Human Anatomy and Physiology I (4)
BIOL 214	Human Anatomy and Physiology II (4)
BIOL 315	Medical Microbiology (4)
BIOL 301	Field Natural Science (4)
BIOL 303	Life Sciences (3)
BIOL 321	Biology of Women (3)
BIOL 322	Biotechnology and Society (3)
BIOL 323	Genes, Evolution and Morality (3)
CHEM 105	Chemistry for Allied Health Professions I (4)
CHEM 106	Chemistry for Allied Health Professions II (4)
CHEM 351	Biochemistry I (3)
CHEM 356	Biochemistry Laboratory (2)
ECON 205	Statistics for Business and Economics I (3)
MATH 231	Basic Statistics (3)
PHYS 202	General Physics for the Health Sciences (5)
PHYS 211	General Physics I (4)
PHYS 212	General Physics II (4)
PSYC 203	Human Development (3)
PSYC 212	Behavioral Statistics (4)
PSYC 361	Abnormal Psychology (3)

Advanced Respiratory Therapy (18 units)

For the respiratory care practitioner, these courses offer advanced clinical competencies, as well as the opportunity to pursue individual practica in clinical practice, education, administration or research.

Required for track:

HCMN 441	Legal and Ethical Issues in Health Administration (3)
AHLT 4XX	Capstone (3)

Course possibilities include:

AHLT 405	Systemic Disease Processes and Interventions in Respiratory Care (3)
AHLT 407	Neonatal and Pediatric Respiratory Care (3)
AHLT 409	Sleep and Rehabilitative Respiratory Care (3)
AHLT 413	Pharmacology and Therapeutics (3)
AHLT 411	Cardiopulmonary Disease and Pathophysiology (3)

ALLIED HEALTH/RESPIRATORY THERAPY PROGRAM DESCRIPTION

The Allied Health/Respiratory Therapy program is designed as a dual degree program whereby students are simultaneously enrolled at Towson University to earn a Bachelor's of Technical or Professional Studies (B.T.P.S.) Degree in Allied Health, and at the Community College of Baltimore County (CCBC) to earn an Applied Associate's of Science Degree (A.A.S.) in Respiratory Care Therapy. Students complete the curriculum with two interdependent degrees—completion of the B.T.P.S. degree requires the completion of the A.A.S. degree.

Respiratory therapy is an allied health discipline in which practitioners work in a variety of health care settings to care for patients with breathing or other cardiopulmonary disorders. Working under the direct supervision of physicians, respiratory therapists assume primary responsibility for treatments and procedures related to respiratory problems of patients. Their work includes: managing ventilators and artificial airway devices, performing chest physical exams as part of diagnosing breathing problems, educating patients and families about lung disease, analyzing breath and blood samples to determine oxygen levels, and consulting with physicians to recommend changes in therapy.

ADMISSION REQUIREMENTS

The Allied Health/Respiratory Therapy major is a screened program with a maximum of 16 students accepted annually. Admission to Towson University does not guarantee admission to this major. Interested students declare Allied Health as their major in their first year, and undergo screening by CCBC's Office of Selective Admissions into the Respiratory Care Therapy program in the spring term of their first year. Admission to the major requires: (a) completion of a minimum of 12 undergraduate credits with an overall GPA of 2.0 or better; (b) GPA of 2.0 or better in the three screening courses (see below); and (c) an interview with the CCBC Program Director. Applications to the program receive best consideration if they are received by March 15; applications are reviewed on a rolling basis through the spring term until the class is filled.

Students who wish to be admitted into the major must complete the following steps during their first year prior to acceptance into the respiratory therapy portion of the program:

1. Officially declare interest in the Allied Health major by meeting with the Allied Health Program Director. Contact the program's main office in the CHP Office of Collaborative Programs at 410-704-4049. Students should contact the office by October 15 who wish to apply to the CCBC Respiratory Therapy program in the spring for the following fall start.
2. Complete three prerequisite courses by the end of the spring term of application. They are: CHEM 105 Chemistry for Health Professions I; ENGL 102 Writing for a Liberal Education; and BIOL 190 Introductory Biology for the Health Professions. By the time of application students must be enrolled in or have completed ENGL 102 and a minimum of one of the two science courses; the other science course must be completed during the term of application.
3. Contact the CCBC Respiratory Care Therapy Program Director Barbara Schenk at 443-840-1760 regarding program application and interview.

NOTE: Students may declare the Allied Health major prior to their acceptance into the CCBC Respiratory Care Therapy program and be enrolled in coursework at TU that is required for the Allied Health program. However, students must successfully complete the A.A.S. degree program in Respiratory Care Therapy at CCBC in order to graduate with the TU B.T.P.S. degree in Allied Health. Students who do not successfully complete the A.A.S. degree program in Respiratory Care Therapy at CCBC may not graduate with the TU

B.T.P.S. degree in Allied Health. CCBC Respiratory Care Therapy credits are a required part of the TU Allied Health degree and must be transferred to TU in completion of Allied Health program requirements. A number of Core Curriculum and required courses for the Respiratory Care Therapy degree will be taken at Towson and must be transferred from TU to CCBC. A Memorandum of Understanding between the two institutions articulates the provisions of this dual degree agreement.

Students will take the following courses at CCBC, which will be transferred to TU as part of Allied Health program completion:

RESP 102	Basic Respiratory Care (4)
RESP 103	Therapeutics and Pathology (3)
RESP 104	Clinical Practicum I (3)
RESP 200	Clinical Practicum II (2)
RESP 201	Specialized Assessment of Oxygenation and Ventilation (3)
RESP 202	Principles of Ventilation Management (4)
RESP 203	Clinical Practicum III (5)
RESP 204	Advanced Principles and Practices of Respiratory Care (4)
RESP 205	Respiratory Care Specialists (3)
RESP 206	Clinical Practicum IV (5)

MAJOR IN ALLIED HEALTH/ RESPIRATORY THERAPY

In addition to Core Curriculum requirements for CCBC and Core Curriculum requirements for Towson, Allied Health/Respiratory Therapy students must complete 72 units in the Allied Health major, which include 36 CCBC units in respiratory therapy courses. However, 9 of the Allied Health units may meet Core Curriculum requirements. Therefore, additional elective units may be required to earn the minimum 120 units necessary for the B.T.P.S. degree, including the 32 upper-division units required to graduate from Towson. Courses applicable toward the major may not be taken under the Pass grading option and must be completed with a grade of 2.00 or better. Courses identified as AHLT 200 are taken on the CCBC-Essex campus; all other courses are taken on the Towson University campus.

Because requirements may be periodically revised, the student is responsible to make sure that he or she is working with the most current materials. Contact the Allied Health Program Director for assistance with curriculum planning.

Students will register for all courses, including AHLT 200, through Towson University, and will have an adviser on each campus. Once accepted into the dual enrollment program, students will have full access to all facilities and student services on both campuses. Students may complete the A.A.S. degree program requirements in Respiratory Care Therapy prior to the completion of the B.T.P.S. degree in Allied Health requirements, and may sit for their national certification exam upon A.A.S. program completion.

RECOMMENDED COURSE SEQUENCE FOR ALLIED HEALTH/ RESPIRATORY THERAPY STUDENTS

(NOTE: Order and term of RESP courses are required.)

First Year

First Term (Fall)

CHEM 105	Chemistry for Allied Health Professionals (4)
ENGL 102	Writing for a Liberal Education (3)
SOCI 101	Introduction to Sociology (3)
	or
FMST 101	Introduction to Family Studies (3)
	or
GERO 101	Introduction to Gerontology (3)
HLTH 101	Wellness for a Diverse Society (3)
Core Curriculum courses	

Second Term (Spring)

MATH 105	Mathematical Ideas (3)
	or
MATH 115	Basic Mathematics for the Sciences (3)
PSYC 101	Introduction to Psychology (3)
COSC 111	Using Information Effectively in the Computing Sciences (3)
	or
HLTH 207	Health Care in the U.S. (3) (online)
BIO 190	Introductory Biology for the Health Professions (4)

Second Year

Third Term (Fall)

RESP 102	Basic Respiratory Care (4)
BIO 213	Human Anatomy and Physiology I (4)
COMM 131	Fundamentals of Speech Communication (3)
Core Curriculum courses	

Fourth Term (Spring)

RESP 103	Therapeutics and Pathology (3)
RESP 104	Clinical Practicum I (3)
BIO 214	Human Anatomy and Physiology II (4)
Core Curriculum courses	

Summer

RESP 200	Clinical Practicum II (2)
AHLT 320	Understanding Evidence-Based Practice (3) (online)

Third Year

Fifth Term (Fall)

RESP 201	Specialized Assessment of Oxygenation and Ventilation (3)
RESP 202	Principles of Ventilation Management (4)
RESP 203	Clinical Practicum III (5)
NURS 416	Multicultural Health Care (online) (3)

Sixth Term (Spring)

RESP 204	Advanced Principles and Practices of Respiratory Care (4)
RESP 205	Respiratory Care Specialists (3)
RESP 206	Clinical Practicum IV (5)
HCMN 441	Legal and Ethical Issues in Health Administration (online) (3)

Fourth Year

Seventh Term (Fall)

AHLT 405	Systemic Disease Processes and Interventions In Respiratory Therapy (3) (online)
AHLT 407	Neonatal and Pediatric Respiratory Care (3) (online)
AHLT 310	Management for Allied Health Professionals (3) (online)
AHLT 445	Research Methods in Allied Health (3) (online)
Core Curriculum courses	

Eighth Term (Spring)

AHLT 409	Sleep and Rehabilitative Respiratory Care (3) (online)
AHLT 411	Cardiopulmonary Disease and Pathophysiology (3) (online)
AHLT 413	Pharmacology and Therapeutics (3) (online)
AHLT 440	Technical and Professional Issues in Allied Health (3) (online)

FINANCIAL AID

While the program has no scholarships specifically designated for the program, students in the program are eligible for a number of merit and need-based financial aid awards through Towson University. For information on available aid, please contact the Towson University Financial Aid Office at (410) 704-4236, or visit the office's website at www.towson.edu/finaid.

FOR MORE INFORMATION

For further information concerning the Allied Health Program, including specifics on how course work completed at community colleges will apply toward the program, contact Dr. Nadine Braunstein in the Collaborative Programs office at Towson University by phone, 410-704-4049, or e-mail, nbraunstein@towson.edu.



Department of Audiology, Speech- Language Pathology and Deaf Studies

Professors: Diana Emanuel, Sharon Glennen
(*Chair*), Eva Hester

Associate Professors: Peggy Korczak, Mark Pellowski

Assistant Professors: Judith Blackburn, Sheryl
Cooper, Jody Cripps, Paul Evitts, Karen Fallon,
Brian Kreisman, Elgustus Polite, Stephanie
Nagle, Jennifer Smart

Clinical Associate Professor: Celia Bassich

Clinical Assistant Professors: Tricia Ashby-Scabis,
Karen Helmuth-Day, Iona Johnson,
Stephen Pallett

Clinical Administrators: Karen Pottash, Candace
Robinson

Lecturers: Donna Coons, Lee Frame

OFFICE

Van Bokkelen Hall 105, 410-704-4153
www.towson.edu/asld

PROGRAMS OF THE DEPARTMENT

The Audiology, Speech-Language Pathology and Deaf Studies Department offers undergraduate and graduate degree programs devoted to the enhancement of all forms of human communication. The blending of three distinct programs into one department creates a unique learning experience for undergraduate and graduate students.

The Speech-Language Pathology and Audiology major is a pre-professional degree program designed for students who want to pursue careers as audiologists or speech-language pathologists. Both careers require graduate study. The undergraduate degree prepares students for admission into both types of graduate programs. The Deaf Studies major is designed for students who want to learn about the culture and community of the Deaf while gaining proficiency in American Sign Language. Students can choose between two major focus areas: Human Services or Deaf Culture. The department is one of a few programs in the nation to offer a combined undergraduate degree in Deaf Studies and Speech-Language Pathology and Audiology. The combined major prepares students for further study in either field and is designed to be completed in four years. We also offer a combined major in Deaf Studies and Elementary Education. Interested students should check the department website for additional information about these programs, www.towson.edu/asld.

In order to continue in and graduate with a department major, students are required to earn a grade equivalent of 2.00 or higher in all required pre-major or major courses, in addition to attaining the overall cumulative GPA required by the university. Any student earning a grade equivalent below a 2.00 in any required major course must repeat the course. Those who earn a grade equivalent below a 2.00 in more than one major course are not allowed to continue in the program.

STUDENT ACTIVITIES

Students in Speech-Language Pathology and Audiology are encouraged to participate in the campus

chapter of the National Student Speech-Language-Hearing Association. In addition, Deaf Studies students are welcome to join the ASL Club.

SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY ADMISSION REQUIREMENTS

The Speech-Language Pathology and Audiology (SPPA) B.S. degree is a screened major with a maximum of 70 students admitted each year. Admission to Towson University does not guarantee admission into this major. Interested students begin the program as "Premajor" students (PSPA major), then apply for admission to the SPPA major once the premajor courses are completed. Admission to the SPPA major requires: a) completing all of the admission steps listed below, b) a minimum GPA of 2.80 or better in 5 premajor courses (see below), and c) a minimum GPA of 2.50 or better for the last 30 credits of courses. Students are admitted into the major in June of each year. Students who wish to be admitted to the major must complete the following steps during the PSPA premajor year.

1. Officially declare the PSPA premajor by meeting with an adviser in the department. Contact the department's main office to schedule an appointment at 410-704-4153. Transfer students should contact the department as soon as they are admitted to the university, and no later than March 31 to be considered for admission to the SPPA major by the following fall. For more information about transfer student procedures, please visit www.towson.edu/asld/undergraduate/speechaudiology/transferstudentpolicy.asp
2. Complete 5 premajor courses with a grade of 2.00 or better before consideration for admission to the major. Courses can be taken at Towson University or transferred from other universities. See the admission requirements in this catalog for more information.

Premajor Course Requirements (16–19 units)

1. ENGL 102 Writing for a Liberal Education or ENGL 190 (3)
2. PSYC 101 Introduction to Psychology or PSYC 102 (3)
3. MATH 111 Algebra for Applications (3) or MATH 109 (3) Transition to Algebra for Applications or MATH 115 Basic Mathematics for the Sciences (3) or MATH 119 Pre-Calculus (4)
4. BIOL 190 Biology for Health Science Major (4) or BIOL 201 Cellular Biology and Genetics (4)
5. One course from Category A or B (students must complete both categories as a graduation requirement but only one category during the premajor year)

Category A:	Physical Science (4–5): CHEM 105, PHYS 202 or PHYS 211
Category B:	Social/Behavioral Science (3): SOCI 101/102, ANTH 207/208 or EDUC 203
6. Complete a minimum of 27 units of study (including the 5 premajor courses)
7. Complete a speech, language, hearing and voice screening at the Towson University Speech, Language and Hearing Center. Screenings are held during the first week of each term. Transfer students who are not screened during the premajor year must

complete the screening during their first term of enrollment at Towson University. Students who have communication disorders or dialects of English that would affect their ability to interact with clients will be encouraged to seek treatment.

Admission decisions are made in early June. All materials are due in the main office by June 1. Transfer students must send official transcripts to the department by this date if their transfer courses have not been processed by Towson University. Eligible students are ranked using the combined average of the premajor GPA and 30-credit GPA. The top 70 students are then selected for admission into the major. Students who do not get into the program can choose to try again the following year. For more information, refer to the admission requirements in this catalog, or the department Web site, www.towson.edu/asld.

SPPA PROGRAMS FOR STUDENTS WITH UNDERGRADUATE DEGREES IN OTHER MAJORS

The department offers three programs for students who do not have undergraduate degrees in Speech-Language Pathology and Audiology. These are the Three-Year Graduate Program in Speech-Language Pathology, Graduate Program in Audiology, and the Second Bachelor's Degree Program.

Speech Language Pathology Three-Year Graduate Program

Students with an undergraduate GPA of 3.50 or higher are eligible to apply to the Three-Year Graduate Program in Speech-Language Pathology. This program is only for full-time study. Students accepted into the program complete undergraduate SPPA courses during their first year and must maintain a GPA of 3.50 or higher. They begin taking graduate courses by the second year. Students apply directly to the College of Graduate Studies and Research by January 15 and must submit GRE scores. For more information contact the graduate program director in Speech-Language Pathology at 410-704-4153.

Graduate Program in Audiology

Students with an undergraduate GPA of 3.2 or higher are eligible to apply to the Doctor of Audiology Graduate Program. Students must complete seven prerequisite courses prior to admission, or while they are completing the graduate degree. Students apply directly to the College of Graduate Studies and Research by February 1 and must submit GRE scores. For more information contact the graduate program director in Audiology at 410-704-4153.

Second Bachelor's Degree Program

The second bachelor's degree is a 49-unit program for students who are not eligible for the Graduate Program. This is a two-year, full-time undergraduate program beginning in the fall term only. Second Bachelor's Degree students take all required courses with the exception of already completed courses from the first degree. Graduates are eligible to apply to any graduate program. Students must apply to the university for admission to this program, then declare the major. Application information is available from the Second Bachelor's Degree Office at 410-704-3974. The application deadline is April 30.

MAJOR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

In addition to Core Curriculum requirements, Speech-Language Pathology and Audiology majors must complete 73 to 75 units. The Pass/Fail grading option may not be applied to any SPPA course or required major course. All required courses must be completed with a grade of 2.00 or better. Some SPPA major required courses and electives can be taken during the premajor year and are indicated with a + after the course title. A criminal background check must be completed and on file prior to beginning practicum (SPPA 487).

Premajor Required Course Sequence (16–19 units)

ENGL 102	Writing for a Liberal Education (or ENGL 190) (3)
PSYC 101	Introduction to Psychology (or PSYC 102) (3)

Choose one of the following:

MATH 109	Transition to Algebra for Applications (3)
MATH 111	Algebra for Applications (3)
MATH 115	Basic Mathematics for the Sciences (3)
MATH 119	Pre-Calculus (4)

Choose one of the following:

BIOL 190	Introductory Biology for the Health Professions (4)

BIOL 201	Cellular Biology and Genetics (4)

and

One course from Category A or B below (Students must complete both categories as a graduation requirement but only one category during the premajor year.)

Category A: Physical Science (4–5): CHEM 105, CHEM 115, PHYS 202 or PHYS 211

Category B: Social/Behavioral Science (3): SOCI 101/102, ANTH 207/208 or EDUC 203

SPPA Major Required Courses (53–55 units)

BIOL 213	Human Anatomy and Physiology I (4) +
DFST 104	American Sign Language I (3) +
PSYC 212	Behavioral Statistics (4) +
SPPA 101	Introduction to Human Communication Disorders (3) +
SPPA 200	Anatomy and Physiology of the Auditory and Vocal Mechanism (3)
SPPA 210	Phonetics of American English (3)
SPPA 215	Language Development in Children (3)
SPPA 302	Articulation and Phonological Disorders (3)
SPPA 303	Hearing Science (3)
SPPA 304	Language Disorders in Children (3)
SPPA 313	Speech Science (3)
SPPA 321	Introduction to Audiology (3)
SPPA 325	Introduction to Aural Rehabilitation (3)
SPPA 416	Clinical Observations and Techniques (3)
SPPA 417	Research Writing in Communication Disorders (3)

plus

SPPA 306	Neurological and Functional Disorders of Speech, Language and Voice (3) or SPPA 341 Clinical Audiology (3)

plus

Remaining Category A or B course (3–5)
(see premajor sequence above)

SPPA Electives (3 units required)

ENGL 251	Applied Grammar (3) +
PSYC 205	Introduction to the Helping Relationship (3) +
SPPA 306	Neurological and Functional Disorders of Speech, Language and Voice (3) (only if SPPA 341 is completed)
SPPA 310	Introduction to Stuttering (3)
SPPA 341	Clinical Audiology (3) (only if SPPA 306 is completed)

SPPA 487	Clinical Internship (3)
SPPA 496	Independent Study in Speech-Language Pathology and Audiology (1–4)
SPPA 497	Directed Readings in Speech-Language Pathology and Audiology (1–4)
SPPA 498	Proctoring in Speech-Language Pathology and Audiology (3)

MAJOR IN DEAF STUDIES

The Deaf Studies major consists of 57 units in addition to the Core Curriculum requirements. The major consists of 36 units of required courses that all students take. Students then select one of two Deaf Studies focus areas, or one of two combined majors. Deaf Studies focus areas include Human Services and Deaf Culture. Students in Deaf Studies focus areas take an additional 21 units to complete the degree (57 units total). The combined major options are (1) Deaf Studies and Speech-Language Pathology and Audiology, and (2) Deaf Studies and Elementary Education. Students must complete all required program courses with a grade equivalent of 2.00 or higher. The Pass/Fail grading option may not be applied to any DFST/SPPA course or required major course. All courses in ASL (DFST 104, 105, 204, 205, 304) must be passed with a grade of 3.00 or higher. The maximum number of Credit for Prior Learning (CPL) units the department will accept is 15. In addition, all students must complete an internship (DFST 410). Students must pass the American Sign Language Proficiency Interview (ASL PI) with a score of 2+ or higher to take DFST 410. If the internship site requires a criminal background check, students must complete the check and have it on file before beginning the internship.

Core Requirements (33 units)

DFST 101	Introduction to Deaf Culture (3)
DFST 104	American Sign Language I (3)
DFST 105	American Sign Language II (3)
DFST 204	American Sign Language III (3)
DFST 205	American Sign Language IV (3)
DFST 304	American Sign Language V (3)
DFST 308	Fingerspelling/Numbers (3)
DFST 345	Deaf Culture (3)
DFST 410	Internship in Deaf Studies (3)
PSYC 101/102	Introduction to Psychology (3)
SOCI 101/102	Introduction to Sociology (3)

DFST Major Focus Area Requirements (21 units)

There are two focus areas for the Deaf Studies major. Requirements and electives vary with each track.

DFST Human Services Focus Area Requirements (21 units)**Required Courses (12 units)**

DFST 220	Introduction to Interpreting (3)
DFST 311	Audition: Science and Social Impact (3)
DFST 318	Social Services in the Deaf Community (3)
DFST 430	Linguistics of American Sign Language (3)

Electives (9 units)

COMM 315	Business/Professional Communication (3)
DFST 309	Introduction to Deafblind Culture and Communication (3)
DFST 375	Deaf History (3)
DFST 425	Deaf Literature (3)
DFST 495	Service Learning in Deaf Studies (3)
DFST 435	Development of Signed Languages and Reading (3)
ENGL 310	Writing Arguments (3)

HLTH 208	Mental Health, Stress and Crisis Intervention (3)
PSYC 205	Helping Relationships (3)
PSYC 203	Human Development (3)
PSYC 325	Social Psychology (3)
PSYC 361	Abnormal Psychology (3)
SPED 301	Introduction to Special Education K-12 (3)
SOCI 343	Minority Groups (3)

DFST Deaf Culture Focus Area Requirements (21 units)**Required Courses (12 units)**

CLST 201	Intro to Cultural Studies (3)
DFST 375	Deaf History (3)
DFST 425	Deaf Literature (3)
DFST 430	Linguistics of ASL (3)

Electives (9 units)

ANTH 207	Introduction to Human Culture (3)
CLST 303	Identity and Culture (3)
DFST 309	Introduction to Deafblind Culture and Communication (3)
DFST 318	Social Services in the Deaf Community (3)
DFST 435	Development of Signed Languages and Reading (3)
PSYC 325	Social Psychology (3)
SOCI 391	Introduction to Research Methods (3)
SOCI 343	Minority Groups (3)

COMBINED MAJOR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY AND DEAF STUDIES

Speech Language Pathology and Audiology (SPPA) is a screened major. Students wanting to combine it with the DFST major need to complete the pre-major requirements (PSPA) for the Speech-Language Pathology and Audiology major and apply for full admission into SPPA. Because the requirements of the SPPA major are relatively fixed, students are encouraged to make the decision to complete the combined SPPA-DFST major in the freshman year. Students who are not admitted to the SPPA major can continue in DFST since it is not screened. In addition to Core Curriculum requirements, students admitted to this option must complete 95–100 units with a grade equivalent of 2.00 or higher. Some SPPA major required courses and electives can be taken during the premajor year and are indicated with a + after the course title.

Premajor Required Course Sequence (16–19 units)

ENGL 102	Writing for a Liberal Education (or ENGL 190) (3)
PSYC 101/102	Introduction to Psychology (or PSYC 102) (3)

Choose one of the following:

MATH 109	Transition to Algebra for Applications (3)
MATH 111	Algebra for Applications (3)
MATH 115	Basic Mathematics for the Sciences (3)
MATH 119	Pre-Calculus (4)

Choose one of the following:

BIOL 190	Introductory Biology for the Health Professions (4)

BIOL 201	Cellular Biology and Genetics (4)

and

One course from Category A or B below (Students must complete both categories as a graduation requirement but only one category during the premajor year.)

Category A: Physical Science (4–5):

CHEM 105, CHEM 115, PHYS 202 or PHYS 211

Category B: Social/Behavioral Science (3):

SOCI 101/102, ANTH 207/208 or EDUC 203

DFST-SPPA Major Required Courses (83–84 units)

BIOL 213	Human Anatomy and Physiology I (4) +
DFST 101	Introduction to Deaf Culture (3)
DFST 104	American Sign Language I (3) +
DFST 105	American Sign Language II (3)
DFST 204	American Sign Language III (3)
DFST 205	American Sign Language IV (3)
DFST 304	American Sign Language V (3)
DFST 345	Deaf Culture (3)
DFST 410	Internship in Deafness (3)
DFST 430	Linguistics of American Sign Language (3)
DFST 435	Development of Signed Languages and Reading Skills for Deaf Children (3)
PSYC 205	Introduction to Helping Relationships (3) +
PSYC 212	Behavioral Statistics (4) +
SPPA 101	Introduction to Human Communication Disorders (3) +
SPPA 200	Anatomy and Physiology of the Auditory and Vocal Mechanism (3)
SPPA 210	Phonetics of American English (3)
SPPA 215	Language Development in Children (3)
SPPA 302	Articulation and Phonological Disorders (3)
SPPA 303	Hearing Science (3)
SPPA 304	Language Disorders in Children (3)
SPPA 313	Speech Science (3)
SPPA 321	Introduction to Audiology (3)
SPPA 325	Introduction to Aural Rehabilitation (3)
SPPA 416	Clinical Observations and Techniques (3)
SPPA 417	Research Writing in Communication Disorders (3)*
plus	
SPPA 306	Neurological and Functional Disorders of Speech, Language and Voice (3)
or	
SPPA 341	Clinical Audiology (3)
plus	
Remaining Category A or B course (3–5)	
(see premajor sequence above)*	

COMBINED MAJOR IN DEAF STUDIES AND ELEMENTARY EDUCATION

Students wanting to combine a major in Deaf Studies (DFST) with a major in Elementary Education (ELED) must separately declare the majors with each department. Because the requirements of the ELED major are relatively fixed, students are encouraged to make the decision to complete the combined DFST-ELED major in the freshman year. The Elementary Education major is divided into a pre-professional program and professional education courses. Students must separately apply for acceptance into the professional education courses. Refer to the Elementary Education major information listed in this catalog for more information.

Degree Requirements

Academic Content

Courses to be taken before formal admission to the professional education sequence:

Term 1: Fall (16 units)

ENGL 102	Writing for a Liberal Education (3)
HIST 145	History of the U.S. to the Mid-19th Century (3)
or	
HIST 146	History of the U.S. since the Mid-19th Century (3)
MATH 204	Mathematical Concepts and Structures I (4)
PSYC 101	Introduction to Psychology (3)
DFST 104	American Sign Language I (3)

Term 2: Spring (16 units)

BIOL 115	Biological Science I (4)
DFST 101	Introduction to Deaf Culture (3)
DFST 105	American Sign Language II (3)
GEOG 102	World Regional Geography (3)
or	
GEOG 105	Geography of International Affairs (3)
	Towson Seminar

Term 3: Fall (13 units)

DFST 204	American Sign Language III (3)
PSYC 201	Educational Psychology (3)
PHSC 101	Physical Science I (4)
SPPA 350	Language Development and Disorders in Educational Settings (3)
or	
ECED 201	Intervention and the Young Child (3)
or	
PSYC 203	Human Development (3)
ELED 201	School and American Society (3)

Term 4: Spring (16 units) (student takes PRAXIS)

DFST 311	Audition: Science and Social Impact (3)
DFST 205	American Sign Language IV (3)
EDUC 203	Teaching and Learning in a Diverse Society (3)
MATH 205	Mathematical Concepts Structures II (4)
ELED 320	Foundations of Writing and Other Language Arts (3)

Term 5: Fall (16 units) (student applies to ELED program this term)

DFST 308	Fingerspelling and Numbers (3)
DFST 304	American Sign Language V (3)
ELED 322	Foundations of Reading and Other Language Arts (3)
MATH 251	Elements of Geometry (4)
SPED 301	Introduction to Special Education K-12 (3)

Creativity and Creative Development (Core 4) Requirement: In addition to the courses listed for Terms 1–5, students must take a course that fulfills the Creativity and Creative Development Core Curriculum requirement. This course can be taken during the fall, spring, summer or Minimester. It is recommended that the course be completed before beginning the Professional Education Courses.

Students are responsible for ensuring that they meet the content requirements outlined above and the university's Core Curriculum requirements. Students must meet admission requirements for ELED in the term prior to Term 6. DFST 304 should be completed before entering ELED Professional Education Level I. The combined major cannot accommodate scheduling DFST courses at Professional Education Level II or higher with the exception of DFST 410.

Professional Education Courses

Term 6, LEVEL I: Spring (14–16 units)

DFST 345	Deaf Culture (3)
ELED 323	Principles and Practices in Reading and Language Arts (3)
ELED 363	Language and Literacy Internship (3)
EDUC 417	Children's Literature and Other Materials for Reading and Language Arts in Elementary School (3)
DFST 435	Development of Signed Languages and Reading Skills for Deaf Children (3)

Term 7, LEVEL II: Fall (17 units)

BIOL 303	Life Sciences (3)
or	
PHSC 303	Earth-Space Science (3)
MATH 323	Teaching Math in Elementary School (3)
MATH 324	Supervised Observation/Participation in Elementary School Mathematics (2)
SCIE 376	Teaching Science in the Elementary School (3)
DFST 410	Internship in Deaf Studies (3)

Term 8, LEVEL III: Spring (15 units)

ELED 311	Child and the Elementary School Curriculum and Assessment (3)
ELED 312	Professional Development School Internship (3)
ELED 365	Teaching Social Studies in Elementary Schools (3)
ELED 429	Principles and Practices of Assessment in Reading and Language Arts (3)
ISTC 301	Utilization of Instructional Media (3)

Term 9, LEVEL IV: Fall (15 units)

ELED 468	Professional Development School Internship II (12)
ELED 469	Professional Development School Internship II Seminar (3)

Total units for the entire program, inclusive of all Core Curriculum and all requirements for both majors: approximately 142 units.



Department of Health Science

Professors: Patricia Alt, Donna Cox, Hubert Nelson, Susan Radius (*Graduate Program Director*), Deitra Wengert

Associate Professors: Daniel Agley, Lillian Carter
Assistant Professors: Niya Werts, Emiko Takagi
Clinical Assistant Professors: Susan Casciani, Kathleen Gould, Laurencia Huttonrogers

OFFICE

Burdick Hall 141, 410-704-2637

PROGRAMS OF THE DEPARTMENT

The field of health science bridges the gap between scientific discoveries and the application of this knowledge to improve the quality of health and life. The Department of Health Science offers the following areas of study: Gerontology; Health Science with concentrations in Community Health and/or School Health; Health Care Management.

Students interested in Gerontology, Health Education or Health Care Management should contact the department chair to receive both information about these programs and forms needed for the selected programs in completing a course of study. All students must meet with their assigned adviser each term. In addition to completing major requirements, students must complete the Core Curriculum requirements.

TRANSFER CREDIT POLICY

All Health Science majors must complete a minimum of 30 units toward the major at Towson University, with at least 15 units at the upper level (300–400), including the advanced writing course.

All students enrolled in Health Science programs will follow the TU Academic Integrity Policy and adhere to the Student Code of Conduct. Students will be expected to follow the professional code of ethics for the major/minor declared (health education, health care management, gerontology). Violations of these policies will result in judicial sanctions.

GERONTOLOGY PROGRAM

The Gerontology Program at Towson University offers an undergraduate degree program leading either to the Bachelor of Arts or Bachelor of Science degree. The course work is multidisciplinary and provides students with an understanding of the scope of gerontology, the issues that are central to the study of aging, and a perspective from which students may understand the phenomenon of human aging and its implications on society. The program is designed to prepare students for entry-level occupational positions in the field of aging and to provide the knowledge and skills necessary for graduate and professional schools.

MAJOR IN GERONTOLOGY

Students pursuing a degree in Gerontology must complete a minimum of 45 units in the program as outlined below and maintain a 2.00 GPA or better in all required courses. Required elective courses must be approved by the students Gerontology adviser.

Required Core Courses (18–21 units)

GERO 101	Introduction to Gerontology (3)
GERO 397	Internship Arranged with Gerontology Adviser (3–6)
GERO 485	Gerontology Senior Seminar (3)
HLTH 411	Health and Later Maturity (3)
PSYC 405	Psychology of Aging (3)
SOCI 359	Social Gerontology (3)

Required Methods Courses (6–8 units)

Research Methods (approved by Gerontology adviser) (3–4)
Social or Behavioral Statistics (approved by Gerontology adviser) (3–4)

Elective Upper-Level Courses (12 units)

GERO 330	Community Planning for Aging Society (3)
GERO 367	Death, Dying and Bereavement (3)
GERO 450	Directed Readings in Gerontology (3)
GEOG 407	Geography of the Aged (3)
HLTH 311	Chronic and Communicable Disease (3)
HLTH 331	Nutrition for Health Professionals (3)
KNES 455	Activity Programming for the Older Adult (3)
LEGL326	Elder Law (3)
SOCI 329	Demography (3)
WMST 341	Women and Aging (3)
or other upper-level courses approved by Gerontology adviser	

Cognate Electives (9 units)

ANTH 207	Cultural Anthropology (3)
ANTH 209	Anthropology of American Culture (3)
ANTH 211	Honors Anthropology of American Culture (3)
HLTH 101	Wellness in Diverse Society (3)
HLTH 204	Nutrition and Weight Control for the Consumer (3)
HLTH 207	Health Care in the U.S. (3)
HLTH 208	Mental Health, Stress Management, and Crisis Intervention (3)
KNES 107	Cardiovascular Fitness (3)
KNES 204	Nutrition/Weight Control (3)
OCTH 103	Leisure and Health (3)
OCTH 216	Bio-psycho-social Development (3)
PSYC 203	Human Development (3)
SOCI 101	Introduction to Sociology (3)
(Additional courses may be counted as Gerontology cognate electives at the discretion of the Gerontology program director.)	

MINOR IN GERONTOLOGY

Students minoring in Gerontology must complete a minimum of 18 units of approved course work. When possible, it is recommended that a student take a gerontology course within his or her own major field of study. Students are required to take three courses (9 units) from the Gerontology core courses listed below:

GERO 101	Introduction to Gerontology (3)
or	
SOCI 359	Social Gerontology (3)
GERO 397	Internship (3)
GERO 485	Gerontology Senior Seminar (3)
HLTH 411	Health and Later Maturity (3)
PSYC 405	Psychology of Aging (3)

The remaining 9 units can be fulfilled by other core or elective offerings in consultation with the academic adviser.

TRANSFER CREDIT POLICY

Students may transfer no more than 18 credits toward the major in Gerontology. Transfer credits must be approved by the department.

HONORARY SOCIETY

Sigma Phi Omega, the national honor society in gerontology, has established the Delta Rho

Chapter at Towson University. The purpose of the society is to recognize excellence in the academic standing of students studying or majoring in gerontology and to provide enriched opportunities and service activities for members. The faculty adviser is Emiko Takagi, 410-704-4643.

MAJOR IN HEALTH SCIENCE

Health science is an applied science that incorporates an interdisciplinary approach to understanding the complexities of human behavior with the expressed purpose of promoting healthy behaviors. In order to develop the competencies necessary to be an effective professional, students need a foundation built on principles derived from behavioral, biomedical and social sciences.

The Department of Health Science offers three concentrations in the Health Science major: the School Health—Teacher Education Concentration, the Community Health Concentration, and a Dual Community/School Health Concentration. Prior to their junior year, students must select a specific concentration area to complete the major. Each concentration requires 12–15 units of experiential learning to be completed in the student's final term, pending completion of all other Core and major requirements. Placements for completing this experiential learning will be approved and assigned by program coordinators, pending student completion of stipulated requirements for the respective concentration.

REQUIREMENTS FOR THE MAJOR

Required Prerequisites (25 units)

BIOL 190	Introductory Biology for the Health Professions (lab) (4)
CHEM 105	Chemistry for Allied Health Professions (4)
BIOL 213	Human Anatomy and Physiology (4)
BIOL 214	Human Anatomy and Physiology II (4)
PSYC 101	Introduction to Psychology (3)
COMM 131	Fundamentals of Speech Communication (3)
GERO 101	Introduction to Gerontology (3)
or	
SOCI 101	Introduction to Sociology (3)

Health Science Content Core (21 units)

HLTH 101	Wellness in a Diverse Society (3)
HTLH 222	Foundations of Health and Health Behavior (3)
HLTH 204	Nutrition/Weight Control Consumer (3)
HLTH 208	Mental Health/Stress/Crisis (3)
HLTH 220	Sexuality in a Diverse Society (3)
HLTH 311	Chronic and Communicable Disease (3)
HLTH 432	Measurement and Evaluation in Health Education (3)

Concentrations

Health Science majors are required to complete one of three concentrations to complete the major: School Health Teacher Education, Community Health or Dual Community School Health Concentration.

SCHOOL HEALTH—TEACHER EDUCATION CONCENTRATION

Students selecting the school health concentration will receive certification to teach 7–12 education. Teacher Education programs at Towson University, based on state and national standards, are approved by the National Council for the Accreditation of Teacher Education and the Maryland State Department of Education. Completion of an

approved program qualifies graduates for certification in all states that are members of the Interstate Reciprocity Contract. Applicants for Maryland teaching certificates are required to achieve qualifying scores on the Praxis I and II examinations, as determined by the Maryland State Board of Education.

Students opting for the school health concentration must meet the requirements for admission to the professional education program and to student teaching. Prior to student teaching, individuals must pass the Praxis I test. Students should schedule this examination before their junior year.

To exit the School Health Teacher program successfully, candidates must have maintained a 2.50 overall GPA, 2.75 in Health courses, and 2.75 in Education courses. The state of Maryland requires candidates to pass Praxis II in order to be certified to teach.

Required Courses (35 units)

HIST 145	History of the U.S. to the Mid-19th Century (3)
or	
HIST 146	History of the U.S. Since the Mid-19th Century (3)
PSYC 201	Educational Psychology (3)
HLTH 103	Emergency Medical Care (3)
HLTH 315	Curriculum and Planning in Health Education (3)
HLTH 405	Drugs in Our Culture (3)
HLTH 425	Instructional Methods in Health Education (3)
HLTH 430	Organization/Implementation/Management of Health Programs (3)
SPED 301	Introduction to Special Education (3)
EDUC 401	Foundations of Education (3)
SCED 341	Principles of Secondary Education (4)
SCED 460	Teaching Reading Secondary School (4)

Electives (6 units)

Students must complete 6 units of electives. These electives may be in either upper (300-400) or lower level (100-200) course work.

Internship (15 units)

SCED 461	Teaching Reading in Content SCHE/SCHL (3)
and	
HLTH 388	Student Teaching in Secondary Education (12)

Requirements for Student Teaching

Before students are allowed to apply for student teaching, they must provide the following:

1. **Criminal Background Check.** All pre-service students in the Teacher Education programs at Towson University whose program requires an intensive/extensive internship or student teaching experience in a public or private school setting (pre-K-12) will be required to undergo a Criminal Background Check (CBC). The CBC must be filed with the director of the Center for Professional Practice.
2. **PRAXIS I.** Students must provide evidence of successful completion of the PRAXIS I before they can be placed.
3. **Completion of speech and hearing screening.** Students cannot be placed for their student teaching experience without a CBC, proof of passing PRAXIS I, and completion of a speech and hearing screening.

To be eligible for the School Health student teaching experience, students must have senior status and must have successfully completed all required courses with a grade of C or better. The requirement for student teaching experience cannot be

waived. ALL COURSE WORK OTHER THAN SCED 461 MUST BE COMPLETED PRIOR TO STUDENT TEACHING PLACEMENT.

COMMUNITY HEALTH CONCENTRATION

As a field, community health education seeks to educate and empower the public to understand their health, to make healthy choices, to improve their quality of life, and to reduce disease and disability. Community health educators design, market, implement and/or evaluate health education and health promotion programs for the general public in community settings. The settings in which community health educators work include, but are not limited to health departments, voluntary health agencies, hospitals, universities, nonprofit organizations, government agencies, and schools.

The community health concentration within the Department of Health Science provides students with a foundation in a variety of health topic areas, health education theory and practice, and program planning and evaluation. During their final term, students complete a 12-unit internship in a community setting to gain exposure and practical experience in the field.

Required Courses (24 units)

HLTH 103	Emergency Medical Care (3)
HLTH 207	Health Care in the U.S. (3)
PSYC 201	Educational Psychology (3)
or	
PSYC 203	Human Development (3)
HLTH 315	Curriculum and Planning in Health Education (3)
HLTH 405	Drugs in Our Culture (3)
HLTH 425	Instructional Methods in Health Education (3)
HLTH 430	Organization/Implementation/Management of Health Programs (3)
HLTH 435	Epidemiological Basis of Diseases (3)

Electives (17 units)

In addition, students opting for the Community Health Concentration shall complete at least 17 elective units, preferably in a Community Health area: Community Health Leadership, Environment, Gerontology, Health Communication, Health Promotions and Wellness, Maternal and Child Health, or Sexuality. Students may opt for an individual area in consultation with a faculty adviser. Students in the Community Health Concentration could also choose to incorporate a minor in another discipline (e.g., Spanish) as part of this community health area. Students must complete these 17 units with a GPA of 2.00 or higher.

Internship (12 units)

HLTH 422	Field Work in Community Health (12)

The Community Health Education Internship, which is completed during the student's final term, serves as a capstone experience where students can apply the knowledge they have gained in the classroom to a health setting. To be eligible for the internship, students must have senior status and must have successfully completed all required courses with a grade of C or better.

The requirements for the internship in this concentration cannot be waived. ALL COURSE WORK MUST BE COMPLETED PRIOR TO INTERNSHIP PLACEMENT.

DUAL CONCENTRATION

Students may choose to select the dual concentration which incorporates the required courses of both the School Health and Community Health Education concentrations. Students who select and complete this concentration will be prepared to work in community health settings and also will receive certification to teach grades 5 through 12. Students in the Dual concentration must meet the requirements for admission to the professional education program and to student teaching. Prior to student teaching, individuals must pass the Praxis I test. Students should schedule this examination before their junior year.

To exit the School Health Teacher program successfully, candidates must have maintained a 2.50 overall GPA, 2.75 in Health courses, and 2.75 in Education courses. The state of Maryland requires candidates to pass Praxis II in order to be certified to teach.

Required Courses (41 units)

HIST 145	History of the U.S. to the Mid-19th Century (3)
or	
HIST 146	History of the U.S. Since the Mid-19th Century (3)
PSYC 201	Educational Psychology (3)
HLTH 103	Emergency Medical Care (3)
HLTH 207	Health Care in the U.S. (3)
HLTH 315	Curriculum and Planning in Health Education (3)
HLTH 405	Drugs in Our Culture (3)
HLTH 425	Instructional Methods in Health Education (3)
HLTH 430	Organization/Implementation/Management of Health Programs (3)
HLTH 435	Epidemiological Basis of Diseases (3)
SCED 341	Principles of Secondary Education (4)
SPED 301	Introduction to Special Education (3)
EDUC 401	Foundations of Education (3)
SCED 460	Teaching Reading Secondary School (4)

Internship (15 units)

SCED 461	Teaching Reading in Content SCHE/SCHL (3)
and	
HLTH 387	Student Teaching in Secondary Education (6)
and	
HLTH 421	Fieldwork in Community Health (6)

The experiential learning for this concentration is split between a student teaching experience and the capstone internship experience in a community health setting. To be eligible for the internship, students with a dual school/community health education concentration must have senior status and must have successfully completed all required courses with a grade of C or better. They must also have completed all requirements for student teaching, as provided below. The requirements for internship or student teaching experience cannot be waived. ALL COURSE WORK MUST BE COMPLETED PRIOR TO INTERNSHIP AND STUDENT TEACHING PLACEMENT.

Requirements for Student Teaching

Before students are allowed to apply for student teaching, they must provide the following:

1. **Criminal Background Check.** All pre-service students in the Teacher Education programs at Towson University whose program requires an intensive/extensive internship or student teaching experience in a public or private school setting (7-12) will be required to undergo a Criminal Background Check (CBC). The CBC must be filed with the director of the Center for Professional Practice.

2. **PRAXIS I.** Students must provide evidence of successful completion of the PRAXIS I before they can be placed.
3. Completion of speech and hearing screening

Students cannot be placed for their student teaching experience without a CBC, proof of passing PRAXIS I, and completion of a speech and hearing screening.

MINOR IN HEALTH SCIENCE

The minor in Health Science consists of 21 units. All required courses must be completed with a GPA of 2.00 or higher.

Required Courses

HLTH 101	Wellness for a Diverse Society (3)
HLTH 204	Nutrition/Weight Control Consumer (3)
HLTH 207	Health Care in the U.S. (3)
HLTH 222	Foundations of Health and Health Behavior (3)

In addition to the four required courses, the student must take three additional upper-level HLTH electives, one of which can be from courses in HCMN or GERO. Courses should be selected in consultation with the student's minor and major advisers.

HONORARY SOCIETY

Eta Sigma Gamma, the national professional honorary society in health education, has established the Beta Zeta Chapter in the Department of Health Science. The purpose of the organization is to elevate standards, ideals and ethics of the profession. For information concerning Beta Zeta, contact the chair of Health Science, 410-704-2637.

MAJOR IN HEALTH CARE MANAGEMENT

The Health Care Management curriculum is designed to provide students with a comprehension of U.S. health care organizations, a public health orientation including epidemiological concepts and tools, and the math, language, and computer competencies for research development, organizational management and/or program evaluation. Depending on a student's interest, graduate training in health administration is recommended after completing this course of study and after the student has worked in the field for 1–2 years.

Students who major and minor in Health Care Management will adhere to the American College of Healthcare Executives Code of Conduct.

Required Prerequisites (21 units)

ACCT 201	Accounting Principles I (3)
ACCT 202	Accounting Principles II (3)
ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)
GERO 101	Introduction to Gerontology (3)
HLTH 101	Wellness in a Diverse Society (3)
MATH 231	Basic Statistics (3)

Required Courses

Health Care Management (18 units)

HCMN 305	Health Care Administration (3)
HCMN 413	Services and Housing for the Long-Term Care Consumer (3)
HCMN 415	Finance and Organization of Health Care in the U.S. (3)
HCMN 441	Legal and Ethical Issues in Health Administration (3)
HLTH 207	Health Care in the U.S. (3)
HLTH 311	Chronic and Communicable Disease (3)

Business (12 units)

FIN 331	Financial Management (3)
LEGL 225	Legal Environment of Business (3)
MNGT 361	Principles of Management (3)
MKTG 341	Principles of Marketing (3)

Interdepartmental Courses (12–13 units)

COSC 111	Information and Technology for Business (3)
ECON 339	Health Economics (3)
ENGL 317	Writing for Business and Industry (3)
	Laboratory Science Elective (3,4)

Long-Term Care Track (12 units)

HCMN 413	Services and Housing for the Long-Term Care Consumer (3)
HCMN 417	Long-Term Care Ethical Problems (3)
HCMN 419	Long-Term Care Administration (3)
HLTH 411	Health and Later Maturity—The Aging Process (3)

Internship-HCMN 495 (12 units)

Students have the opportunity to gain hands-on, practical work experience in this required full term capstone course. Students will be able to apply the knowledge and skills they have acquired in managing and delivering health services. Students must apply for the internship in the term prior to enrolling in HCMN 495. The internship coordinator will assign students to a placement site based on the acceptability of student to agency and the acceptability of agency to student.

To be eligible for the internship, students must have senior status and must have successfully completed all course work prior to internship placement. Program requirements must be completed with a grade of "C" or better.

The requirement for internship in this major cannot be waived.

MINOR IN HEALTH CARE MANAGEMENT

The minor in Health Care Management consists of 18 units. All required courses must be completed with a GPA of 2.00 or higher.

Required Courses

ECON 339	Health Economics (3)
HLTH 207	Health Care in the U.S. (3)
HCMN 305	Community Health Administration (3)
	or
MNGT 361	Principles of Management (3)
HCMN 413	Services and Housing for the Long-Term Care Consumer (3)
HCMN 415	Financing and Organization of Health Care Services in the U.S. (3)
HCMN 441	Legal and Ethical Issues in Health Administration (3)

UPSILON PHI DELTA HONOR SOCIETY

The purpose of the Upsilon Phi Delta Honor Society is to further the professional competence and dedication of the individual members in and for the profession of health care management. Members are selected on the basis of academic achievements, service to the community and/or contributions to the health care management profession. For information concerning the Upsilon Phi Delta Honor Society, contact the chair of Health Science at 410-704-2637.

HEALTH SCIENCE DEPARTMENT RECOGNITION AWARDS

These awards are presented in the spring commencement ceremony to outstanding undergraduate Health Education, Gerontology, and Health Care Management majors, as well as the graduate program.

GRADUATE PROGRAM

The department offers a Master of Science degree with concentrations in Health Administration, Community Health Education, and School Health Education. For more information, see the *Graduate Catalog*.



Department of Kinesiology

Professors: Andrea Boucher, David Zang

Associate Professors: Jill Bush, Karla Kubitz, Elin Lobel, Gail Parr

Assistant Professors: Keunsu Han, Brian Hand, Michael Higgins, Gerald Jerome, Ryan King-White, Jessica Minkove, Tabatha Uhrich, Alex Vigo-Valentin

Clinical Assistant Professors: Andrea Barton, Heather Crowe, Mary Nadelén

Lecturers: Susan Harnett, James Harrison, Susan Truitt, Andi Worthington

OFFICE

Towson Center 200, 410-704-2376

PROGRAMS OF THE DEPARTMENT

The Department of Kinesiology offers four academic majors: Physical Education, Athletic Training, Sport Management and Exercise Science.

MAJOR IN PHYSICAL EDUCATION

The Physical Education/Teacher Education program prepares students to become competent physical educators consistent with developmentally and instructionally appropriate guidelines provided by National Association for Sport and Physical Education (NASPE). Graduates of the program are eligible for certification by the Maryland State Department of Education as a K-12 Physical Education teacher.

The Physical Education/Teacher Education program includes the following phases:

- I General Preparation
- II Pre-Professional Preparation/Internship I
- III Professional Preparation/Internship II

The focus of Phase I is completion of Core Curriculum requirements as well as completion of courses required for the academic major. The following requirements must be met for entry into Phase II:

- A grade of C or better in the following courses:
 - KNES 290 Introduction to Teaching Physical Education
 - KNES 283 Activities for the Young Child (K-3)
 - KNES 284 Adventure-Based Activities
 - a minimum of four of the following courses: KNES 140, KNES 150, KNES 156, KNES 182, KNES 184, KNES 202, KNES 239 and KNES 327
- Satisfactory scores on Praxis I, SAT, ACT or GRE.
- Completion of a speech and hearing test

During Phase II, students complete the Physical Education "methods" classes (i.e., KNES 324 Teaching Physical Education in the Elementary School, KNES 325 Teaching Physical Education in the Secondary School, and KNES 423 Adaptive Physical Education) as well as other courses required for the academic major. Requirements for advancement to Phase III are as follows:

- Grade point average (GPA)
 - an overall cumulative minimum GPA of 2.75
 - a cumulative GPA of 3.00 in the following courses: KNES 324, KNES 325, KNES 423, ELED 324, EDUC 401, PSYC 201

- a cumulative GPA of 2.75 in the courses that are part of the KNES Professional Core and Professional Lab Skills

- Satisfactory criminal background check
- Additional requirements as deemed necessary by the Department of Kinesiology or College of Education

Phase III of the program includes a term of student teaching (KNES 392 and KNES 394) and completion of the course KNES 480 Seminar in Teaching Physical Education. The student teaching experience includes placements at both an elementary and secondary school. This experience must be completed in Baltimore County, Carroll County, Harford County, Howard County or Anne Arundel County. Teacher candidates are not permitted to take any other courses during Phase III.

Effective fall 2009, all teacher candidates (i.e., students with major in Physical Education and post-bac program in Physical Education) must demonstrate achievement and maintenance of all five components of the Fitnessgram® health-related physical fitness test. Accommodations will be provided for all teacher candidates who have a documented physical disability.

A certification in Health Science is available for students who wish to be certified to teach in physical education and health education at the elementary and secondary levels. Students are advised that the Department of Health Science is responsible for establishing the health-education requirements for this program. As such, students interested in pursuing this option must contact the chair of Health Science for additional and current information.

KNES Professional Required Courses (35 units)

KNES 290	Introduction to Teaching in Physical Education (2)
KNES 298	History and Philosophy of Physical Education (3)
KNES 309	Tests and Measurements (3)
KNES 311	Biomechanics (3)
KNES 313	Physiology of Exercise (3)
KNES 315	Care and Prevention of Athletic Injuries (3)
KNES 324	Teaching Physical Education in the Elementary School (3)
KNES 325	Teaching Physical Education in the Secondary School (3)
KNES 341	Concepts of Motor Learning (3)
KNES 355	Psychology of Sport (3)
KNES 423	Adapted Physical Education (3)
KNES 426	Motor Development (3)

KNES Professional Lab Skills/Activities (13 units)

KNES 140	Track and Field (1)
KNES 150	Personal Defense/Wrestling (1)
KNES 156	Gymnastics (1)
KNES 165	Swimming (1)
KNES 182	Field Court I (1)
KNES 184	Field Court II (1)
KNES 202	Net/Wall Games (1)
KNES 239	Physical Fitness Activities (1)
KNES 283	Physical Education Activities for the Young Child (1)
KNES 284	Adventure-Based Education Activities (1)
KNES 327	Teaching Cultural Dance Forms: Creative Movement for PHEC Majors (3)

KNES Professional Electives (6 units)

KNES 305	Outdoor Education Philosophy and Methods (3)
KNES 331	Principles of Coaching (3)
KNES 337	Advanced Coaching Techniques (3)
KNES 351	Philosophy: The Sport Experience (3)
KNES 353	Sport and Society (3)
KNES 496	Independent Study (1-3)
HLTH 101	Wellness in a Diverse Society (3)

Teacher Education Core (22 units)

SCED 200	Foundations of Education (3)
ELED 324	Integrating Literacy in the K-12 Content Areas (3)
KNES 392	Elementary Student Teaching (6)
KNES 394	Secondary Student Teaching (6)
KNES 480	Seminar in Teaching Physical Education (1)
REED 365	Reading & Writing in the Content Area K-12 (3)

Additional Required Courses (28-29 units)

BIOL 190	Introductory Biology for the Health Professions (4)
BIOL 213	Anatomy and Physiology I (4)
BIOL 214	Anatomy and Physiology II (4)
CHEM 105	Chemistry for Allied Health Professions I (4)
	or
PHYS 202	General Physics for the Health Sciences (5)
COMM 131	Fundamentals of Speech Communication (3)
IDHP 110	Information Utilization in the Health Professions (3)
	or
ISTC 201	Using Information Effectively in Education (3)
PSYC 101	Introduction to Psychology (3)
PSYC 201	Educational Psychology (3)

MAJOR IN ATHLETIC TRAINING

The program of study in Athletic Training is designed for students who are interested in a career in allied health care specializing in the care of athletes and physically active individuals. Athletic trainers function as integral members of the athletic health care team in secondary schools, colleges and universities, sports medicine clinics, professional sports organizations and other health care settings. The athletic trainer specializes in the prevention, assessment, management, rehabilitation and health care administration of athletic injuries and illnesses.

The Athletic Training Education Program (ATEP) is designed to provide an effective blend of theoretical and practical learning experiences in athletic training by incorporating extensive academic and clinical education experiences. The ATEP is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). Successful completion of the Athletic Training Education Program prepares an individual as a candidate for the National Athletic Trainers' Board of Certification examination.

The goals of the ATEP are first and foremost to provide students with a quality, well-rounded education. Second, the ATEP seeks to provide the necessary cognitive, psychomotor and affective competencies and proficiencies in a formalized multidimensional academic and clinical setting for students to be successful in the field of athletic training. Last, the ATEP provides opportunities for students to participate in community events and professional activities that will instill a sense of active participation in their communities and chosen profession.

The ATEP is a capped major with a limited enrollment. As such, admission to the university does not guarantee admission to the program.

Screening Process for the Accredited Athletic Training Education Program

Students desiring to major in Athletic Training are admitted to the Pre-Athletic Training Program. Students seeking admission into the Athletic Training major are required to have completed the following courses: BIOL 190, PSYC 101, KNES 235, KNES 291, HLTH 101, HLTH 103.

Prospective students must submit the following materials as part of the screening procedure: program application (including personal statement); signed technical standards verifying that, with appropriate accommodation, they meet the technical standards for an entry-level athletic trainer; and verification of health status form (signed by the applicant's health care provider).

Transfer Students

Transfer students must submit a copy of an official transcript to show completion of equivalent course work at their previous institutions. Students transferring to the ATEP need to provide documentation that they have satisfied the clinical competencies and proficiencies addressed in KNES 291. Students need to provide verification that they have satisfied these required skills at the sending institution under the direction of a Towson University-approved clinical instructor. If verification is not available, the student will meet with the coordinator of the ATEP and work through the checklist. If the student has not been exposed to, and evaluated in, these proficiencies, the student will need to complete KNES 291 at Towson University.

The Pre-AT student will make formal application, which includes all of the materials stated below, to the coordinator of the ATEP no later than the **second Friday in May**: official transcripts, directed observation hours, two letters of recommendation, essay and clinical skills worksheet.

Evaluative Criteria

Seven criteria are evaluated as part of the admission process in accepting students into the ATEP:

1. **Overall GPA** – Students must have a minimum overall GPA of 2.00 in their college courses to be able to apply to the ATEP.
2. **Prerequisite Courses GPA** – Six classes (KNES 291, KNES 235, BIOL 190, HLTH 103, HLTH 101 and PSYC 101) are used to calculate the prerequisite courses GPA.
3. **Observation Hours** – Students are assigned by the ATEP coordinator or clinical coordinator of education to a variety of clinical settings at Towson University, which include athletic training rooms, athletic practices and competitive events, to gain valuable directed observation hours.
4. **Letters of Recommendation** – Students seeking admission into the ATEP will be asked to secure two letters of recommendation from individuals who can attest to their personality, academic success, intellectual abilities and clinical abilities.
5. **Interview** – Candidates seeking admission to the ATEP are given a formal interview conducted by the Athletic Training Admission Committee.

6. **Essay** – Applicants will submit a one-page essay explaining their reasons for pursuing the major in Athletic Training.
7. **Clinical Skills Worksheet** – Students are expected to complete the clinical skills worksheet during the course of the academic year (September - March). The worksheet will consist of skills that each student should be proficient in performing (i.e. making an ice bag, taping an ankle, wrapping a thigh).

In addition to the evaluation criteria, the following must be completed and turned in to the program coordinator prior to beginning clinical hours: (1) program application, (2) acceptance of technical standards and (3) verification of health status form.

Acceptance into the program is based upon the stated criteria and the number of available openings in the program. **Meeting the minimum admission requirements does not guarantee acceptance into the program.** Offers of admission into the ATEP are presented on a competitive basis to those individuals who are most qualified. Students must apply for admission to the program by the **second Friday of May in the spring term**. Candidates will be notified of acceptance/rejection in the first week of June by mail.

Appeal Procedures

Students who are not admitted into the program can re-apply three times, but it will still take six terms to complete the required class and clinical workload. If the student does not maintain an overall GPA of 2.00, a C or better in all didactic athletic training courses, and a grade of satisfactory in all clinical courses, the student will be placed on probation for one year. If the student does not rectify the stated deficiency within the one-year period the student will be dropped from the program.

For more detailed information regarding the ATEP at Towson University please refer to the Athletic Training Education section at: www.towson.edu/kinesiology.

Program Requirements

The requirements for the major in Athletic Training include 25–26 units of lower-level courses and 56 units of KNES courses. The specific requirements for the major in Athletic Training are as follows:

KNES Required Courses (56 units)

KNES 235	Individualized Fitness (3)
KNES 291	Introduction to Athletic Training (3)
KNES 309	Tests and Measurements (3)
KNES 311	Biomechanics (3)
KNES 313	Physiology of Exercise (3)
KNES 316	Lower Extremity and Spine Evaluation (4)
KNES 363	Nutrition for Exercise and Sport (3)
KNES 381	Basic Clinical Athletic Training I (2)
KNES 382	Basic Clinical Athletic Training II (2)
KNES 385	Intermediate Clinical Athletic Training I (2)
KNES 386	Intermediate Clinical Athletic Training II (2)
KNES 388	Advanced Clinical Athletic Training I (2)
KNES 389	Advanced Clinical Athletic Training II (2)
KNES 415	Upper Extremity and Spine Evaluation (4)
KNES 417	Organization and Administration of Athletic Training (3)
KNES 427	Therapeutic Exercise in Athletic Training (4)
KNES 428	Therapeutic Modalities in Athletic Training (4)
KNES 431	Seminar in Athletic Training (3)
KNES 432	General Medical Aspects (4)

Lower-Level Required Courses (25–26 units)

BIOL 190	Introductory Biology for the Health Professions (4)
BIOL 213	Human Anatomy and Physiology I (4)
BIOL 214	Human Anatomy and Physiology II (4)
CHEM 105	Chemistry for Allied Health Professions I (4)
	or
PHYS 202	General Physics for the Health Sciences (5)
HLTH 101	Wellness for a Diverse Society (3)
A lab fee of \$25 will be assessed to each student in KNES 381 and 389 for supplies used in both classes	

MAJOR IN EXERCISE SCIENCE

The major in Exercise Science is intended to examine the relationship between exercise and human performance and the role of physical activity in the promotion of healthy lifestyles. Exercise science consists of several overlapping disciplines, including biomechanics, exercise physiology and biochemistry, growth and development, exercise nutrition, measurement and evaluation, and exercise psychology. The program of study is designed to provide an effective blend of classroom instruction and practical experience. The program is intended to prepare qualified individuals for careers in clinical, corporate, commercial, and/or community exercise/wellness settings as well as to prepare students for graduate study in related fields.

Program Requirements

The requirements for the major in Exercise Science include 46 units of KNES courses and 26–27 units of courses outside of KNES. The specific requirements for the major in Exercise Science are as follows:

Exercise Science Required Courses (46 units)

KNES 217	Functional Anatomy for EXSC (3)
KNES 297	Foundations of EXSC (3)
KNES 309	Tests and Measurement (3)
KNES 311	Biomechanics (3)
KNES 313	Physiology of Exercise (3)
KNES 315	Care and Prevention of Athletic Injuries (3)
KNES 361	Exercise Psychology (3)
KNES 363	Nutrition for Sport and Exercise (3)
KNES 365	Exercise Testing and Prescription (3)
KNES 369	Clinical Competencies and Fieldwork in EXSC (4)
KNES 372	Practical and Instructional Skills in Exercise Leadership (3)
KNES 398	Internship in Exercise Science (6)
KNES 469	Research Methods in EXSC (3)

Choose one course from the following:

KNES 407	Advanced Principles of Strength and Conditioning (3)
KNES 406	Exercise Prescription and Programming for Special Populations (3)
KNES 420	Advanced Exercise Physiology (3)

Additional Required Courses (26–27 units)

BIOL 190	Intro to Biology for Health Professions (4)
BIOL 213	Anatomy and Physiology I (4)
BIOL 214	Anatomy and Physiology II (4)
CHEM 105	Chemistry for Allied Health Professionals (4)
	or
CHEM 110	General Chemistry I (4)
HLTH 101	Wellness for a Diverse Society (3)
PHYS 202	General Physics for the Health Sciences (5)
	or
PHYS 211	General Physics I (4)
PSYC 101	Introduction to Psychology (3)

MAJOR IN SPORT MANAGEMENT

The Sport Management major is designed to prepare students for a changing sports industry. The curriculum develops critical and ethical sensibilities as well as practical skills with the intent of producing graduates who will be responsible business leaders and community advocates able to address commercial, economic, political and social issues related to sport. Note: Students selecting this major must also declare a minor in Business Administration.

Program Requirements

The requirements for the major in Sport Management include 39 units of KNES courses, and 21 units of BUAD courses.

The specific requirements for the major in Sport Management are as follows:

Sport Management Required Courses (39 units)

KNES 280	Introduction to the Sport Industry (3)
KNES 285	Sport: A Cross-Cultural Perspective (3)
KNES 353	Sport and Society (3)
KNES 333	Sport Management (3)
KNES 395	Kinesiology Internship (3)
KNES 452	Sport Marketing (3)
KNES 456	Sport Governance, Policies and Legal Issues (3)
KNES 460	Cultural Economy of Sport (3)
Plus 15 units of electives from selected KNES courses	

BUAD Requirements (21 units)

ACCT 201	Accounting Principles I (3)
ACCT 202	Accounting Principles II (3)
ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)
FIN 331	Principles of Finance (3)
MKTG 341	Principles of Marketing (3)
MNGT 361	Principles of Management (3)

Additional Required Course (3 units)

MATH 231	Basic Statistics
	or
ECON 205	Statistics for Business and Economics (3)

**PROFESSIONAL PREPARATION
ELEMENTARY EDUCATION**

The Department of Kinesiology offers three courses for students majoring in Early Childhood or Elementary Education. They are KNES 281–282 Physical Education for Elementary Education Students I, II; and KNES 324 Teaching Physical Education in the Elementary School. KNES 281–282 are prerequisites for KNES 324.

TRANSFER CREDIT POLICY

Kinesiology transfer credits will be evaluated by the department on an individual basis. A minimum of one-half of the units required in the major (KNES) must be completed at Towson University. A grade equivalent of 2.00 or higher must be earned in all required courses and all prerequisites for required courses.

Department of Nursing

Professors: Joanna Basuray, Mary Lashley
Associate Professors: Christina Barrick, Verna Carson

Assistant Professors: Elizabeth Austin, Beverly Bye, Sheila Green (*Chair*), Kathy Ogle, (*Graduate Program Director*), Regina Phillips

Clinical Associate Professors: Vicky Kent (*ATM Program Director*), Kim McCarron, Janet McMahon

Clinical Assistant Professors: Judith E. Breitenbach (*Nursing Program Director, Hagerstown*), Elizabeth Crusse, Mary Sharon Curran, Angela Durry, Bonnie Fuller, Jean Gambo, Lori Geier, Nancy Hannafin, Michelle Kirwan, Margaret McCormick, Kathy Rabon, Elizabeth Rudolf, Heidi Stone

Visiting Instructors: Alice Behles, Karen Cooper, Nancy Lerner, Kristen Rawlett

Lecturer: Renada Gilliard

OFFICE

Burdick Hall 136, 410-704-2069

Recorded Information: 410-704-2067

Admissions Coordinator: 410-704-4170

www.towson.edu/nursing

**PROGRAMS OF THE
DEPARTMENT**

Nursing is both an art and a science with an evolving body of specialized knowledge derived from nursing research, as well as from the synthesis of knowledge from related disciplines. Nursing, independently or collaboratively, guides and influences the behavior of others in their efforts toward optimizing the health status of individuals, families, groups and communities.

Towson offers a program in professional nursing leading to the Bachelor of Science degree with a major in Nursing. The Nursing curriculum includes courses in the liberal arts, the sciences and nursing. The curriculum, designed for basic and registered nurse students, prepares the graduate to accept responsibility and accountability for the care of clients and families in a variety of health care settings, to function in beginning leadership roles, and to be consumers of and participants in nursing research. Students are also provided with the foundation for graduate study in nursing.

The Nursing Program is approved by the Maryland Board of Nursing, and accredited by the Commission on Collegiate Nursing Education. Basic students graduating from the Nursing major are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The Department of Nursing holds membership in the American Association of Colleges of Nursing, the Council of Baccalaureate and Higher Degree Programs of the National League for Nursing, Commission on Collegiate Nursing Education, and the Council on Collegiate Education in Nursing of the Southern Regional Education Board.

**MAJOR IN NURSING:
BASIC STUDENTS**

The university requires a minimum of 120 units for graduation. However, established departmental requirements must also be completed for graduation with a Nursing major. This necessitates completion of more than 120 units for most students enrolled in the department.

Students must complete all prerequisite courses prior to beginning the major. Proper course planning and good advising are key to timely admission to the major and completion of the program in four years. The departmental brochure and department web site contain a recommended course plan for students for the entire four-year degree. Pre-nursing majors may request a nursing adviser to help them plan their academic program prior to admission to the major. Students can contact the department for specific information and to be assigned to an adviser. Once the student is admitted to the Nursing major, the nursing courses must be completed in a sequential pattern, because each course is a foundation for the subsequent course. Part-time study options are available.

Pre-nursing students demonstrating competencies covered in MATH 115 (as determined by the Department of Mathematics) may enroll in an alternative offering of one of the following: MATH 119 or MATH 273, in order to meet the mathematics requirement. Placement in the particular course is determined by the Department of Mathematics.

Because requirements may be revised from time to time, it is the student's responsibility to make certain that he or she is working with the most current materials. Contact the department for assistance with program planning.

REQUIREMENTS FOR THE MAJOR

In addition to the Core Curriculum requirements, Nursing majors must complete the following prerequisites prior to beginning major course work. Several of these courses can also meet Core Curriculum requirements.

BIOL 190	Introductory Biology for the Health Professions (4) (Core 7, Core 8)
BIOL 213	Human Anatomy and Physiology I (4)
BIOL 214	Human Anatomy and Physiology II (4)
BIOL 315	Medical Microbiology (4)
CHEM 105	Chemistry for Allied Health Professions I (4) (Core 7, Core 8)
CHEM 106	Chemistry for Allied Health Professions II (4) (Core 7, Core 8)
ENGL 102	Writing for a Liberal Education (3) (Core 2)
HLTH 331	Nutrition for Health Professionals (3)
MATH 115	Basic Mathematics for Sciences (3) (Core 3)
PSYC 101	Introduction to Psychology (3) (Core 6)
PSYC 203	Human Development (3) (Core 6)
SOCI 101	Introductory Sociology (3) (Core 6)

**REQUIRED COURSE SEQUENCE FOR
THE NURSING MAJOR****Junior Year****First Term**

NURS 330	Professional Nursing: Bridge (3)*
NURS 332	Professional Nursing I: Introduction to Nursing
NURS 347	Health Assessment Across the Life Span (3)
NURS 350	Nursing and Health Care I: Foundations (5)

Second Term

NURS 353	Nursing Practice II: Adult Health (5)
NURS 355	Nursing Practice III: Childbearing Families (5)
NURS 404	Health Care: An Interdisciplinary Approach (3) or
NURS 416	Cultural Diversity in Health Care (3) (Core 13)
MATH 231	Basic Statistics (3) or
MATH 237	Biostatistics (3–4) or
PSYC 212	Behavioral Statistics (4)

Senior Year**First Term**

NURS 431	Professional Nursing II: Research (2)
NURS 451	Nursing Practice IV: Psychiatric and Mental Health (5)
NURS 453	Nursing Practice V: Child Health (5)
NURS 404	Health Care: An Interdisciplinary Approach (3) or
NURS 416	Cultural Diversity in Health Care (3) (Core 13)

Second Term

NURS 433	Professional Nursing III: Issues (3) (Core 9)
NURS 455	Nursing Practice VI: Community Health (5)
NURS 457	Nursing Practice VII: Clinical Practicum (2)
NURS 459	Nursing Practice VIII: Leadership and Management (4)

*RNs only

ADMISSION TO THE NURSING MAJOR

Before students can be considered for admission to the Nursing major, they must be admitted to or have applied for admission to the university. Transfer students must adhere to the university's transfer policies.

Admission to the Nursing major is granted only by the department. Admission to the university does not constitute or guarantee admission to the major. Students are admitted in both the fall and spring terms of each academic year. The application for admission to the Nursing major is available from the admissions coordinator. It is to be returned to the admissions coordinator, Department of Nursing, by January 15 for fall admission and August 15 for spring admission. Because the process requires official transcripts from all educational institutions that students have attended, students should allow sufficient time for receipt of transcripts in the department by the due date.

Beginning spring 2012, the Test of Essential Academic Skills V (TEAS) is required to apply to the major. The score received on the test is included in the selective admissions process. If official TEAS scores are not forwarded to the admissions coordinator, the nursing application will not be processed. Please review the nursing application packet for further information and instructions. A \$50 non-refundable application fee is required for the application to be processed, and a \$200 non-refundable nursing acceptance deposit is required when the student is admitted to the major.

BASIC PROGRAM

High school students are advised to take the following courses to provide the base necessary to complete the prerequisite courses for the Nursing major: mathematics – three units (two years of algebra and one year of geometry); chemistry – one unit; biology – one unit. Physics, although not required, is recommended.

Eligibility and screening: Admission to the major is contingent upon the student being screened and admission being offered to the applicant by the department. The screening process takes place during the term prior to the student's anticipated enrollment in the first nursing course. Students are eligible to apply for admission after they have completed a minimum of 42 undergraduate units, including at least four laboratory science prerequisites and ENGL 102. Only one grade below a grade equivalent of 2.00 is allowed in prerequisite or Core Curriculum courses, and no more than two courses may be repeated. A minimum GPA of 3.00 on a 4.00 scale is required. Students must note that achievement at the 3.00 level in itself does not guarantee admission to the program.

INDIVIDUAL ADMISSION POLICY

Applicants who have the required cumulative GPA of 3.00 but do not meet the admission criteria may still be considered for admission under the individual admission policy. To be considered, the individual must demonstrate the ability to be successful in a rigorous academic curriculum through recent strong academic performance in relevant course work. Applicants who wish to be considered under this policy must submit, with the standard application, supporting materials making a *specific, personalized case* of why the applicant deserves acceptance into a *rigorous academic program*. Submitted materials should include a written request for consideration, two letters of recommendation from appropriate sources, such as professors or academic advisers, and a personal statement with supporting materials explaining why the applicant deserves special consideration and why his or her qualifications do not meet stated criteria. Materials submitted should contain *very specific and compelling information* to warrant special consideration.

TRANSFER AND SECOND DEGREE STUDENTS

Transfer students and those seeking a second baccalaureate degree are admitted to the university according to university policies and procedures. Generally, transfer students must complete all required nursing courses at Towson University. Nursing courses completed in another baccalaureate nursing program are evaluated individually for equivalence by the department.

REGISTERED NURSE COMPLETION PROGRAM

To be eligible for admission, students must have graduated from a state-approved diploma or associate degree nursing program and be licensed as a registered nurse in Maryland. Recent graduates may be admitted pending successful completion of the NCLEX-RN. Students applying for admission to the Nursing major must either have been admitted to the university or be currently seeking admission to the university.

Registered nurse students are advised to contact the department for advisement prior to completion and submission of the application for admission to the university.

Eligibility and screening: Admission to the Nursing Program is granted only by the department. Eligibility requirements are dependent upon the option chosen. In addition, RN students are required to have a minimum GPA of 2.50 on a 4.00 scale.

Only one grade below a grade equivalent of 2.00 is allowed in the non-nursing courses required for the Nursing Program.

RN ARTICULATION MODEL

The Department of Nursing participates in a state-wide RN articulation model. No more than half of the baccalaureate degree, with a maximum of 60 non-nursing units, will be accepted at Towson from a community college. Nursing units will not be transferred. However, individuals with an active unencumbered Maryland or compact RN license articulating to the baccalaureate level are awarded a minimum of 30 upper-division nursing units in the program.

The minimum number of units that must be completed at Towson is 30; this may vary depending on the number of credits transferred from the community college. To ensure successful progress through the Nursing major, students will need to complete Organic Chemistry, Nutrition and Microbiology. If these courses were not part of the associate's degree, they must be completed prior to acceptance into the Nursing major—which could add additional units to the program. A statistics course is needed prior to enrolling in NURS 431.

HEALTH ASSESSMENT CHALLENGE EXAMINATION

Registered nurses with an extensive background in health assessment may elect to challenge the course NURS 347 Health Assessment Across the Life Span. Students interested in challenging the course must first meet with the NURS 347 course coordinator to determine the extent of their health assessment background and receive specific information regarding the challenge option.

THE ASSOCIATE TO MASTER'S DEGREE NURSING PROGRAM

The ATM program is a full-time, year-round program designed for students with a non-nursing bachelor's degree. In addition to the non-nursing bachelor's degree, students must complete prerequisite courses and the TEAS exam to be eligible for admission. Admission to the ATM program is a collaborative decision between the Community College of Baltimore County/Essex (CCBC/Essex) and the Towson University Department of Nursing. Admissions occur only in the Spring term. The application deadline is August 15. Students complete an associate's degree in nursing in 5 academic terms, approximately 16 months. Three Towson University courses will be taught during the associate's degree sequence. Students who successfully complete the Associate of Science degree and obtain RN licensure will then attend classes on the Towson University campus to complete a combined B.S./M.S. in nursing with a focus in Nursing Education. Students interested in the program should contact the Office of Admissions for CCBC Essex for application information.

ACADEMIC STANDARDS

Students are required to maintain a cumulative GPA of 2.50 to enroll in clinical courses in the major. A grade of 2.00 or higher in both the theory and clinical components in each nursing course is required, in addition to maintaining a 2.50 overall GPA.

Students entering or re-entering the program are expected to earn the standard score established by the Department of Nursing on the designated Educational Testing Exam during their senior year, second term, in order to be eligible to sit for the NCLEX-RN examination required for licensure.

The *Nursing Student Handbook* provides additional information concerning department policies and is distributed upon enrollment in the major.

SPECIAL FINANCIAL OBLIGATIONS

All students in the Nursing major are required to:

- carry Nursing student liability insurance through the university
- carry hospitalization insurance including accident and/or emergency benefits
- purchase departmental uniforms and supplies (approximately \$700 for basic students and \$200 for RN students)
- have a valid driver's license and access to the independent use of a car in order to provide own travel to and from clinical facilities
- assume financial responsibility for expenses related to the required physical examination and laboratory/screening tests

Students accepted to and enrolled in the Nursing major are charged a fee of \$100 per term to cover the costs of Educational Testing Examinations which are administered at the end of each term. The fees will be attached to clinical courses at the junior level and at the senior level. If any clinical courses are repeated, the student will be charged an additional \$100. Educational Testing Fees are non-refundable after the change of schedule period. Please note the Educational Testing Fees do not apply to the RN to B.S. completion students.

Information about financial assistance may be obtained from the university's Office of Financial Aid.

Information sessions are offered throughout the year. For additional information, contact the admissions coordinator.

Department of Occupational Therapy and Occupational Science

Professors: Janet DeLany, Charlotte Exner, Regena Stevens-Ratchford, S. Maggie Reitz (*Chair*)

Associate Professors: MaryBeth Merryman, Sonia Lawson, Wendy Stav, Marcie Weinstein, Jenna Yeager

Assistant Professors: Lisa Crabtree, Theresa Smith

Clinical Associate Professor: Marlene Riley

Clinical Assistant Professors: Barbara

Demchick, Lynne Murphy

Lecturer: Andrea Nusinov

Fieldwork Administrator: Jerry Bentley

OFFICE

Enrollment Services Center 245, 410-704-2762

Admissions Coordinator: Burdick 105, 410-704-2653

PROGRAMS OF THE DEPARTMENT

The practice of occupational therapy is the therapeutic use of everyday life activities (occupations) with individuals or groups for the purpose of participation in roles and situations in home, school, workplace, community, and other settings. Occupational therapy services are provided to those who have or are at risk for developing an illness, injury, disease, disability or activity limitation. Occupational therapy addresses the physical, psychosocial, cognitive, sensory and other aspects of performance in a variety of contexts to support engagement in everyday life activities that affect health, well-being and quality of life (American Occupational Therapy Association, 2004).

The Department of Occupational Therapy and Occupational Science currently offers a Combined B.S./M.S. Program designed to provide a liberal education and develop professional competence. The program of study leads to a Bachelor's Degree in Occupation and Well-being and a Master's Degree in Occupational Therapy. The Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. ACOTE's phone number c/o AOTA is 301-652-AOTA.

Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT certification examination. (Persons convicted

of felonies may be unable to sit for the certification examination and should inquire in advance of program entry regarding eligibility.)

Occupational therapy is a profession that demands its practitioners have clinical competencies as well as academic knowledge. In addition to satisfactory completion of course work, students must demonstrate appropriate professional behaviors and skills prior to beginning clinical/fieldwork experiences. Students must possess a minimum of 3.00 GPA in order to enroll in OCTH 435/436 and enter the graduate portion of the Combined B.S./M.S. Program. In the event that students do not demonstrate appropriate professional behaviors and/or skills and/or do not have satisfactory academic performance in one or more required courses, recommendations for remedial courses of action will be made in accordance with department policy.

Students are expected to be aware of and adhere to the AOTA Ethics Standards (*Occupational Therapy Code of Ethics, the Guidelines for the Occupational Therapy Code of Ethics, and the Core Values and Attitudes of Occupational Therapy Practice*). Violation of the standards is cause for disciplinary action which may include dismissal from the programs offered by the Department of Occupational Therapy and Occupational Science.

The department also offers a Master of Science degree in Occupational Therapy and a Doctor of Occupational Science (Sc.D.). For further information, consult the *Graduate Catalog*.

PROGRAM AND FIELDWORK REQUIREMENTS

Initial Health and Insurance Requirements

Contracts with fieldwork facilities require that students in placements show proof of current health insurance and documentation of current health status. The findings of the health examination will not necessarily exclude students from placement. Students must present evidence of current health insurance, a recent health examination (including documentation of results of titers for immunization of measles, mumps, rubella, and varicella), a speech and hearing screening, results of a P.P.D. test, and results of a Hepatitis B titer or sign a declination form for the vaccine. Failure to comply will prevent registration.

Speech and Hearing Screening

Speech and hearing screening is offered free of charge through the Towson University Speech, Language and Hearing Center each term. Only one initial screening is required. Failure to comply will prevent registration.

Annual Health Requirements

Students must present evidence of current health insurance and results of P.P.D. test annually.

CPR Courses and First Aid

Certification for adult, infant and child CPR is required prior to beginning the program. Proof of annual CPR certification is required during enrollment in the major. Online courses are not accepted. It is highly recommended that students complete a standard course in first aid.

Criminal Background Check

Students may be required to obtain a criminal background check if required by the fieldwork site. This can occur for any Level I or Level II fieldwork experience. The student is responsible for this expense.

Damaged or Missing Equipment, Assessments or Other Resources

Students are responsible for covering replacement costs for any items that are found to be damaged or missing due to their actions.

PRE-ADMISSION ADVISING

Admission to the university does not guarantee admission to the Occupational Therapy major. At students' request, occupational therapy and occupational science faculty and administrative staff will advise candidates about the nature of the profession, the national certification examination, and the occupational therapy curriculum prior to admission. Applicants are encouraged to contact the department to request a Pre-Occupational Therapy adviser.

APPLICATION CRITERIA

Application materials for the Occupational Therapy Program may be obtained from the College of Health Professions (CHP) admissions coordinator. All application materials must be submitted to the admissions coordinator with a postmark no later than March 1. All students applying for admission to the Combined B.S./M.S. Occupational Therapy Program at Towson University must meet the following criteria:

1. Applicants must have applied to Towson University for fall admission by February 1.
2. Applicants must have completed a minimum of 13 units in college courses, excluding developmental courses, by the end of the fall term preceding screening.
3. The following pre-requisite courses or their equivalents must be completed by December 31:
 - a. BIOL 190 Introductory Biology for the Health Professions (4) (must be completed by end of fall term preceding screening) OR BIOL 213 Anatomy and Physiology I (4) (must have been taken within the last five years).
 - b. Two of the following three courses:
 - PSYC 101 Introduction to Psychology (3)
 - SOCI 101 Introduction to Sociology (3)
 - ENGL 102 Writing for a Liberal Education (3)

All of these courses must be completed by the end of the Spring term in which screening takes place with a grade equivalent of 2.67 or higher. CLEP tests and AP exam scores may be used in lieu of course grades. However, scores must be equivalent to the grade requirement of a 2.67 or higher, and the courses must be posted on the TU transcript. Applicants with lower test scores must take the course and achieve a grade equivalent of 2.67 or higher to be considered for screening. Applicants with such test scores must contact the CHP admissions coordinator for specific information.

4. Applicants must have a minimum overall GPA of 3.00 by the end of the fall term preceding screening for admission to the program.

5. Applicants must submit the following documents in *one* packet postmarked by March 1:
 - a. Official transcripts that include course work taken through the fall term preceding application to the program at institutions other than Towson University.
 - b. A completed Human Service Activity Verification Form, which provides evidence of completion of at least 30 hours of work and/or volunteer experience in a human service activity. This work or volunteer experience must have involved direct contact with people with disabilities, illness or other disadvantages. Examples include work/volunteer experience with clients in hospitals, nursing homes, rehabilitation facilities, senior centers, drug rehabilitation programs, programs for the homeless, camps, etc.
 - c. A typewritten application essay following the guidelines provided by the department.
 - d. Three reference forms completed by appropriate individuals and submitted in accordance with application requirements.
6. Applicants must have a completed Prerequisite Checklist with the Admissions Coordinator on file by March 1. In addition, applicants who wish to have courses not listed on this form approved as equivalent to major courses in this program of study must submit a written request for approval of these courses.
7. A minimum of 23 units meeting Core Curriculum requirements must have been completed prior to beginning the first term of the Occupational Therapy Program.

Applicants with units more than 10 years old may petition (in writing by March 1) to have these units excluded from calculation of the GPA if they have successfully completed 13 or more units within the past two years. These 13 units must include either BIOL 190 Introductory Biology for the Health Professions or BIOL 213 Anatomy and Physiology I (or their equivalent). When this option is approved, all units more than 10 years old are excluded from GPA computation, with the exception of grades for PSYC 101, SOCI 101 and ENGL 102. If applicants wish old screening course grade(s) to be omitted, they must have retaken the screening course(s) within the past 10 years. If a petition regarding omission of these grades is not received by the application deadline, all courses more than 10 years old will be used in computation of the GPA.

APPLICATION PROCESS

Admissions Coordinator is available to assist with application process at 410-704-2653.

Screening for admission is based on a review of student's GPA, admission essay, letters of recommendation and required volunteer experience.

Early Admission to the Major

High school seniors, current Towson University students, and transfer students with an overall GPA of 3.40 may be considered for early admission to the Combined B.S./M.S. Occupational Therapy Program. Early admission will result in Guaranteed Admission Status, which will ensure the student a place in the program with the next class admitted. In order to receive Guaranteed Admission Status, applicants need to complete the application process

and be selected by the program's Admissions Committee. In order to enter the program, students must meet all application criteria, including prerequisite grade requirements and be admitted to the university.

Early admission applicants will be admitted on a first-come, first-served rolling admission basis until Jan. 31 of the year preceding screening. Applications will continue to be accepted until all available spaces are filled. No more than 50 percent of the class will be filled with early admit students. Applicants will be informed of the status of their application within 30 days. Students interested in pursuing early admission under this policy must contact the CHP admissions coordinator, 410-704-2653.

Screening

Screening will occur immediately after March 1 for applicants who have complete files.

The department's Admissions Committee will evaluate all completed applications based upon GPAs, essays and references. The top candidates from this pool of applicants will be selected for admission.

Selection of the top candidates will be completed by April 15. A waiting list will be developed consisting of applicants from the original pool who were not accepted but wish to remain on the waiting list for classes beginning that fall term. The top candidate on that list is notified if a place becomes available in the class. If that candidate cannot accept the place, the next candidate is notified. The waiting list is maintained until the end of the drop-add period in the fall and does not carry over into the next year.

UNDERGRADUATE PORTION OF COMBINED B.S./M.S. PROGRAM

In addition to the Core Curriculum requirements, Occupational Therapy majors must complete 44 units in occupational therapy course, 24–25 units in other required courses, and 27 units in clinical and fieldwork courses at the undergraduate level. A total of 36 units in occupational therapy courses and approved electives are required at the graduate level. Courses applicable toward the major may not be taken under the Pass/Fail grading option.

Students must maintain a minimum cumulative GPA of 2.75 following admission into the Occupational Therapy major. Should the degree student's average fall below a 2.75, a letter of academic warning will be sent. The GPA must be restored to a 2.75 within 12 units or completed in a one-year period from the term in which the GPA fell below 2.75, whichever comes first. A student on academic probation who does not restore the GPA to 2.75 as required will be dismissed from the degree program. By the end of the term preceding OCTH 435, students must achieve and maintain a cumulative GPA of 3.00, and consistently demonstrate professional behaviors and necessary competencies to enroll in OCTH 435. All Core Curriculum requirements and undergraduate courses must be completed prior to advancement to graduate status. Students must have a cumulative GPA of 3.00 and successfully complete a portfolio review process to be admitted into the graduate portion of the occupational therapy program. A grade equivalent below 2.00 in a required course will not count toward major units. Students receiving a grade equivalent below 2.00 in a major course

or a U in OCTH 435/436 may retake the course once to improve their standing. Failure of OCTH 435 or 436 (U grade) may result in denial of re-admission. Students may repeat no more than 2 courses required for the bachelor's degree portion of the major.

Students must successfully complete all undergraduate course work, including OCTH 435 and OCTH 436, in order to earn the bachelor's degree in occupation and well-being.

After advancement to graduate student status, completion of 36 graduate units is required. All students must complete the Occupational Therapy Knowledge Exam (OTKE) as a degree requirement. Occupational Therapy Combined B.S./M.S. students must meet all department and Graduate School academic standards and policies.

Registration

Departmental consent is required for admission to all Occupational Therapy major courses.

COMBINED BACHELOR'S/MASTER'S DEGREE PROGRAM

Students complete a total of 45 months of pre-requisite, core curriculum, and professional course-work, which is completed over a period of 5 to 5½ calendar years.

Undergraduate Portion

Prerequisites

BIOL 190	Introductory Biology for the Health Professions (4)
ENGL 102	Writing for a Liberal Education (3)
PSYC 101	Introduction to Psychology (3)
SOCI 101	Introduction to Sociology (3)

First Term (Fall)

OCTH 211	Philosophy of Occupational Therapy (3)
OCTH 216	Life Span Adaptations and Occupations (4)
OCTH 217	Analysis of Occupational Performance I (4)
BIOL 213	Anatomy and Physiology I (4)

Second Term (Spring)

PSYC 361	Abnormal Psychology (3)
OCTH 213	Small Group Dynamics (3)
OCTH 218	Analysis of Occupational Performance II (3)
BIOL 214	Anatomy and Physiology II (4)
BIOL 427	Neuromuscular Mechanisms of the Upper Body (2)

Summer (Optional)

MATH 237	Biostatistics (4)
	or
MATH 231	Basic Statistics (3)
	or
PSYC 212	Behavioral Statistics (4)
	or
ECON 205	Statistics for Business (3)

Third Term (Fall)

OCTH 221	Clinical Kinesiology (3)
OCTH 314	Principles of Psychosocial Occupational Therapy Practice (5)
OCTH 320	Psychosocial Level I Fieldwork (3)
PHYS 211	General Physics I
	or
PHYS 202	General Physics for the Health Sciences (5)
MATH 237	Biostatistics (4)
	or
MATH 231	Basic Statistics (3)
	or
PSYC 212	Behavioral Statistics (4) (if not taken in summer)
	or
ECON 205	Statistics for Business (3)

Fourth Term (Spring)

HLTH 207	Health Care in the U.S. (3)
OCTH 313	Adult Neurological Occupational Therapy (3)
OCTH 317	Adult Musculoskeletal Occupational Therapy (3)
OCTH 319	Physical Dysfunction Level I Fieldwork (3)
OCTH 323	Gerontological Occupational Therapy (3)

Fifth Term (Fall)

OCTH 325	Occupational Therapy Practice with Children and Youth (4)
OCTH 326	Children and Youth Level I Fieldwork (3)
OCTH 428	Occupational Therapy Organization in Modern Society (3)
OCTH 430	Research Methods in Occupational Therapy (3)

Portfolio Review

Sixth Term (Spring)

OCTH 435	Physical Rehabilitation Level II Fieldwork (9)
OCTH 436	Psychosocial Level II Fieldwork (9)

Graduate Portion

Summer

OCTH 610	Data Analysis in Occupation-Based Research and Evidence-Based Practice (3)
OCTH 611	Advanced Theory and Philosophy of Occupation (3)

Seventh Term (Fall)

OCTH 678	Assessment Through the Lifespan (3)
OCTH 612	Occupational Therapy Health Promotion Initiatives in the Community: Clinical (3)
OCTH 613	Advanced Research Methods in Occupation-Based Practice (3)
	*Graduate elective (3)

Minimester

- *Graduate elective (3)
- *Graduate elective (3)

Eighth Term (Spring)

OCTH 603	Issues in Occupational Therapy (3)
OCTH 781	Graduate Seminar (3)
	*Graduate elective (3)
	*Graduate elective (3)

Summer

OCTH 880	Graduate Project (3)
	*Graduate elective (3)
	*Four graduate electives are required.

ACCELERATED OPTION

See above courses under Summer and Seventh Term (Fall).

Minimester

OCTH 781	Graduate Seminar
	*Graduate elective

Eighth Term (Spring)

OCTH 603	Issues in Occupational Therapy (3)
OCTH 880	Graduate Project (3)
	*Graduate elective (3)
	*Graduate elective (3)

*Four graduate electives are required.

This sequence may change without prior notice.

All Occupational Therapy students must complete 960 hours of Level II full-time fieldwork within 24 months following completion of academic preparation.

Students in this program may not take Occupational Therapy courses prior to the terms in which they are scheduled on this plan.

OCCUPATIONAL THERAPY ASSISTANTS

Occupational therapy assistants may ask to have courses taken in fulfillment of their degree reviewed to determine if any of these courses may substitute for required 200-level courses in the Combined B.S./M.S. program of study at Towson University. Students who wish to be considered for this option must notify the department in writing of their request and must provide course descriptions and transcript for review.

PROFESSIONAL MASTER'S DEGREE PROGRAM

This Master of Science in Occupational Therapy is designed for individuals with bachelor's degrees in other fields who are interested in becoming occupational therapists. For further information, consult the *Graduate Catalog*.

POST-PROFESSIONAL MASTER'S DEGREE PROGRAM

This Master of Science in Occupational Therapy is designed for individuals with bachelor's degrees in Occupational Therapy who are interested in assuming leadership roles in the profession and obtaining advanced education with emphasis on teaching, research or clinical practice. For further information, consult the *Graduate Catalog*.

DOCTOR OF SCIENCE IN OCCUPATIONAL SCIENCE (Sc.D.)

The applied doctoral degree in Occupational Science prepares graduates to teach, influence policy, and engage in applied research. Occupational science is the scientific study of human

occupation related to the purposeful and meaningful activities that comprise everyday life experiences. The main emphasis of this interdisciplinary doctoral program is to advance education, research and service that promote occupational engagement, social and occupational justice, and health and well-being of persons, organizations and populations by applying knowledge gained through the promoted study of occupational science.

The doctoral degree requires the completion of at least 90 units beyond a bachelor's degree. For more information, consult the *Graduate Catalog* or Program Director Janet DeLany at jdclany@towson.edu or 410-704-2371.

Pre-Professional Preparation

PHYSICAL THERAPY PREPARATION

Contact Person: Robert Karp

OFFICE

Burdick Hall 105, 410-704-2653
rkarp@towson.edu

In recent years, most physical therapy programs in the United States have converted to graduate programs, and most of these will become D.P.T. granting. Entry into these programs is highly

competitive, and prerequisites vary. The minimum requirements for application to most physical therapy programs include 90 units, but many are now requiring a B.S. or B.A. Prerequisite requirements typically include extensive course work in biology, chemistry and physics, as well as statistics and courses in behavioral sciences. Because of these requirements, students often choose majors in a science or health-related field, such as Biology, Exercise Science or Athletic Training. However, any major is acceptable, as long as specific undergraduate prerequisites for individual schools are completed. A typical first-year student curriculum at Towson University might include chemistry, biology and mathematics. Towson provides advising to assist students with their undergraduate preparation for this field.





The departments and programs of the College of Liberal Arts explore what it means to be human, how people construct identities and institutions, and how individuals and groups interact over time—in communities, in cultures, and in nations. The college includes those disciplines customarily identified as the humanities and those generally identified as the social sciences, with each departmental discipline having a developed set of questions, methods and results. The College of Liberal Arts also hosts a variety of interdisciplinary programs that frame their studies not by discipline but by topic, bringing to bear the insights of multiple disciplinary tools and perspectives. Because it contains many of the fundamental disciplines of higher education, the college contributes heavily to the Core Curriculum course offerings of the university.

Study in the College of Liberal Arts develops those abilities and habits of mind associated with a liberal education. Students learn how to examine evidence carefully, how to represent ideas fully and fairly, and how to analyze information and construct claims. They learn to express themselves clearly and creatively, to weigh complexities of argument and circumstance in reaching informed judgments, and to appreciate the rich diversity of human culture. The cultivation of such abilities prepares students for richer lives both personally and professionally and equips liberal arts graduates to meet the highest tests of democratic citizenship.

The College of Liberal Arts limits the size of its classes whenever possible to allow greater faculty-student interaction, an emphasis on writing and constructive feedback, and responsiveness to individual students. Learning may take place in many settings and through varied forms of interaction. The college supports exploration of different teaching formats, creative uses of technology, experience beyond the classroom, and work with peers as important bases for the expansion of student learning.

Faculty are active scholars who participate in professional meetings, publish articles and books, conduct seminars or workshops, collaborate with community organizations, and engage in research and intellectual exchange regionally, nationally and internationally. Such work not only invigorates the classroom but also helps to create opportunities for students. More advanced students may undertake work under the guidance of or in collaboration with faculty on campus, perhaps as part of a grant project, as an independent study, or as a senior thesis. Internships or service-learning opportunities also reflect arenas of faculty engagement. Students join travel programs led by a faculty member or study abroad because of opportunities created through faculty contacts. The college seeks to build an intellectual and civic life that encompasses students and faculty alike.

Employers often list among the traits they most desire in their employees the ability to write clearly and effectively, the ability to analyze a problem and to pursue solutions with good judgment, the ability to work with others in groups, and the ability to understand and to appreciate cultural differences. Democratic government requires a citizenry that is able to engage in civil discourse, to understand and evaluate ideas, and to make choices in an environment of complexity. Individual appreciation of much that surrounds us in American and global culture flourishes through a recognition of pattern, precedent, reference and meaning. The demands of all of these spheres are addressed by an education in the liberal arts. In both its undergraduate and graduate programs, the College of Liberal Arts seeks to convey knowledge and to sharpen the tools of thought to aid students in constructing their personal, professional and civic lives. We invite you to join us in this voyage of creation and discovery.

Terry A. Cooney, Dean

The College of Liberal Arts

Cultural Studies
 English
 Environmental Science and Studies (with FCSM)
 Family Studies and Community Development
 Foreign Languages
 French
 German
 Italian
 Spanish
 Geography and Environmental Planning
 Geography and Land Surveying
 History
 Interdisciplinary Studies
 African and African American Studies Minor
 American Studies
 Ancient Mediterranean Studies Minor
 Animal Behavior
 Asian Studies
 Business, Communication and the Liberal Arts Minor
 Individually Designed Thematic Option
 Jewish Studies Minor
 Latin American and Latino/a Studies
 Lesbian, Gay, Bisexual and Transgender Studies Minor
 Museum Studies Minor
 International Studies
 Law and American Civilization
 Metropolitan Studies
 Philosophy
 Political Science
 Prelaw Advising Program
 Psychology
 Religious Studies
 Social Sciences
 Sociology-Anthropology
 Sociology
 Anthropology
 Criminal Justice
 Women's and Gender Studies

COLLEGE OFFICE
 Liberal Arts Building 2213, 410-704-2128
 Fax: 410-704-6392
www.towson.edu/cia

Cultural Studies Program

Director: William Tsitsos (*Sociology, Anthropology and Criminal Justice*)

Affiliated Faculty: Peter Baker (*English*), Jennifer Ballengee (*English*), Celia Bardwell-Jones (*Philosophy*), Joanna Basuray (*Nursing*), David Bergman (*English*), Sam Collins (*Sociology, Anthropology and Criminal Justice*), Chris D'Addario (*English*), Ayse Dayi (*Women's Studies*), Matthew Durlington (*Sociology, Anthropology and Criminal Justice*), Ping Fu (*Foreign Languages*), Paz Galupo (*Psychology*), Phil Gochenour (*English*), Susan Isaacs (*Art*), Kimberly Katz (*History*), Peter Lev (*Electronic Media and Film*), Paul Miers (*English*), John Murungi (*Philosophy and Religious Studies*), Gerald Phillips (*Music*), Paul Pojman (*Philosophy and Religious Studies*), Deborah Shaller (*English*), Lisa Swanson (*Kinesiology*),

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THE PROGRAM

In the Cultural Studies program, faculty and students study how meaning is produced and consumed in the process of constructing and inhabiting a culture. Cultural Studies programs cross disciplines in order to engage contexts like gender and sexuality, class, race and ethnicity, globalization, and national identity. This interdisciplinary approach utilizes the methods of inquiry of the humanities, social sciences and critical cultural theory, as well as science, mathematics, economics and health professions. The program brings together students and faculty who are committed to the notion that, in our increasingly global society, diversity reaches far beyond face value. Rather, diversity must be measured in the richness and complexity of ideas and experiences, a depth of understanding that the Cultural Studies program aims to foster. In the spirit of the university's liberal arts tradition, the Cultural Studies program creates a space in which students can be critically engaged, aware, and active in thought, in work, and in the community.

MAJOR IN CULTURAL STUDIES

Majors in Cultural Studies must complete 42 units of course work, including the introductory course (3 units), the methodology course (3 units), required courses (15 units), either a capstone project or a capstone/internship combination (6 units), and 15 units of elective courses.

I. Introductory Course

CLST 201 Introduction to Cultural Studies. Core 11 (3)

II. Methodology Course

CLST 300 Methods of Cultural Inquiry. (3)

III. Required Courses (15 units):

CLST 301 Perspectives in Global Culture (3)
CLST 303 Identity and Culture (3)
CLST 307 Visual Culture (3)
CLST 311 Science, Technology, and Culture. Core 14 (3)
CLST 370 Special Topics in Cultural Studies (3)

IV. Capstone Experience (6 units):

Three units of CLST 497 Capstone Project in Cultural Studies and 3 units of CLST 495 Internship in Cultural Studies.

CLST 495 Internship in Cultural Studies (3)
CLST 497 Capstone Project in Cultural Studies (3)

V. Electives (15 units)

15 units of courses from the following groupings, 9 of which must be upper division. A list of offered courses will be updated each term. The following learning modules are meant to indicate possible thematic trajectories, as a guide for students. As such, courses may be listed under more than one heading.

CLST 490 Independent Study in Cultural Studies (limited to 3 units)

Society of the Spectacle: The courses in this module are meant to theorize the intersection of traditional and contemporary media and consumer cultures. In contemplating a broad spectrum of "spectacles," students will consider the economic, political, and social discourses of visual culture and performance.

ANTH 325 Moral Panics (3)
ANTH 382 Visual Anthropology (3)
ANTH 341 Information Age Cultures (3)
ARTH 328 Art, Culture, and Politics (3)
CLST 309 Performance Culture (3)
ENGL 463 Semiotics: The Study of Signs (3)
KNES 353 Sport and Society (3)
KNES 485 Cultural Economy of Sport (3)
MCOM 101 Introduction to Mass Communication (3)
MCOM 352 Media Criticism (3)
MCOM 385 Mass Media and Society (3)
THEA 310 Theater for Social Change (3)

Cultural Cartographies: The courses in this module examine the cultural products that result from human landscapes, charting the ways in which we map our interaction with the environment.

ANTH 207 Cultural Anthropology (3)
ANTH 351 Drugs in the Americas (3)
ANTH 364 Religion, Magic, and Witchcraft (3)
ANTH 368 Globalization in Cross-Cultural Perspective (3)
ANTH 380 Ethnographic Methods (3)
ARTH 330 East Asian Art and Architecture (3)
ARTH 331 The Art of China (3)
ARTH 333 The Art of Japan (3)
CLST 305 Textuality and Culture (3)
ENGL 471 Topics in World Literature (3)
GEOG 357 Cultural Geography (3)
GEOG 381 Political Geography (3)
MUSC 112 World Music: The Americas, Africa and West Europe (3)
MUSC 113 World Music: East Europe, Asia and the Middle East (3)
PHIL 204 Race, Class, and Gender (3)
SOCI 243 Sociology of Race, Class and Gender (3)
THEA 316 Theatre of Crossing Cultures (3)

Critical Pedagogies: This module is ordered around one central premise: knowledge is never neutral. As such, these courses call into question the construction of knowledge; interrogate the traditional means of passing on cultural knowledge; and recognize alternative forms of knowledge and the processes by which they are disseminated.

ARTH 328 Art, Culture and Politics (3)
ARTH 335 African-American Art (3)
ARTH 339 Latin-American Art (3)
ARTH 341 Women in Art (3)

ENGL 462 Modern Literary Theory (3)
ENGL 463 Semiotics: The Study of Signs (3)
KNES 251 History of American Sport (3)
MUSC 112 World Music: The Americas, Africa and West Europe (3)
MUSC 113 World Music: East Europe, Asia and the Middle East (3)
MUSC 127 Elements and History of Rock Music (3)
PHIL 201 Social and Political Philosophy (3)
PHIL 204 Race, Class, and Gender (3)
PHIL 343 Aesthetics (3)
WMST 337 Feminist Theory (3)

Political Economies of Empire: The courses within this module investigate the relations of corporate, political, economic and cultural forces in the context of 21st century globalization. The courses assess factors such as: wealth distribution, the disappearance of "local" culture, labor and labor exploitation, the military and globalization, environmental issues, and new notions of empire.

ANTH 346 Wealth, Power, and Politics in Cross-Cultural Perspective (3)
ANTH 351 Drugs in the Americas (3)
ANTH 368 Globalization in Cross-Cultural Perspective (3)
ECON 201 Microeconomic Principles (3)
ECON 202 Macroeconomic Principles (3)
ECON 321 History of Economic Thought (3)
ECON 331 Government and Economic Life (3)
ECON 341 Labor Economics and Labor Relations (3)
ECON 374 Economic Issues of Gender (3)
ECON 375 Environmental Economics (3)
KNES 460 Cultural Economy of Sport (3)
SOCI 249 Social Problems (3)
SOCI 323 Social Movements (3)
SOCI 333 Political Sociology (3)
SOCI 341 Class, Status and Power (3)
WMST 335 Women, Work and Family (3)

Critical Artscape: The courses in this module critically examine visual aspects of society.

ARTH 323 Modern Art I (3)
ARTH 324 Modern Art II (3)
ARTH 325 History of Modern Architecture (3)
ARTH 327 History of Modern Design (3)
ARTH 328 Art, Culture and Politics (3)
CLST 305 Textuality and Culture (3)
ENGL 462 Modern Literary Theory (3)
PHIL 343 Aesthetics (3)

Posthumans in Second Nature: The courses in this module consider the ways in which advances in genetics and the reproductive sciences have raised questions about our identities and human beings and our relation to nature, blurring divisions between human and non-human, culture and nature, animal and machine.

ANTH 341 Information Age Cultures (3)
ANTH 368 Globalization in Cross-Cultural Perspective (3)
ARTH 351 History of Photography (3)
ENVS 301 People and Pests (3)
ENVS 337 The Chesapeake Bay and its Watershed (3)
PHIL 319 Science, Technology and Values (3)
SOCI 312 Sociology of Gender (3)

Postcolonial Contexts: The courses in this module foster discussions of various conditions in which western and non-western cultures collide. In the postcolonial context, the formation of identity is understood as a result of resistance to imposing and powerful cultural forces.

ANTH 353 Latinas in the Americas (3)
ARTH 328 Art, Culture and Politics (3)

CLST 309	Performance Culture (3)
ENGL 336	Postcolonial Literature (3)
ENGL 462	Modern Literary Theory (3)
KNES 285	Sport: Cross-cultural perspective (3)
PHIL 204	Race, Class, and Gender (3)

Wild and Docile Bodies: This module features courses that approach the body as the point of conjunction between the individual and society and therefore as a site of control, study, discipline, punishment and emancipation. Students in these courses will examine the cultural, political and economic technologies active within, and which act upon, the corporeal aspects of everyday life.

ARTH 341	Women in Art (3)
ARTH 335	African-American Art (3)
CLST 309	Performance Culture (3)
HLTH 218	Women's Health (3)
HLTH 220	Sexuality in a Diverse Society (3)
KNES 353	Sport and Society (3)
LGBT 101	Introduction to Lesbian, Gay, Bisexual and Transgender Studies (3)
LGBT 381	Readings in LGBT Studies (3)
PHIL 204	Race, Class and Gender (3)
SOCI 243	Sociology of Race, Class and Gender (3)
SOCI 312	Sociology of Gender (3)
WMST 336	Women and Medicine (3)
WMST 338	Women and Sexuality (3)
WMST 339	Reproductive Technologies and the Future of Motherhood (3)

MINOR IN CULTURAL STUDIES

The minor in Cultural Studies is designed to enhance and supplement students' studies in a number of other areas, including anthropology, education, English and mass communication. In these areas of study, the fundamental questions posed by cultural studies give students a broader, more critical look at the interactions between their fields of study and society as a whole. These courses may also provide a useful complement to any undergraduate program of study.

Requirements

Students minoring in cultural studies must complete 18 units, including the introductory course (3 units), the methodology course, 2 from required courses list, and two electives (6 units), one of which must be upper-division. Students must earn a grade equivalent of 2.00 or higher in all courses in the minor.

I. Introductory Course

CLST 201	Introduction to Cultural Studies. Core 11 (3)

II. Methodology Course

CLST 300	Methods of Cultural Inquiry. (3)

III. Required Courses (6 units; Two of the following courses)

CLST 301	Perspectives in Global Culture (3)
CLST 303	Identity and Culture (3)
CLST 307	Visual Culture (3)
CLST 311	Science, Technology and Culture Core 14 (3)
CLST 370	Special Topics in Cultural Studies (3)

IV. Electives (6 units)

Two of the electives listed above (under Major Requirements), one of which must be upper-division.

Department of English

Professors: Lena Ampadu, Evelyn Avery, Peter Baker, Carl Behm, David Bergman, H. George Hahn (*Chair*), Harvey Lillywhite, Florence Newman

Associate Professors: Jennifer Ballengee, Barbara Bass, Geoffrey Becker, Frances Botkin, Cheryl Brown, Christopher Cain, K Edgington, Paul Miers, Marlana Portolano, Gary Wood

Assistant Professors: Christopher D'Addario, Tara Bynum, Michael Downs, Erin Fehskens, Lili Fox-Velez, Jennifer Mott-Smith, W. Dana Phillips, Joel Slotkin, Zosha Stuckey

Instructors: Margaret Benner, Deborah Shaller

Lecturers: Alan Britt, Joseph Capista, Jack Carneal, Gina Crace, Juana Green-Nicoletta, Steven Heaney, Tina Kelleher, Reiner Prochaska, Carol Quinn, Andrew Reiner, Robert Roensch, Susy Sayre, Gregory Seagle, Robin Smith, Laurel Strassberger, Benjamin Warner

Part-time faculty: Lianne Appelt, Suan Bergamy, Clare Banks, David Belz, Quinton Blackwell, Melvin Brown, Natasha Brown, Warren Buttendorf, Deanne Byerly, Vivia Chang, Mark Charney, Kristina Collins, Mary Ann Criss, Joseph Davis, Judy Decraene, Lynne Dowell, Bonnie Curr, Beth Edelstein, Johnie Fields, Bruce Friedlander, Lee Gardener, Michele Glenn, Denise Gordon, Eric Hallengren, Regina Holmes, Rob Hudson, Hank Johnson, Kate Lashley, Arthur Lesley, Elise Levine, Ab Logan, Adean Lopez, Tone Mafale, Tracy Miller, Tim Nelson, Mark Panos, Alan Reese, Rebekah Remington-Jonke, Diane Scharper, Ian Sullivan, Nabie Swaray, Christopher Thacker, Erika Watkins

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PROGRAMS OF THE DEPARTMENT

English offers students pleasure and profit, wit and wisdom, a sense of history and a vision of the future. English students know the delight of reading the best of British and American literature — authors as diverse as Shakespeare and Emily Dickinson, Edgar Allan Poe and Virginia Woolf, James Baldwin and John Donne. The Department of English provides several programs tailored to diverse needs. Students majoring in English can follow one of three tracks: Writing, Literature, or Secondary Education. Students pursuing other majors can minor in English, Creative Writing, or World Literature.

Each English major is assigned a faculty adviser, who assists the student in creating an individual program of study best suited to the student's interest and abilities. Still, students are responsible for monitoring their own progress toward graduation. The flexibility of all programs, including majors and minors, allows the

student a wide choice of courses within the department and possibilities for coordinating a program with another academic department.

The Department of English oversees the master's in Professional Writing program, offering unique post-baccalaureate opportunities for English majors and minors interested in pursuing careers in creative writing, technical writing, editing, public relations, and teaching writing at the community-college level. Geoffrey Becker, 410-704-5196, coordinates the program.

MAJOR IN ENGLISH

English majors must complete 42 units, and each course must be completed with a grade equivalent of 2.00 or higher. Majors are encouraged to use English courses to fulfill University Core Requirements where appropriate.

Required Courses (21 units)

I. Foundation Courses (12 units)

ENGL 200	Introduction to Studying English (3)
ENGL 221	British Literature to 1798 (3)
ENGL 222	British Literature since 1798 (3)
ENGL 300	Literary Research and Applied Criticism (3)

Students are to take ENGL 200 and ENGL 300 prior to taking upper-level courses in the major.

II. American Literature (3 units)

One of the following:

ENGL 230	Main Currents in American Literature (3)
ENGL 231	American Literature to 1865 (3)
ENGL 232	American Literature since 1865 (3)

III. Shakespeare (3 units)

One of the following:

ENGL 426	Topics in Shakespeare Studies (3)
ENGL 427	Shakespearean Comedies (3)
ENGL 428	Shakespearean Tragedies (3)

Secondary Education Concentration majors need the approval of their advisers to take ENGL 426.

IV. Capstone Experience (3 units)

One of the following in the final year:

ENGL 485-6	Seminar in English Studies (3)
ENGL 498	English Internship as Capstone (3)
ENGL 499	Honors Thesis (3)

Literature Track (21 units)

I. Linguistics (3 units)

One of the following:

ENGL 350	Comparative Grammar (3)
ENGL 351	Historical Linguistics (3)
ENGL 353	History of American English (3)
ENGL 451	History of the English Language (3)
ENGL 452	Structure of the English Language (3)
ENGL 475	Topics in Linguistics (3)

II. Literary Criticism (3 units)

One of the following:

ENGL 461	History of Literary Criticism (3)
ENGL 462	Modern Literary Theory (3)
ENGL 463	Semiotics (3)
ENGL 464	Topics in Literary Theory

III. Workshop or Studio Courses (3 units)

One of the following:

ENGL 310	Writing Argument (3)
ENGL 313	Academic Essay (3)
ENGL 315	Literary Essay (3)
ENGL 316	Writing about Literature (3)
WMST 333	Women's Words, Women's Lives (3)

IV. Literary History (3 units)

One of the following pre-1900 literature courses:

ENGL 321	Medieval British Literature (3)
ENGL 322	Medieval and Early Modern British Drama (3)
ENGL 323	16th-century British Literature (3)
ENGL 324	Early 17th-century British Literature (3)
ENGL 325	18th-century British Literature (3)
ENGL 326	Literature of the British Romantic Period (3)
ENGL 327	The Victorian Age (3)
ENGL 341	History and Literature of the Old Testament (3)
ENGL 380	Voices of Medieval Women (3)
ENGL 420	Development of the British Novel: 18th Century (3)
ENGL 421	Development of the British Novel: 19th Century (3)
ENGL 425	Chaucer (3)
ENGL 429	Milton (3)
ENGL 431	Literature of the American Romantic Period (3)
ENGL 435	Development of the American Novel: 19th century (3)

Depending on specific content, ENGL 469: Studies in One or Two Authors and various "topics" courses (ENGL 426, 471, 472, 473, 476, and 477) may satisfy this requirement, with the approval of the chair.

V. Electives (9 units)

3 units of a 300- or 400-level literature course, not including ENGL 490.

3 units of any 300- or 400-level ENGL course.

3 units of any ENGL course.

Writing Track (21 units)**I. Language or Criticism (3 units)**

ENGL 416 Editing
or

One of the following:

ENGL 350	Comparative Grammar (3)
ENGL 351	Historical Linguistics (3)
ENGL 353	History of American English (3)
ENGL 451	History of the English Language (3)
ENGL 452	Structure of the English Language (3)
ENGL 461	History of Literary Criticism (3)
ENGL 462	Modern Literary Theory (3)
ENGL 464	Topics in Literary Theory
ENGL 475	Topics in Linguistics (3)

II. Workshop or Studio Courses (12 units)

A. At least one of the following:

ENGL 310	Writing Argument (3)
ENGL 313	Academic Essay (3)
ENGL 315	Literary Essay (3)
ENGL 316	Writing about Literature (3)
WMST 333	Women's Words, Women's Lives (3)

B. Up to three of the following:

ENGL 311	Writing Poetry (3)
ENGL 312	Writing Fiction (3)
ENGL 317	Writing for Business and Industry (3)
ENGL 318	Advanced Informational Writing (3)
ENGL 411	Advanced Writing Poetry (3)
ENGL 412	Advanced Writing Fiction (3)
ENGL 417-19	Topics in Writing (3)

III. Electives (6 units)

These must be at the 300 or 400 level, and at least 3 units must be a literature course, not including ENGL 490. It is strongly recommended that majors fulfill the Global Perspectives and Diversity and Difference Core Curriculum requirements with English courses.

Secondary Education Track (21 units)**I. Diversity in American Literature (3 units)**

One of the following:

ENGL 233	African American Literature (3)
ENGL 234	Major Writers in African American Literature (3)
ENGL 235	Ethnic American Literature (3)
ENGL 236	American Indian Literature (3)
ENGL 239	Modern Jewish Literature (3)
ENGL 471-477	Topics in Literature (when appropriate) (3)

II. Linguistics and Grammar (6 units)

A. Grammar:

ENGL 251	Applied Grammar (3)

Students who place out of this course through departmental examination are to take in its place an upper-division elective in literature.

B. One of the following:

ENGL 350	Comparative Grammar (3)
ENGL 351	Historical Linguistics (3)
ENGL 353	History of American English (3)
ENGL 451	History of the English Language (3)
ENGL 452	Structure of the English Language (3)
ENGL 475	Topics in Linguistics (3)

III. World Literature/Non-Western Literature (3 units)

ENGL 243	Introduction to Classical Mythology (3)
ENGL 244	World Folklore (3)
ENGL 248	Literature of the Global Experience (3)
ENGL 341	History and Literature of the Old Testament (3)

ENGL 342	Folklore and Literature (3)

ENGL 343	Myth and Literature (3)

ENGL 347	World Literature Written in English (3)

IV. Advanced Writing (3 units)

One of the following:

ENGL 310	Writing Argument (3)
ENGL 313	Academic Essay (3)
ENGL 315	Literary Essay (3)
ENGL 316	Writing about Literature (3)
WMST 333	Women's Words, Women's Lives (3)

V. Textual Analysis (3 units)

ENGL 463	Semiotics (3)

VI. Electives (3 units, 300- or 400-level)

Students in the Secondary Education program should be aware of the formal admission requirements for Secondary Education, including specified Core Curriculum requirements, and must determine what courses are required and permitted before formal admission. (See the Department of Secondary Education section of this catalog.) Students pursuing Secondary Education should visit the Department of Secondary Education in Hawkins Hall 404 as early as possible to declare their SCED track and obtain a Secondary Education adviser.

MINOR IN CREATIVE WRITING

Recognizing that all good writing is an act of imagination, ordering and synthesis that transcends subject-matter boundaries, the Creative Writing minor is designed for students with academic concentrations outside the field of English who desire to develop their present writing skills beyond those specifically geared to their chosen disciplines, and to do this under the supervision of professional writers.

Students minoring in Creative Writing must complete 24 units with a grade equivalent of 2.00 or higher in each course. At least 15 units must be earned at the 300–400 level. Courses should be

selected in consultation with the student's minor adviser in the Department of English. Students are encouraged to complete ENGL 102 as soon as possible.

Required Courses (12–15 units)

Select at least four courses in creative writing from the following:

ENGL 283	Introduction to Creative Writing (3)
ENGL 311	Writing Poetry (3)
ENGL 312	Writing Fiction (3)
ENGL 315	Literary Essay (3)
(recommended for students who do not fulfill the Advanced Writing Seminar Core Curriculum requirement with a course in their major)	
ENGL 411	Advanced Poetry Writing (3)
ENGL 412	Advanced Fiction Writing (3)
ENGL 417	Topics in Writing (3)
(may be selected only when the topic pertains to creative writing)	
ENGL 490	Independent Study (3)
(may be selected only when the topic pertains to creative writing)	

Formal Study of a Genre (3 units)

Select one course from the following:

ENGL 261	Elements of Poetry (3)
ENGL 263	Elements of Fiction (3)
ENGL 265	Elements of Drama (3)

Literature Courses (6–9 units)

Select at least two courses in literature. One of these courses must be at the 300–400 level.

MINOR IN ENGLISH

Students must complete 24 units with a grade equivalent of 2.00 or higher in each course, including ENGL 102 or ENGL 190, 6 units of 200-level courses, 6 units of upper- or lower-level courses, and 9 units of upper-level courses. No specific courses or blocks of courses are stipulated for the minor; each student works with a departmental adviser to design a coherent and purposeful individual program.

Electives

Electives may be chosen from the courses listed above or from other courses in British and American literature, folklore, mythology, ethnic literature or literary criticism selected in consultation with the student's minor adviser. With the permission of the minor adviser and the Department of English chair, students may take up to 6 units in literature courses taught in a foreign language. These courses are offered through the Department of Modern Languages; course descriptions may be found under the listings for the specific language.

The Portfolio

Students will be asked in their senior year to submit portfolios of a few papers that cover their years in the major. These portfolios are used anonymously to learn how well the major is working for its students. Students themselves will not be assessed; their standing will not be affected in any way. The English program will be assessing itself through what it finds students are learning.

COURSE PREREQUISITES

Course prerequisites are noted in the course descriptions. The department strictly enforces prerequisites.

MEETING CORE CURRICULUM REQUIREMENTS/COMPETENCY

All students in the university must fulfill the Core Curriculum requirements.

Every student in the university must complete ENGL 102 or ENGL 190 with a grade equivalent of 2.00 or higher to satisfy the English Composition Core Curriculum requirement.

Students may take additional courses to complete Core Curriculum requirements. Many 200-level and some 300-level courses fulfill Core Curriculum requirements.

Philosophy, art, history, speech and theatre Core Curriculum courses provide especially effective background for an English major. Students are encouraged to select elective courses in these areas in addition to those which fulfill Core Curriculum requirements.

Students may select any of the following advanced writing courses to fulfill the Advanced Writing Seminar: ENGL 310, ENGL 313, ENGL 315, ENGL 316, ENGL 317, ENGL 318. Students may, of course, take additional elective units in English.

Some students will be required to complete special competency courses in language and writing in addition to meeting Core Curriculum requirements in English. See the **Academic Achievement Center** section in **Academic Resources**. Students for whom English is not a native language may be required to complete courses in English as a Second Language as a prerequisite to enrollment in ENGL 102 Writing for a Liberal Education (see **International Undergraduate Admissions**).

TRANSFER CREDIT POLICY

The Department of English accepts English credits from accredited colleges and universities. However, to meet Core Curriculum requirements, students must either present 3 transfer credits in a college-level composition course, with a grade equivalent of 2.00 or higher, or earn a grade equivalent of 2.00 or higher in ENGL 102 or ENGL 190 at Towson University. Students registering in the department's major and minor programs must complete a minimum of 12 units in Department of English offerings at Towson University.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The department awards units through the Advanced Placement Program of the university. Also, a selected number of entering freshmen are placed in ENGL 190 rather than ENGL 102. The department offers units for most courses, other than upper-level writing courses, through the Credit for Prior Learning Program. Students applying for credit under this program complete an examination, an interview and at least one paper in the area.

ENGLISH HONORS AND ACTIVITIES

The department participates in the Honors Program. As a member of the Honors College, the department offers a number of intensive introductory seminars for qualified students. It also sponsors departmental honors whereby students pursue independent study leading to the completion of a thesis. Students interested in departmental honors should consult the chair of the department no later than the first term of their junior year. Honors are designated on the graduate's transcript and diploma.

By a vote of the English faculty, the outstanding graduate in the department receives the Gerry Buettner Award at Commencement. By departmental vote, the Fil Dowling Award goes to the year's outstanding English Education major. By selection of the joint English/Women's Studies committee, the Frank W. Guess Award is given to the year's outstanding portfolio of student writing. By selection of the English department committee, the Margery W. Harriss "Great Starts" Award is presented to the year's outstanding portfolio of first-year writing (ENGL 102 or ENGL 190).

Lambda Iota Tau is the national literary honor society with a chapter in the department, and the English Club is an informal association of majors, minors and professors who meet to exchange ideas about literature.

Students may publish in the Towson University literary publication *Grub Street*.

COMBINED BACHELOR'S IN ENGLISH AND MASTER'S IN PROFESSIONAL WRITING (30 UNITS)

The combined Bachelor's-Master's degree program in English and Professional Writing is designed to allow students to complete combined undergraduate and graduate degrees in five years, including 6 units taken during summer terms. This program is open only to undergraduates pursuing the Writing track in English.

Undergraduate Admission Requirements

For admission to this track on the undergraduate level, the student must apply to the director of the Professional Writing Program before the second term of the junior year and meet the following criteria:

- Completion of or current enrollment in 60 units (may include transfer credits)
- Declaration of an English major in the undergraduate Writing track
- Completion of (or current enrollment in) at least 12 units of the English major (3 of these units should fulfill the university's Advanced Writing Seminar requirement with a class from the English department: ENGL 313, ENGL 315 or ENGL 316)
- Achievement of an overall GPA of 3.30 or better and a GPA in English of 3.30 or better
- Demonstration of a high degree of proficiency in writing, to be determined by the director of the Professional Writing Program from the student's PRWR master's program admission materials

Degree Requirements

9 units taken at the 600 level after completion of the junior year will be double-counted toward fulfilling the 120 units required for the B.S. and the 36 units required for the M.S.:

- PRWR 617 Editing (3) fulfills the undergraduate requirement in Language or Criticism
- Two of the following fulfill undergraduate requirements for Workshop or Studio courses (6 units):
PRWR 611 Rhetoric The Pursuit of Eloquence (3)
PRWR 612 Rhetorical Grammar (3)

- PRWR 613 Theory of Exposition (3)
- PRWR 615 History and Theory of Prose Style (3)
- PRWR 627 Modern Rhetoric (3)

Undergraduates may count no more than 6 graduate units per term toward an undergraduate degree, beginning in the summer following the junior year.

A bachelor's degree will be awarded after all degree requirements for the bachelor's are met, normally after the fourth year. Students who do not successfully complete the bachelor's portion of this track, or who do not maintain a 3.30 GPA, may not proceed to the M.S. level unless such deficiencies are resolved. Students must receive a grade of B or better in the double-counted graduate level courses.

The student applies for admission to the Master's in Professional Writing Program during the first term of the senior year and enters the master's program during the first term of the fifth year.

Students who complete the bachelor's but decide not to continue with the M.S. program will terminate their program with the fulfillment of all requirements for the bachelor's degree. Students may withdraw from the combined degree program by informing the director of the Professional Writing Program. If a student becomes ineligible to participate in the combined program, the director of the Professional Writing Program will inform the student in writing. A student who is ineligible to participate or who withdraws from the combined degree program cannot double-count any courses for both bachelor's and master's degrees.

COMBINED BACHELOR'S IN ENGLISH AND MASTER'S IN HUMANITIES (30 UNITS)

The combined bachelor's-master's degree program in English and Humanities is designed to allow students to complete combined undergraduate and graduate degrees in five years, including 6 units taken during summer terms. This program is open only to undergraduates pursuing the Literature track in English.

Undergraduate Admission Requirements

For admission to this track on the undergraduate level, the student must apply to the Director of the Master's in Humanities program before the second term of the junior year and meet the following criteria:

- Completion of, or current enrollment in, 60 units (may include transfer credits)
- Declaration of an English major in the undergraduate Literature track
- Completion of, or current enrollment in, at least 12 units of the English major, 6 of which should be ENGL 300 and ENGL 319, ENGL 313, ENGL 315 or ENGL 316.
- Achievement of an overall GPA of 3.30 or better and a GPA in English of 3.30 or better
- Demonstration of a high degree of proficiency in academic writing, to be determined by the Director of the Humanities program from the student's Humanities program admissions materials

Degree Requirements

9 units taken at the 600-level after completion of the junior year will be double-counted toward fulfilling the 120 units required for the B.A.-B.S. and the 30 units required for the M.A.:

- Three of the following partially fulfill undergraduate requirements for electives (6 units): HUMA 611 Rhetoric: The Pursuit of Eloquence (3)
One course in Philosophical Inquiry HUMA 616-630 (3)
One or two courses in Humanities and Comparative Literary Inquiry HUMA 606-615 (3-6)

Undergraduates may count no more than 6 graduate units per term towards an undergraduate degree, beginning in the summer following the junior year.

A bachelor's degree will be awarded after all degree requirements for the bachelor's are met, normally after the fourth year. Students who do not successfully complete the bachelor's portion of this track, or who do not maintain a 3.30 GPA, may not proceed to the M.A.-level unless such deficiencies are resolved. Students must receive a grade of B or better in the double-counted graduate level courses.

The student applies for admission to the master's in Humanities program during the first term of the senior year and enters the master's program during the first term of the fifth year.

Students who complete the bachelor's but decide not to continue with the M.A. program will terminate their program with the fulfillment of all requirements for the bachelor's degree. Students may withdraw from the combined degree program by informing the Director of the Humanities program in writing. If a student becomes ineligible to participate in the combined program, the Director of the Humanities program will inform the student in writing. A student who is ineligible to participate or who withdraws from the combined degree program cannot double-count any courses for both bachelor's and master's degrees.

DOUBLE MAJOR PROGRAM

Students who major in one of the other programs of the university but feel a strong interest in language, literature or writing are urged to explore the value of completing a double major with their adviser or with the chair of the Department of English.

Environmental Science and Studies Program

Director: Jane L. Wolfson

Affiliated Faculty, Environmental Studies: Daniel Agley (*Health Science*), Celia Bardwell-Jones (*Philosophy and Religious Studies*), Kent Barnes (*Geography and Environmental Planning*), Robert Blake (*Elementary Education*), John Bullock (*Political Science*), Lillian Carter (*Health Science*), Beth Hall (*Geography and Environmental Planning*), Kang Shou Lu (*Geography and Environmental Planning*), James Manley (*Economics*), Toni Marzotto (*Political Science*), John Morgan (*Geography and Environmental Planning*), Dennis Muniak (*Political Science*), Karen Oslund (*History*), Paul Pojman (*Philosophy and Religious Studies*), Thomas Rhoads (*Economics*), Martin Roberge (*Geography and Environmental Planning*), Robert Rook (*History*), Stephen Scales (*Philosophy and Religious Studies*), Timothy Sullivan (*Economics*), Jeremy Tasch (*Geography and Environmental Planning*), Paporn Thebpanya (*Geography and Environmental Planning*), Donna Worgs (*Political Science*)

Affiliated Faculty, Environmental Science: Venessa Beauchamp (*Biological Sciences*), Harald Beck (*Biological Sciences*), Mark Bulmer (*Biological Sciences*), Rachel Burks (*Physics, Astronomy and Geosciences*), Ryan Casey (*Chemistry*), Brian Fath (*Biological Sciences*), Jonathan Filer (*Physics, Astronomy and Geosciences*), Susan Gresens (*Biological Sciences*), Sarah Haines (*Biological Sciences*), David Hearn (*Biological Sciences*), Matthew Hemm (*Biological Sciences*), Scott Johnson (*Biological Sciences*), John LaPolla (*Biological Sciences*), Steven Lev (*Physics, Astronomy and Geosciences*), Clare Muhoro (*Chemistry*), Jay Nelson (*Biological Sciences*), David Onwby (*Chemistry*), Roland Roberts (*Biological Sciences*), Gerald Robinson (*Biological Sciences*), Lev Ryzhkov (*Chemistry*), Erik Scully (*Biological Sciences*), Richard Seigel (*Biological Sciences*), Colleen Sinclair (*Biological Sciences*), Joel Snodgrass (*Biological Sciences*), Shannon Stitzel (*Chemistry*), David Vanko (*Physics, Astronomy and Geosciences*), Jane Wolfson (*Biological Sciences*)

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THE PROGRAM

The Environmental Science and Studies Program has two primary educational objectives. One is to provide the fundamental scientific, technical and social knowledge that program graduates will need to assess, plan, evaluate and

communicate environmental concerns, particularly those confronting metropolitan regions. The second is to instill the wide range of cognitive skills and content mastery that students will need to effectively analyze environmental issues, propose realistic plans for solving environmental problems at local, regional and national levels, or bring improved understanding of these issues to others through informal environmental education programs.

The requirements of the program are structured to meet these two objectives and include mathematical and scientific foundations as well as extensive interdisciplinary study related to environmental issues. The upper-level courses integrate the student's program of study and provide hands-on practice in an environmental field. The environmental problems addressed in many classes and seminars will focus on the adjacent urban/suburban region and its impact on the surrounding environment.

Most environmental problems resist solutions from any single discipline and environmental education programs need to reflect the complexity of the environmental processes they present. Therefore the program utilizes a rigorous interdisciplinary approach. The curriculum draws upon the expertise of faculty in the areas of biology, chemistry, geology, mathematics, environmental ethics and values, public policy, science education, economics, geography, public health and social change.

MAJOR IN ENVIRONMENTAL SCIENCE AND STUDIES

The Environmental Science and Studies Program has two concentrations: Environmental Studies and Environmental Science. There is considerable overlap in the required courses between the two concentrations. As students progress through the program, they begin to specialize in their area of greatest interest. During the senior year students in both concentrations are involved in course work that emphasizes application of concepts to real-world problems. The Environmental Studies Concentration is described below. For information about the Environmental Science Concentration, see the Fisher College of Science and Mathematics.

ENVIRONMENTAL STUDIES CONCENTRATION

Along with completing the common required courses, students in the Environmental Studies Concentration complete additional units as they complete one of five tracks. The tracks are: Environmental Geographical Analysis, Environmental Policy/Management, Environmental Health, Directed Environmental Studies and Informal Environmental Education. All students in the program will complete the required courses establishing the scientific principles and mathematical skills needed as a foundation for more specialized study. They also will complete additional courses in the social sciences, an upper-level internship or research course and additional course work appropriate to the selected track.

Required Courses (37–39 units)

Natural Sciences (16 units)

BIOL 201	Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Introduction to Ecology and Evolution (4)
CHEM 104	Introduction to Environmental Chemistry (4)
GEOL 121	Physical Geology (4)

Mathematics and Statistics (6–8 units)

One of the following:

- MATH 119 Pre-Calculus (4)
MATH 211 Calculus for Applications (3)

One of the following:

- MATH 231 Basic Statistics (3)
MATH 237 Elementary Biostatistics (4)
GEOG 375 Quantitative Methods in Geography (3)
ECON 205 Statistics for Business and Economics (3)

Advanced Writing Course (3 units)

One of the following:

- ENGL 318 Advanced Informational Writing (3)
ENVS 337 The Chesapeake Bay and Its Watershed (3)
GEOG 383 Natural Resources and Society (3)

Environmental Geography, Ethics and Health (12 units)

- GEOG 101 Physical Geography (3)
GEOG 410 Environmental Geography (3)
HLTH 451 Introduction to Environmental Health (3)
PHIL 255 Environmental Ethics (3)

ENVIRONMENTAL GEOGRAPHICAL ANALYSIS TRACK (34–35 UNITS)**Required Courses (28 units)**

- ECON 201 Microeconomic Principles (3)
ECON 375 Environmental Economics (3)
or
ECON 376 Natural Resource Economics (3)
POSC 103 American National Government (3)
or
POSC 207 State Government (3)
POSC 421 Politics and Environmental Policy (3)

All of the following:

- GEOG 221 Interpretation of Maps (3)
GEOG 232 Introduction to Geographic Information Systems (4)
GEOG 416 Principles of Remote Sensing and Digital Image Processing (3)
GEOG 481 Environmental Impact Analysis (3)

One of the following:

- ENVS 482 Environmental Research (3)
ENVS 485 Environmental Internship (3)
ENVS 491 Senior Seminar (3)

Electives (6–7 units)

Students complete two additional courses, one from any Environmental Studies track AND one selected from any Environmental Science and Studies track.

ENVIRONMENTAL POLICY/ MANAGEMENT TRACK (33–34 UNITS)**Required Courses (15 units)**

- ECON 201 Microeconomic Principles (3)
ECON 375 Environmental Economics (3)
or
ECON 376 Natural Resource Economics (3)
POSC 103 American National Government (3)
or
POSC 207 State Government (3)
POSC 421 Politics and Environmental Policy (3)

One of the following (3 units):

- ENVS 482 Environmental Research (3)
ENVS 485 Environmental Internship (3)
ENVS 491 Senior Seminar (3)

Electives (18–19 units)

Any five courses selected from the following list AND one additional elective from any Environmental Science and Studies track:

- BIOL 306 Human Ecology and Sustainability
ECON 326 Economic Development (3)
ECON 337 Public Finance (3)
ECON 351 Urban Economics (3)
ECON 375 Environmental Economics (3) (if not taken as part of required courses)
ECON 376 Natural Resource Economics (3) (if not taken as part of required courses)
ECON 470-9 Topics in Economics (3) (with approval of program director)
PHIL 319 Science, Technology and Values (3)
POSC 305 Urban Government and Politics (3)
POSC 470-9 Special Topics in Political Science (3) (with approval of program director)
POSC 481 Seminar in American Government and Public Policy (Requires approval of the director) (3)
POSC 482 Seminar in Comparative Politics (Requires approval of the director) (3)
WMST 345 Women, Environment and Health (3)

ENVIRONMENTAL HEALTH TRACK (33–34 UNITS)**Required Courses (15 units)**

- ECON 201 Microeconomic Principles (3)
ECON 375 Environmental Economics (3)
or
ECON 376 Natural Resource Economics (3)
POSC 103 American National Government (3)
or
POSC 207 State Government (3)
POSC 421 Politics and Environmental Policy (3)
One of the following (3 units):
ENVS 482 Environmental Research (3)
ENVS 485 Environmental Internship (3)
ENVS 491 Senior Seminar (3)

Electives (18–20 units)

Any five courses from the following AND one additional course from any Environmental Science and Studies track:

- GEOG 232 Introduction to Geographic Information Systems (4)
GEOG 329 Medical Geography (3)
GEOG 385 Population Geography (3)
or
SOCI 329 Demography (3)
GEOG 411 Studies in Natural Hazards (3)
GEOG 470 Seminar: Selected Topics in Medical Geography (3)
HLTH 435 Epidemiological Aspects of Disease and Environmental Health (3)
POSC 481 Seminar in American Government and Public Policy (Requires approval of the director) (3)
WMST 345 Women, Environment and Health

DIRECTED ENVIRONMENTAL STUDIES TRACK (33–34 UNITS)

All students selecting this track should, in consultation with their adviser, develop a coherent course of study that includes six electives.

Required Courses (15 units)

- ECON 201 Microeconomic Principles (3)
ECON 375 Environmental Economics (3)
or
ECON 376 Natural Resource Economics (3)

- POSC 103 American National Government (3)
or
POSC 207 State Government (3)
POSC 421 Politics and Environmental Policy (3)

One of the following:

- ENVS 482 Environmental Research (3)
ENVS 485 Environmental Internship (3)
ENVS 491 Senior Seminar (3)

Electives (18–20)

Students complete 5 courses selected from the list below AND one additional elective from any Environmental Science and Studies track.

- BIOL 306* Human Ecology and Sustainability (3)
ECON 326 Economic Development (3)
ECON 337 Public Finance (3)
ECON 351 Urban Economics (3)
ECON 375 Environmental Economics (3) (if not selected above)
ECON 376 Natural Resources Economics (3) (if not selected above)
ECON 470-9 Topics in Economics (3) (Requires approval of the director)
ENVS 430-439 Special Topics in Environmental Science and Studies (1–4)
ENVS 471 Independent Study in Environmental Science and Studies (1–3)
GEOG 221 Interpretation of Maps (3)
GEOG 232 Introduction to Geographic Information Systems (4)
GEOG 317 Energy Resources (3)
GEOG 319 Soils and Vegetation (3)
GEOG 329 Medical Geography (3)
GEOG 383 Natural Resources and Society: A Geographic Perspective (3) [if not taken as part of required courses]
GEOG 385 Population Geography (3)
or
SOCI 329 Demography (3)
GEOG 393 Transportation and Infrastructure Planning (3)
GEOG 405 Comprehensive Planning (3)
GEOG 411 Studies in Natural Hazards (3)
GEOG 414 GIS Application (3)
GEOG 415 Geographic Aspects of Pollution (3)
GEOG 416 Principles of Remote Sensing and Digital Image Processing (3)
GEOG 419 Severe and Hazardous Weather (3)
GEOG 470-9 Selected Topics in Geography (3) (Requires approval of program director)
GEOG 481 Environmental Impact Analysis (3)
GEOG 484 Land Use Planning (3)
GEOG 495 Directed Readings (Requires approval of the director) (3)
GEOG 496 Independent Research (Requires approval of the director) (3)
HLTH 435 Epidemiological Basis of Disease and Environmental Health (3)
HLTH 491 Health Directed Readings (3) (Requires approval of the director)
PHIL 319 Science, Technology and Values (3)
PHIL 380 Philosophical Topics (Requires approval of the director) (3)
POSC 305 Urban Government and Politics (3)
POSC 375 Public Administration (3)
POSC 470-9 Special Topics in Political Science (3) (Requires approval of the director)
POSC 481 Seminar in American Government and Public Policy (Requires approval of the director) (3)
POSC 482 Seminar in Comparative Politics (Requires approval of the director) (3)
PSYC 341 Environmental Psychology (3)
WMST 345 Women, Environment and Health

INFORMAL ENVIRONMENTAL EDUCATION (40–42 UNITS)**Required Courses (30 units)**

BIOL 205	Botany (4)
BIOL 207	Zoology (4)
BIOL 301	Field and Natural Science (3)
BIOL 304	Natural History Interpretation and Public Education (3)
ENVS 485	Environmental Internship (3)
SCIE 380	Methods of Teaching Science (3)

One two-course sequence in one discipline consisting of one lower-level and one upper-level course:

ECON 201	Microeconomic Principles (3)
ECON 375	Environmental Economics (3)
	or
ECON 376	Natural Resource Economics (3)
POSC 103	American National Government (3)
	or
POSC 207	State Government (3)
POSC 421	Politics and Environmental Policy (3)

One of the following:

BIOL 402	Ecology (4)
BIOL 435	Plant Ecology (4)

Electives (10–12 units)

Choose three of the following:

BIOL 306	Human Ecology and Sustainability (3)
BIOL 353	Invertebrate Zoology (4)
BIOL 432	Vascular Plant Taxonomy (4)
BIOL 455	Fish Biology (4)
BIOL 456	Ornithology (4)
BIOL 458	Mammalogy (4)
BIOL 461	Entomology (4)
BIOL 467	Herpetology (4)
ENVS 382	Environmental Education and Service Learning in the Tropics (3)
GEOG 319	Soils and Vegetation (3)
GEOL 305	Environmental Geology (4)

MINOR IN ENVIRONMENTAL SCIENCE AND STUDIES

Students may minor in Environmental Science and Studies by taking five key required courses and fulfilling an additional 6–8 unit requirement for the minor (21–23 units total).

All students minoring in Environmental Science and Studies take the following five required courses for a total of 15 units. Some of these courses have prerequisites.

ECON 375	Environmental Economics (3)
	or
ECON 376	Natural Resource Economics (3)
GEOG 410	Environmental Geography (3)
HLTH 451	Introduction to Environmental Health (3)
PHIL 255	Environmental Ethics (3)
POSC 421	Politics and Environmental Policy (3)

Science majors who minor in Environmental Science and Studies take two additional 3-unit elective courses from among the environmental studies

electives. Total unit requirement for the minor for science majors is 21 units.

Non-science majors who minor in Environmental Science and Studies take 8 units in the environmental sciences. A one-year sequence in a science with lab (8 units) selected from the environmental sciences (BIOL 201-202, CHEM 110-111, GEOL 121 and GEOL 305) satisfies this requirement. Total unit requirement for the minor for non-science majors is 23 units.

**Department of Family Studies and Community Development**

Professor: Karen Goldrich Eskow (*Chair*)

Assistant Professors: Audrey Falk, Diane

Hall, Sharon Jones-Eversly, Linda Oravec, Andrew Quach, Patricia Williams

Clinical Assistant Professors: Lisa Martinelli Beasley, Cynthia Vejar

Lecturer: Linda Stone

Affiliated Faculty: Susan Bartels (*School Psychology*), Hana Bor (*Jewish Education*), Donna Cox (*Health Science*), Edyth Wheeler (*Early Childhood Education*)

OFFICE

College of Liberal Arts Building, Suite 2210,
410-704-5851

www.towson.edu/fmst

PROGRAMS OF THE DEPARTMENT

The Department of Family Studies and Community Development offers a major in Family Studies with tracks in Family and Human Services, Services to Children and Youth, Child Life, and Leadership in the Nonprofit Sector. A minor in Family Studies is also offered.

The Family Studies major provides students with academic and field experiences related to the study and application of individual and family development across the lifespan with an additional emphasis on human service education. Academic preparation includes family life methodology, theories of family functioning, dynamics within families and interaction between families and the larger social context. The curriculum includes course work that emphasizes civic engagement through service learning. The service learning activities are designed to provide students with opportunities to integrate course work with real-life professional experiences. Field experiences include observation, small group community service assignments and internships. Community participation is required in several of the required courses.

GRADUATE PROGRAMS

The department offers a Master of Science in Child Life, Administration and Family Collaboration and a Post-baccalaureate Certificate in Family-Professional Collaboration. See the *Graduate Catalog* for details.

MAJOR IN FAMILY STUDIES

Majors in Family Studies complete 57–73 units of course work depending on the track of study the student selects. Students complete 43 units of required courses. For each track, they complete additional track-specific courses and electives. These requirements include a sequence of focused community courses including FMST 297 Preparing Human Service Workers, FMST 387 Community Services for Families, FMST 397 Internship, and FMST 490 Senior Seminar.

The units of internship requirements are specified by each track. Students must maintain a 2.00 GPA or better in all courses required for the major and must meet Towson University requirements for the completion of a Bachelor of Arts or Bachelor of Science degree.

Prerequisites for Courses in the Major

The following courses are prerequisites for courses required in the major. The 100-level courses should be taken early in the student's academic studies, and PSYC 212, MATH 231, MATH 237 or ECON 205 must be taken prior to FMST 485.

ENGL 102	Writing for a Liberal Education (3) or
ENGL 190	Honors Writing Seminar (3)
PSYC 101	Introduction to Psychology (3)
SOCI 101	Introduction to Sociology (3)

Basic Statistics: Students may choose from MATH 231, MATH 237, ECON 205* or PSYC 212.

*Required for Leadership in the Nonprofit Sector track

Required Courses (43 units)

FMST 101	Introduction to Family Studies (3) or
FMST 102	Honors Introduction to Family Studies (3)
FMST 201	Family Resources (3)
FMST 297	Preparing Human Service Workers (3)
FMST 301	Family Relationships (3)
FMST 302	Theories of Family Functioning (3)
FMST 303	Trends in Contemporary Family Life (3)
FMST 305	Parent-Child Relationships Across the Lifespan (3) or
EDUC 201	The Parenting Process (3)
FMST 380	Family Law (3)
FMST 387	Community Services for Families (3)
FMST 397	Internship in Family Studies (3)
FMST 485	Writing and Research Methods in Family Studies (3)
FMST 490	Senior Seminar (4)
PSYC 203	Human Development (3)
HLTH 220	Sexuality in a Diverse Society (3)

Family Life Educator Certification

Completion of the required course work above prepares the student for provisional certification as a Family Life Educator (CFLE). A student may become fully certified by completing two years of family life work experience following graduation. The CFLE credential is administered through the National Council on Family Relations.

FAMILY AND HUMAN SERVICES TRACK (22 UNITS)

Required Courses (10 units)

PSYC 205	Introduction to the Helping Relationship (3)
FMST 350	Fundamentals of Leadership in the Nonprofit Sector (3)
FMST 497	Advanced Internship in Family Studies and Community Development (4)

Electives (12 units)

Electives shall be selected from the following content areas: psychology, sociology, health science, education, gerontology, and women's studies. Students are encouraged to take a course in small-group dynamics and gerontology. One elective course (3 units) must be at the 300 level or above. Minors

in Gerontology, Sociology, and Psychology can be completed with minimal or no additional course work. Electives must be approved by a Family Studies adviser or the department chairperson.

SERVICES TO CHILDREN AND YOUTH TRACK (21 UNITS)

Required Courses (6 units)

ECED 201	Intervention and the Young Child (3)
FMST 415	Services to Children and Youth (3)

Electives (15 units)

Electives shall be selected from the following content areas: education, psychology, sociology, and health science. Three elective courses (9 units) must be at the 300 level or above. Electives must be approved by a department adviser.

CHILD LIFE TRACK (28 UNITS)

Required Courses (19 units)

ECED 201	Intervention and the Young Child (3)
OCTH 213	Small Group Dynamics (3) or
PSYC 431	Group Dynamics (3)
PSYC 205	Introduction to the Helping Relationship (3)
FMST 340	The Hospitalized Child and Family (3)
GERO 367	Sociology of Death, Dying and Bereavement (3)
FMST 497	Advanced Internship in Family Studies and Community Development (4)

Required Child and Adolescent Development Courses (9 units)

ECED 315	Infant Intervention (3)
PSYC 403	Infant and Child Development (3)
PSYC 404	Adolescent Psychology (3)

Other Recommended Courses

FMST 140	Medical Terminology for Human Service Workers (1)
FMST 345	Introduction to Art Therapy (3) as additional elective to meet content areas specified by the Child Life Council

LEADERSHIP IN THE NONPROFIT SECTOR TRACK (22 UNITS)

Required Courses (7 units)

FMST 350	Fundamentals of Leadership in the Nonprofit Sector (3)
FMST 497	Advanced Internship in Family Studies and Community Development (4)

Required Business and Liberal Arts Courses (12 units)

MCOM 253	Principles of Strategic Public Relations and Integrated Communication (3)
CLST 303	Identity and Culture (3)
MKTG 341	Principles of Marketing (3)
MNGT 361	Principles of Management (3)

Elective (3 units)

Elective must be approved by adviser. (Recommended disciplines: MNGT, MCOM, MKTG)

Students who pursue the Leadership in the Nonprofit Sector track should consider a minor in Business Administration (BUAD). The required course work for the BUAD minor includes MKTG 341 and MNGT 361. Nine credits of the BUAD minor would be approved toward the track requirements

replacing MCOM 253, CLST 303 and the elective course listed above. Students should note that the BUAD minor requires six additional credits beyond the major requirements. A complete description of the BUAD minor is found under the College of Business and Economics, Business Administration Program.

Students seeking certification in Nonprofit Leadership from the Nonprofit Leadership Alliance are strongly encouraged to complete a minor in Business Administration (BUAD) in addition to the FMST major.

MINOR IN FAMILY STUDIES (21 UNITS)

The minor in Family Studies provides an opportunity for students who would like to study families along with their major focus of study. Knowledge about families and working with families has emerged as a critical area of concern for health, social service, and education professionals. Thus, this program fits well for students studying in health professions, liberal arts, and education.

Pre-registration Requirements

PSYC 101	Introduction to Psychology (3)
SOCI 101	Introduction to Sociology (3)

Required Courses (15 units)

FMST 101	Introduction to Family Studies (3)
FMST 201	Family Resources (3)
FMST 301	Family Relationships (3)
FMST 302	Theories of Family Functioning (3)
FMST 303	Trends in Contemporary Family Life (3)

Upper-Level Discipline-Based Elective (3 units)

Choose one course from the following:

FMST 305	Parent-Child Relationships Across the Lifespan (3)
FMST 340	The Hospitalized Child and Family (3)
FMST 345	Introduction to Art Therapy (3)
FMST 350	Fundamentals of Leadership in the Nonprofit Sector (3)
FMST 370-379	Special Topics in FMST (with approval of department chair) (3)
FMST 380	Family Law (3)
FMST 387	Community Services for Families (3)
FMST 397*	Internship in Family Studies (3)
FMST 415	Services to Children and Youth (3)
FMST 490**	Senior Seminar (4)

*Prerequisites are FMST 297 and FMST 387. FMST 297 must be taken one term prior to enrollment in FMST 397.

**Must be approved by the department chair.

Additional Elective (3 units)

Students may choose this elective from the list of FMST electives in any of the four tracks in the Family Studies major. Additional courses may be counted as electives at the discretion of the Family Studies chair.

COMMUNITY EXPERIENCE

Civic Engagement/Service Learning

Internships and service learning are critical components of the Family Studies major. A continuum of field experiences offered throughout the program provides opportunities for students to enhance their understanding of course content, develop professional skills and apply knowledge in the

field. The first concentrated field experience is obtained during FMST 387 Community Services for Families. This course focuses on service learning through program development. Students participate directly with community organizations and agencies. Internships are the culminating field experience for the Family Studies student. The internship experience offers students the opportunity to apply course content, learn new skills, and develop professional contacts.

Family Studies interns work in a variety of settings depending on their interests. Internships occur in off-campus public and private agencies, including but not limited to, preschools, day-care centers for children or adults, child abuse and domestic violence centers, family support centers, agencies for the disabled and various mental health and health care facilities. Examples of recent student placements include Adoptions Together, Art with a Heart, Ashland Preschool Center, Baltimore City Child Abuse Center, Boys and Girls Club of Metro Baltimore, Esperanza Center, The Family Tree, Johns Hopkins Children's Center, the Law Office of Carl Gold, Leukemia and Lymphoma Society, National Family Resiliency Center, Rose of Sharon Equestrian School, University of Maryland Hospital for Children, and Young Parent Support Center.

The curriculum emphasizes civic engagement through service learning. Service learning involves a process of preparation for community experiences, participation in the community and integration of the academic preparation and community participation. The integration process involves self-reflection as well as self-discovery, including understanding of values, skills and content. Community participation is required in several courses throughout the curriculum.

STUDENT ORGANIZATIONS

The Department of Family Studies and Community Development sponsors two student organizations. The Towson University Student Council on Family Relations (TUSCFR) is affiliated with the National Council on Family Relations (NCFR).

The Towson University Student Association of the Nonprofit Leadership Alliance meets biweekly. Activities include collaborating with other Nonprofit Leadership Alliance programs in the Baltimore-Washington area, partnering with nonprofit organizations in Maryland and nationally, raising funds for student projects and networking with professionals.

ADVISING

Advising is an important component of the student experience. Family Studies majors meet regularly with department advisers who help them plan for the future. Please note the specific information about the advising process listed below.

1. Family Studies majors must meet individually with their assigned advisers at least once a term. All advisers have set aside times during the week to address questions and concerns, or simply to check in and review progress and plans.

2. All new or potential majors must meet with the department chair. The chair has set aside times each week to meet with students. A permanent adviser will be assigned once a program plan is set up. Prior to meeting with the department chair, new or potential majors must complete the Understanding Graduation Requirements Form and the Advising Survey and bring the completed documents to the meeting. To obtain copies of the forms, visit the Family Studies website at <http://www.towson.edu/fmst> and click on Advising.
3. Students may sign up for an advising meeting at the department office or by calling 410-704-5851.
4. Several FMST courses require special permits. These are given out by the department chair. To see a list of the permit courses, visit the Family Studies website of www.towson.edu/fmst and click on Advising, then Permit Courses.

TRANSFER CREDIT POLICY

Students may transfer no more than 18 credits toward the major in Family Studies. Transfer credits must be approved by the department.

Department of Foreign Languages

Professors: John C. McLucas (*Chair*), Michael O'Pecko, Lea Ramsdell, Katia Sainson, Salvatore Zumbo

Associate Professors: Maria Alegre-Gonzalez, Isabel Castro-Vazquez, Colleen Ebacher, Beverly Leetch, George McCool

Assistant Professors: Michael Carlo, Margherita Pampinella-Cropper, Ping Fu, Badis Guessaier, Leticia Romo

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PROGRAMS OF THE DEPARTMENT

The Department of Foreign Languages offers the following programs: 1) the major in Foreign Languages (FORL) with tracks in French, German and Spanish Secondary Education; 2) the major in Foreign Languages (FORL) with tracks in French, German and Spanish Literature/Professional Program; 3) the minor in Chinese, French, German, Italian and Spanish; 4) the proficiency in French, German and Spanish for non-language majors or minors planning for careers which require reasonable oral and written competency in a foreign language; and 5) language elective, for all students who wish to acquire a reading or conversational ability in one of the following languages: Arabic, Chinese, Hebrew, Japanese, Latin, Portuguese or Russian. Expansion of these non-major languages will be made in response to expressed student interest. Students who major or minor in Foreign Languages must declare their tracks in the department and are required to have academic advisers in their major and minor field and maintain close contact with the faculty advisers in order to select and prepare their course of study. Majors should see their advisers at least once a term. It is recommended that the track be declared before or during the sophomore year.

Culture and Civilization Course Requirement

The requirement of 6 upper-division units of culture and civilization for Foreign Languages majors in the Spanish Track is strongly felt by the Spanish faculty to be a necessity in the program. This is primarily because of the great diversity of Spanish-speaking countries in Europe, South America, Central America and the Caribbean, and the importance of the knowledge of this diversity for all who teach or otherwise use Spanish. The French faculty also feel that the study of French culture and civilization represents a necessary aspect of the program and believe that it cannot be separated from the study of the language and literature. The German culture and civilization course is required for the Teacher Education Program in German.

Double Tracks or Majors

The department encourages its FORL majors to carry an additional track in either another language or to combine their language with another field of study. Interested students should consult the department.

MINOR IN CHINESE

Students minoring in Chinese must complete **18 units** at the 200, 300 and/or 400 level with a grade equivalent of 2.00 or higher in each course. Twelve units must be taken at the 300–400 level.

Required Courses (6 units)

CHNS 301	Composition and Conversation I (3)
CHNS 302	Composition and Conversation II (3)

Electives (12 units)

Students must take an additional 12 units from the following electives:

Chinese 201 and Chinese 202 may be applied toward the minor; however, students who have already completed a Chinese course at the 300 level may not register for lower-level courses.

CHNS 311	Chinese Culture and Civilization (3)
CHNS 370	Special Topics in Chinese (3)
CHNS 491	Directed Readings in Chinese I (3)
CHNS 492	Directed Readings in Chinese II (3)
CHNS 494	Chinese Study Abroad (3)
ARTH 331	The Art of China (3) or
HIST 315	Imperial China (3) or
HIST 316	Revolutionary China (3) or
PHIL 302	Philosophy of China and Japan (3)

Students may also petition the Foreign Languages Department to take *one* of the following courses as an elective toward the Chinese minor. Written approval must be received from the Foreign Languages Department *prior* to enrolling in the course:

ASST 270	Special Topics in Asian Studies (3)
ASST 470	Advanced Topics in Asian Studies (3)
ASST 490	Directed Readings in Asian Studies (3)
ASST 492	Independent Study in Asian Studies (3)
ASST 494	Internship in Asian Studies (3)
PHIL 380	Philosophical Topics (3)
PHIL 470	Philosophical Problems (3)

Language minors may transfer up to 6 units toward a minor and must earn 6 upper-division units at Towson. Courses should be selected in consultation with the student's minor adviser.

FRENCH LITERATURE/ PROFESSIONAL TRACK

In addition to the Core Curriculum requirements, Foreign Languages majors in the French Literature/ Professional Track must complete 30 units with a grade equivalent of 2.00 or higher in French beyond the intermediate level. Of the 30 units, at least 15 units must be taken at Towson University.

Required Courses (15 units)

FREN 301	Advanced Conversation (3)
FREN 302	Advanced Composition (3)
Students are required to take three courses in literature and civilization at the 300 level. All students must take either FREN 328 or FREN 329.	
FREN 328	20th-Century French Literature and Civilization (3) or
FREN 329	Contemporary French Literature and Civilization (3)

plus two of the following:

FREN 325	Early French Literature and Civilization (3)
FREN 326	18th-Century French Literature and Civilization (3)
FREN 327	19th-Century French Literature and Civilization (3)

Electives

Fifteen units in the target language, including 9 units at the 400 level are required.

Students wishing to emphasize the Professional Track, with the permission of the department, can substitute the internship (497) for one 400-level elective course. The internship is generally completed in the junior or senior year, and students will need to complete 27 units beyond the intermediate level and have a GPA of at least 2.50 in the foreign language before applying for the internship.

FRENCH SECONDARY EDUCATION TRACK

Foreign Languages majors may wish to obtain certification to teach French at the secondary level. Students in this Secondary Teacher Education Track receive certification to teach in Maryland upon graduation. In addition to the Core Curriculum requirements and the requirements specified by the Department of Secondary Education, students must complete 30 units with a grade equivalent of 2.00 or higher beyond the intermediate level from among the following courses. Students must contact the Department of Secondary Education about admission to the Secondary Education Program.

Majors who are in the Secondary Teacher Education Program are required to take Advanced Grammar and Method of Teaching a Foreign Language before student teaching. Students are also required to complete the Oral Proficiency Interview.

Required Courses (18 units)

FREN 301	Advanced Conversation (3)
FREN 302	Advanced Composition (3)
Students are required to take three courses in literature and civilization at the 300 level. All students must take either FREN 328 or FREN 329.	
FREN 391	Advanced Grammar (3)
FREN 328	20th-Century Literature and Civilization (3) or
FREN 329	Contemporary French Literature and Civilization (3)

plus two of the following:

FREN 325	Early French Literature and Civilization (3)
FREN 326	18th-Century French Literature and Civilization (3)
FREN 327	19th-Century French Literature and Civilization (3)

Electives

Twelve units of electives, including 6 units at the 400 level. These courses must be taken in addition to the Department of Secondary Education requirements.

MINOR IN FRENCH

Students minoring in French must complete **18 units** with a grade equivalent of 2.00 or higher in each course. Twelve units must be taken at the 300–400 level.

Required Courses (6 units)

FREN 301	Advanced Conversation (3)
FREN 302	Advanced Composition (3)

Literature and Civilization Courses (3 units)

Students must take at least one of the following:

FREN 325	Early French Literature and Civilization (3)
FREN 326	18th-Century French Literature and Civilization (3)
FREN 327	19th-Century French Literature and Civilization (3)
FREN 328	20th-Century French Literature and Civilization (3)
FREN 329	Contemporary French Literature and Civilization (3)

Electives (9 units)

Students must take an additional 9 units from electives at either the 200, 300 or 400 level, 3 units of which must be at the upper level (300–400). FREN 201 and FREN 202 may be applied to the minor; however, students who have already completed a course at the 300 level may not register for lower-level courses. Language minors may transfer up to 6 units toward a minor and must earn 6 upper-division units at Towson. Courses should be selected in consultation with the student's minor adviser.

GERMAN LITERATURE/ PROFESSIONAL TRACK

In addition to the Core Curriculum requirements, students in the German Literature/Professional Track must complete 30 units with a grade equivalent of 2.00 or higher in German beyond the intermediate level. Of the 30 units, at least 15 units must be taken at Towson University.

Required Courses (18 units)

GERM 301	Composition and Conversation I (3)
GERM 302	Composition and Conversation II (3)
GERM 311	Culture and Civilization (3)
GERM 341	Readings in Contemporary German (3)
GERM 391	Advanced German Grammar (3)
GERM 392	Advanced German (3)

Electives

Twelve units in the target language, including 9 units of literature at the 400 level are required.

Students wishing to emphasize the Professional Track, with the permission of the department, can substitute the internship (497) for one 400-level elective course. The internship is generally completed in the junior or senior year, and students will need to complete 27 units beyond the intermediate level and have a GPA of at least 2.50 in the foreign language before applying for the internship.

GERMAN SECONDARY EDUCATION TRACK

Foreign Languages majors in the German Secondary Teacher Education Track receive certification to teach in Maryland upon graduation. In addition to the Core Curriculum requirements and the requirements specified by the Department of Secondary Education, students must complete 30 units with a grade equivalent of 2.00 or higher beyond the intermediate level from among the following courses. Students are also required to complete the Oral Proficiency Interview.

Required Courses (21 units)

GERM 301	Composition and Conversation I (3)
GERM 302	Composition and Conversation II (3)
GERM 303	German Translation (3)
GERM 311	Culture and Civilization (3)
GERM 341	Readings in Contemporary German (3)
GERM 391	Advanced German Grammar (3)
GERM 392	Advanced German (3)

Electives

Nine units in the target language, including 6 units of literature at the 400 level are required. These courses must be taken in addition to the Department of Secondary Education requirements. Students must contact the Department of Secondary Education about admission to the Secondary Teacher Education Program.

MINOR IN GERMAN

Students minoring in German must complete **18 units** with a grade equivalent of 2.00 or higher in each course. Twelve units must be taken at the 300-400 level.

Required Courses (6 units)

GERM 301	Advanced Conversation (3)
GERM 302	Advanced Composition (3)

Students must take an additional 12 units from electives at either the 200, 300 or 400 level, 6 units of which must be at the upper level (300-400). GERM 201 and GERM 202 may be applied to the minor; however, students who have already completed a course at the 300 level may not register for lower-level courses. Language minors may transfer up to 6 units toward a minor and must earn at least 6 upper-division units at Towson. Courses should be selected in consultation with the student's minor adviser.

MINOR IN ITALIAN

Students minoring in Italian must complete **18 units** with a grade equivalent of 2.00 or higher in each course. Twelve units must be taken at the 300-400 level.

Required Courses (3 units)

ITAL 301	Composition and Conversation I (3)
	or
ITAL 302	Composition and Conversation II (3)

Students must take an additional 15 units from electives at either the 200, 300 or 400 level, 9 units of which must be at the upper level (courses numbered 300-400). ITAL 201 and ITAL 202 may be applied to the minor; however, students who have already completed a course at the 300 level may not register for lower-level courses. Language minors may transfer up to 6 units toward a minor and must earn at least 6 upper-division units at Towson. Courses should be selected in consultation with the student's minor adviser.

SPANISH LITERATURE/ PROFESSIONAL TRACK

In addition to the Core Curriculum requirements, students in the Spanish Literature/Professional Track must complete 30 units with a grade equivalent of 2.00 or higher in Spanish beyond the intermediate level. Of the 30 units, at least 15 units must be taken at Towson University.

Required Courses (18 units)

SPAN 301	Composition and Conversation I (3)
SPAN 302	Composition and Conversation II (3)
SPAN 311	Culture and Civilization of Spain (3)
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 321	Literature of Spain
SPAN 322	Spanish American Literature

Electives (12 units)

Select from the following:

SPAN 305	Readings in Spanish (3)
SPAN 306	Spanish Phonetics (3)

SPAN 331	Spanish for Business (3)
SPAN 391	Advanced Spanish Grammar (3)
SPAN 407	Advanced Spanish Composition (3)
SPAN 408	Advanced Spanish Conversation (3)
SPAN 409	Spanish Translation (3)
SPAN 455	Hispanic Popular Culture (3)
SPAN 470-479	Special Topics (3)
SPAN 4xx	Upper-level literature course (3)

Of the 12 units of electives in the target language, 3 units must be in a 400-level literature course or in a 400-level special topics course. However, before enrolling in a 400-level literature course, students must have completed a survey of literature course, either 321 or 322.

Students wishing to emphasize the Professional Track, with the permission of the department, can substitute the internship (497) for one 400-level elective course. The internship is generally completed in the junior or senior year, and students will need to complete 27 units beyond the intermediate level and have a GPA of at least 2.50 in the foreign language before applying for the internship.

SPANISH SECONDARY EDUCATION TRACK

Foreign Languages majors in the Spanish Secondary Teacher Education Track receive certification to teach in Maryland upon graduation. In addition to the Core Curriculum requirements and the requirements specified by the Department of Secondary Education, students must complete 30 units with a grade equivalent of 2.75 or higher beyond the intermediate level in the following courses. Students must contact the Department of Secondary Education about admission to the Secondary Teacher Education Program. Students are also required to complete the Oral Proficiency Interview.

Required Courses (30 units)

SPAN 301	Composition and Conversation I (3)
SPAN 302	Composition and Conversation II (3)
SPAN 306	Spanish Phonetics (Requirement for non-native Spanish-speakers only)
SPAN 311	Culture and Civilization of Spain (3)
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 321	Literature of Spain
SPAN 322	Spanish American Literature
SPAN 391	Advanced Spanish Grammar (3)
Any 400-level Spanish Literature or Culture Course. (3)	

Required for Native and Heritage Spanish speakers:

SPAN 407	Advanced Spanish Composition (3)
	and
SPAN 408	Advanced Spanish Conversation (3)

Required for Non-native Spanish speakers, in consultation with their FORL SCED adviser:

SPAN 407	Advanced Spanish Composition (3)
	or
SPAN 408	Advanced Spanish Conversation (3)

All of the above required courses must be completed in addition to the Department of Education requirements

MINOR IN SPANISH

Students minoring in Spanish must complete **18 units** with a grade equivalent of 2.00 or higher in each course. Twelve units must be taken at the 300-400 level.

Required Courses (6 units)

SPAN 301	Composition and Conversation I (3)
SPAN 302	Composition and Conversation II (3)

Culture and Civilization Courses (3 units)

SPAN 311	Culture and Civilization of Spain (3)
	or
SPAN 312	Culture and Civilization of Latin America (3)

Electives (9 units)

Students must take an additional 9 units from electives at either the 200, 300 or 400 level, 3 units of which must be at the upper level (300-400). Spanish 201 and Spanish 202 may be applied to the minor; however, students who have already completed a course at the 300 level, may not register for lower-level courses. Language minors may transfer up to 6 units toward a minor and must earn 6 upper-division units at Towson. Courses should be selected in consultation with the student's minor adviser.

MINOR IN A FOREIGN LANGUAGE

The minor programs in French, German, Spanish and Italian provide majors in other disciplines with the educational language background necessary to enhance their career opportunities. Language minors may transfer up to 6 units toward a minor. Transfer students may then complete up to 6 units off campus through Towson University's study abroad or Maryland state inter-institutional exchange. All minors must complete at least 6 upper-level units as *on-campus* course work at TU. The minor should be approved by the student's department adviser. Minors in all languages need a C or higher in each completed course applied toward the minor.

PROFICIENCY IN A FOREIGN LANGUAGE

The department has designed a program of study that offers the non-language major or minor a recognition of Proficiency in Foreign Languages with a focus in French, German or Spanish upon satisfactory completion of prescribed requirements.

The proficiency may be earned by a degree candidate at Towson University as well as any individual whose sole interest in attending the university is for the purpose of obtaining the proficiency of the language.

The program is designed for those individuals who are planning or practicing careers which require reasonable oral and written competence in a modern language. In the job market, national and international, a large number of opportunities await persons whose knowledge of one or more modern languages has been well established through intensive college/university study. The proficiency is quite advantageous for aspiring professionals in the fields of communications, public service, business and finance, agriculture, transportation, health services, education, energy, natural resources, journalism, law, foreign services, air traffic, management, import/export purchasing, sales, etc.

In order to complete the recognition of proficiency, students must complete all required courses with a grade equivalent of 2.00 or higher. Students who are prepared to begin at the advanced level will need to complete 12 units of study, whereas students who begin at the elementary level will have to earn 24 units in the particular language.

French Proficiency Required Courses (24 units)

FREN 101	French Elements I (3)
FREN 102	French Elements II (3)
FREN 201	French Intermediate I (3)
FREN 202	French Intermediate II (3)
FREN 301	Advanced Conversation (3)
FREN 302	Advanced Composition (3)
FREN 495	Internship in French (3)
FREN xxx	One elective course in FREN (3)

German Proficiency Required Courses (24 units)

GERM 101	German Elements I (3)
GERM 102	German Elements II (3)
GERM 201	German Intermediate I (3)
GERM 202	German Intermediate II (3)
GERM 301	Composition and Conversation I (3) or
GERM 302	Composition and Conversation II (3)
GERM 311	Culture and Civilization (3)
GERM 391	Advanced German Grammar (3)
GERM 495	Internship in German (3)

Spanish Proficiency Required Courses (24 units)

SPAN 101	Spanish Elements I (3)
SPAN 102	Spanish Elements II (3)
SPAN 201	Spanish Intermediate I (3)
SPAN 202	Spanish Intermediate II (3)
SPAN 301	Composition and Conversation I (3) or
SPAN 302	Composition and Conversation II (3)
SPAN 311	Culture and Civilization of Spain (3) or
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 495	Internship in Spanish (3)
SPAN xxx	One elective course in SPAN (3)

MEETING B.A. REQUIREMENTS

Completion of the intermediate level of a foreign language (201 and 202) or its equivalent is required of all Bachelor of Arts degree candidates. This requirement may be met by: a) completing two or more years of the language in high school plus intermediate levels I and II in college; b) completing the elementary- and intermediate-level courses of the language in college; c) successfully completing one term of any course beyond the intermediate level; or d) successfully completing a Credit for Prior Learning Exam in any language offered at the 301–302 level at Towson University administered each November by the Department of Foreign Languages.

CREDIT FOR PRIOR LEARNING EXAM

The examination will be given only in the languages offered by the Department of Foreign Languages at the 301–302 level. The units for 201–202 may not be earned unless the student takes 301 as a course. An overall grade of A is required in order to receive 6 units; a grade of B entitles the student to 3 units. The student should contact the department for further information.

PLACEMENT IN LANGUAGES

The department reserves the right to assess and place students in the language level appropriate to their prior learning and/or native or heritage speaking skills. The following guideline pertains to entering students with high school language study:

- One year of high school language study, students may register for 101 or 102.
- Two years of high school language study, students may register for 102.
- Three years of high school language study, students may register for 102 or 201.

- Students with 3 or more years of high school language study may not register in 101.
- Four years of high school language study, students may register for 201 or 202.
- Five years of high school language study, students may register for 202 or 301.

TRANSFER CREDIT POLICY

All Foreign Languages majors may transfer up to 15 units toward the major. All Foreign Languages minors may transfer up to 6 units toward the minor.

HONORS PROGRAM

The department participates in the Honors College. Students interested in completing a language major with departmental honors should consult the departmental honors faculty coordinator no later than the first term of their junior year.

SPECIAL DEPARTMENTAL PROGRAMS

The department sponsors the Eta Gamma Chapter of the National Spanish Honor Society, Sigma Delta Pi, and encourages all Spanish students to participate in the activities of the society. The department also sponsors the Kappa Pi chapter of the National French Honor Society, Phi Delta Phi and Gamma Kappa Alpha, the National Italian Honor Society.

The department offers an internship program through the Career Center.

Faculty-led study abroad programs are available for students interested in traveling to France, Germany, Italy, Costa Rica or Spain.

ORAL PROFICIENCY INTERVIEW

As part of the requirements for graduation, teacher candidates in French, German and Spanish must complete the Oral Proficiency Interview (OPI), administered by an interviewer certified by the American Council on the Teaching of Foreign Languages (ACTFL). While candidates may take the OPI at any time during their course of study, the requirement should be completed no later than the end of the term in which the candidate is enrolled in SCED 499 Internship in Secondary Education. Teacher candidates consult with their adviser in the Department of Foreign Languages regarding OPI requirements, application procedures and testing fees.

Teacher candidates from Towson University who are seeking certification in Maryland are strongly encouraged to achieve a level of “Advanced Low” in the OPI. The Department of Foreign Languages will provide numerous opportunities for candidates to meet the “Advanced Low” standard through its study abroad programs, service-learning opportunities, tutoring, language clubs and on-campus events such as film festivals and guest speakers. Students are also encouraged to seek out their own opportunities through volunteer work requiring their language skills, through the formation of practice groups with other language students and native speakers on campus, and through viewing films and television programs in the language they will be teaching.

Note for Foreign Language students: Courses at the levels of 101, 102, 201 and 202 in any foreign language offered by the department are not open to students who have completed a higher level in the same language.

Department of Geography and Environmental Planning

Professors: James DiLisio, Wayne McKim, John Morgan

Associate Professors: Kent Barnes, Martin Roberge, Charles Schmitz, Virginia Thompson (*Chair*)

Assistant Professors: Beth Hall, Paporn Thebanya, Kang Shou Lu, Alan Marcus, James Smith, Jeremy Tasch

Part-time Faculty: Doug Adams, Karna Couch, Natalie Faith, Doug Goldsmith, Charles Goodman, Doug Herman, Ingrid Pfoertsch, Henry Schupple, Betty Shimshak

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PROGRAMS OF THE DEPARTMENT

The Department of Geography and Environmental Planning offers the following programs: the major in Geography and Environmental Planning with a General Track or Global Skills Track, the major in Geography and Land Surveying, the minor in Geography, the minor in Geographic Information Sciences, and the Master of Arts in Geography and Environmental Planning, and participates in the Master of Education with an emphasis in Geography. For more information about the graduate programs, consult the *Graduate Catalog*.

The Geography and Environmental Planning major is designed as a liberal arts program that explores how geographers carefully observe and measure human uses of the earth under diverse combinations of natural and cultural environments. Such academic preparation facilitates understanding of the changing world and its past.

Students are prepared in the program for careers in business, management, governmental service, education, planning, public affairs and other professions, as well as graduate school.

The major in Geography and Land Surveying is designed to meet the requirements of professionals in the field of land surveying. Courses taken in geography at Towson University will both complement those taken in surveying at the Community College of Baltimore County-Catonsville as well as provide additional skills of value to the professional surveyor. Completion of the four-year degree will shorten the time necessary to achieve professional licensure.

COMBINED MAJORS

The department has established cooperative programs with the departments of Economics, History, Political Science, and Sociology, Anthropology and Criminal Justice, which make it possible for students to attain majors in both Geography and one of these other disciplines. For further information, contact the Department of Geography and Environmental Planning or one of the cooperating departments listed above.

MAJOR IN GEOGRAPHY AND ENVIRONMENTAL PLANNING

General Track Geography majors must complete a minimum of 40 units in geography courses with a grade equivalent of 2.00 or higher. Of these 40 units, 19 units are required plus 3 units of a prescribed regional course. The remaining 18 units in the major are selected from 100–400-level geography electives reflecting the student's areas of interest. Only 3 units of electives may be taken at the 100 level. No more than 6 units of electives can be under the 300–400 level.

Required Courses (19 units)

GEOG 101	Physical Geography (3)
GEOG 109/110	Human Geography (3) or GEOG 102 (3) or 105 (3) or 110 (3)
GEOG 221	Interpretation of Maps (3)
GEOG 232	Introduction to GIS (4)
GEOG 375	Quantitative Methods in Geography (3)
GEOG 401	Growth of Geographic Thought (3)

Regional Course Requirement (3 units)

Majors must select at least one regional course. These courses may be selected from the following:

Select at least one:

GEOG 420	Geography of the United States and Canada (3)
GEOG 423	Geography of Maryland (3)
GEOG 431	Geography of Africa (3)
GEOG 424	Historical Geography of Atlantic Canada (3)
GEOG 443	Geography of East Asia (3)
GEOG 445	Geography of South and Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)
GEOG 448	Conflict in Ireland (3)
GEOG 451	Geography of Europe (3)
GEOG 453	The Russian Colossus: Historical and Contemporary Geographies of Russia (3)
GEOG 461	Geography of Latin America (3)
GEOG 462	The Two Down Unders: Geographies of Australia and Aotearoa-New Zealand (3)
GEOG 463	The Silk Road: Geographies of Central Eurasia (3)

Electives (18 units)

Majors must take 18 units of geography electives at the 100–400 level. A maximum of 3 units may be taken at the 100 level and 3 units at the 200 level, or 6 units at the 200 level.

Global Skills Track

The Global Skills Track requires 40 units and focuses on analytical, technical and regional expertise for those considering careers in the international arena. It is aimed at developing multicultural skills and critical thinking in cross-cultural scenarios; acquiring analytic and technical competence for identifying and making effective decisions on spatial issues; and developing geographic fluency regarding one or more regions of the world.

In addition to taking selected geography courses for completion of this track, students will be advised toward taking non-geography courses relevant to their topical or regional interests, in order to deepen their skills and knowledge base for successful understanding of complex global issues.

Qualified undergraduate students pursuing the Global Skills Track in geography may be eligible, beginning their junior year, to participate in an accelerated B.A./M.A. program in Geography. Interested students should contact the geography graduate program director for details.

Foreign Language Requirement

Students opting for the Global Skills Track must achieve a level of proficiency equivalent to four terms of college-level language training in a modern foreign language that is offered by or can be tested by the Department of Foreign Languages. The language selected may depend upon the interests of the student. Students can fulfill this language requirement through any of the procedures outlined in the Meeting B.A. Requirements section of the Department of Foreign Languages entry in this catalog. Lower-division courses taken in a foreign language do not count toward the 40 units needed to complete the Geography – Global Skills major.

Required Courses (22 units)

GEOG 101	Physical Geography (3)
GEOG 102	World Regional Geography (3)
	or
GEOG 105	Geography of International Affairs (3)
GEOG 109	Human Geography (3)
GEOG 221	Interpretation of Maps (3)
GEOG 232	Introduction to GIS (4)
GEOG 375	Quantitative Methods in Geography (3)
GEOG 401	Growth of Geographic Thought (3)

Group Requirements (15 units)

Majors must select at least two technique courses, at least two regional courses, and at least two systematic courses from the following:

Technique Courses: Select at least one:

GEOG 321 [504]	Interpretation of Aerial Photographs (3)
GEOG 323 [505]	Cartography and Graphics I (3)
GEOG 414 [523]	GIS Applications
GEOG 416	Remote Sensing and Digital Image Processing (3)
GEOG 418 [507]	Computer Mapping (3)

Regional Courses: Select at least two:

GEOG 420 [560]	Geography of the United States and Canada (3)
GEOG 424	Historical Geography of Atlantic Canada (3)
GEOG 427	The Global Economy (3)
GEOG 431 [562]	Geography of Africa (3)
GEOG 443 [564]	Geography of East Asia (3)
GEOG 445 [5xx]	Geography of Southeast Asia (3)
GEOG 447 [565]	Geography of the Middle East (3)
GEOG 448	Conflict in Ireland (3)
GEOG 451 [566]	Geography of Europe (3)
GEOG 452	Geography of the European Union (3)
GEOG 453 [567]	The Russian Colossus: Historical and Contemporary Geographies of Russia (3)
GEOG 461 [568]	Geography of Latin America (3)
GEOG 462	The Two Down Unders: Geographies of Australia and Aotearoa-New Zealand (3)
GEOG 463	The Silk Road: Geographies of Central Eurasia (3)

Systematic Courses: Select at least two:

GEOG 251	Introduction to Planning (3)
GEOG 317	Energy Resources (3)
GEOG 329	Medical Geography (3)
GEOG 355	Historical Geography of Urbanization (3)
GEOG 357	Cultural Geography (3)
GEOG 359	Economic Geography
GEOG 363	Spatial Organization of Economic Activity
GEOG 381	Political Geography
GEOG 383	Natural Resources and Society
GEOG 385	Population Geography
GEOG 391	Urban Systems
GEOG 393	Transportation and Infrastructure Planning
GEOG 405	Comprehensive Planning
GEOG 407	Geography of the Aged
GEOG 415	Geographical Aspects of Pollution

Electives (3 units)

Three units of geography electives at the 200–400 level

MAJOR IN GEOGRAPHY AND LAND SURVEYING

The major in Geography and Land Surveying is based on a transfer articulation agreement between the Community College of Baltimore County-Catonsville and Towson University. Most students electing to major in Geography and Land Surveying will complete the A.A.S. degree in Land Surveying at CCBC-Catonsville prior to enrollment at Towson University. All surveying courses will transfer. However, Towson University will only accept a maximum of 64 total units in transfer. Any Core Curriculum requirements not completed prior to enrollment will be completed at Towson University. Current Towson Geography majors interested in this program should see the department chair.

The program of study follows the guidelines for a major in Geography and Environmental Planning. A total of 40 units are required as indicated above. The preferred course for fulfilling the regional requirement is GEOG 423 Geography of Maryland. Elective units (a minimum of 18) should be selected in consultation with the adviser, as some are more preferable than others. GEOG 491 Internship is strongly recommended for those with little or no work experience. Students may not substitute past work experience, nor use concurrent work to meet internship requirements, without permission of the department. A non-major requirement for this program is calculus, which may be taken at Catonsville or Towson, and which must be passed with a grade of C or higher.

For further information on this program, contact James E. Lobdell, coordinator of the Surveying Program at CCBC-Catonsville (410-455-4965), or the chair of the Department of Geography and Environmental Planning at Towson University (410-704-2973).

COMBINED MAJOR IN GEOGRAPHY AND HISTORY

The completion of individual majors in History and Geography requires the successful completion of 82 units (42 in History and 40 in Geography) with a grade equivalent of 2.00 or higher. However, by electing the combined major in History and Geography, students will be able to complete both majors with a total of 70 units (36 in History and 34 in Geography). Students interested in this combined major should consult with an adviser in both departments.

In Geography and Environmental Planning, students must complete all requirements for the major. However, they are obligated to substitute two approved courses (6 units) in history toward fulfillment of the required six elective courses (18 units) in Geography and Environmental Planning.

All upper-division history electives (300–400) with specific geographic foci (region, country, continent or global) are approved for the geography component of the program (e.g. HIST 307 Andean Republics, HIST 312 History of Modern India, and HIST 329 History of South Africa). Courses on environmental and landscape history are also approved for geography (e.g. HIST 484 Historical Themes, which include topics such as Environmental History of the Contemporary World

and Environmental History of the Chesapeake). Students should consult with their academic advisers to ensure that appropriate history courses are selected for the geography component.

In History, students must complete all requirements for the major according to the specifications below:

Required Course (3 units)

HIST 300 Introduction to Historical Study* (3)

History Electives (39 units)

Five lower-division survey courses (15 units) including the following:

- minimum of one course in pre-modern history (history prior to 1500)
- minimum of one course in U.S. survey (HIST 145, HIST 146 or HIST 148)
- minimum of one course in European survey (e.g. HIST 101, HIST 102, HIST 103 or HIST 105)
- minimum of two courses in global surveys (must be non-U.S. AND non-European history, such as HIST 117, HIST 118, HIST 121 or HIST 122, HIST 160 or HIST 161)**

Eight upper-division courses (24 units) including the following:

- minimum of two courses in pre-modern history (history prior to 1500)
- minimum of one course in U.S. history
- minimum of one course in European history
- minimum of two courses in global history***
- One Senior History Seminar (HIST 486, either U.S., European, or global history)***

*Course must be taken during the junior year or equivalent.

**Of the four required global history courses (two lower and two upper), students must take at least one course from two of the five sub-regions (Africa, Middle East, Asia, Latin America, World History).

***Course must be taken during the senior year

Geography Electives

GEOG 355	Historical Geography of Urbanization (3)
GEOG 420	Geography of the United States and Canada (3)
GEOG 423	Geography of Maryland (3)
GEOG 424	Historical Geography of Atlantic Canada (3)
GEOG 427	The Global Economy (3)
GEOG 431	The Geography of Africa (3)
GEOG 433	Geography of East Asia (3)
GEOG 445	Geography of Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)
GEOG 448	Conflict in Ireland (3)
GEOG 451	Geography of Europe (3)
GEOG 452	Geography of the European Union (3)
GEOG 453	The Russian Colossus: Historical and Contemporary Geographies of Russia (3)
GEOG 462	The Two Down-Unders (3)
GEOG 463	The Silk Road (3)
GEOG 47X	Seminar in Geography (3) (Topic to be approved by the Department of History)

COMBINED MAJOR IN GEOGRAPHY AND SOCIOLOGY-ANTHROPOLOGY

The departments of Geography and Environmental Planning and Sociology, Anthropology and Criminal Justice offer a program leading to a bachelor's degree with a combined major in Geography and Environmental Planning and Sociology-Anthropology, with a concentration in Sociology or Anthropology. The Sociology Concentration course requirements are listed below. For information on the Anthropology Concentration combined major option, see the department chair in Sociology, Anthropology and Criminal Justice.

I. The following lower-division courses must be taken:

A. GEOG 101	Physical Geography (3)
B. SOCI 101	Introduction to Sociology (3)
(Both A and B count toward Core Curriculum requirements.)	

II. One of the following statistics courses must be taken:

A. GEOG 375	Quantitative Methods in Geography (3)
	or
B. PSYC 212	Behavioral Statistics (4)
	or
C. MATH 231	Basic Statistics I (3)

(Any of these courses will count as 3 units in either Geography or Sociology and satisfy the statistics requirement in both programs. Students cannot receive credit in both the first and second major for more than one of these courses.)

III. Two of the following sociology courses must be taken:

SOCI 313	Introduction to Social Psychology (3)
SOCI 323	Social Movements (3)
SOCI 327	Urban Sociology (3)
SOCI 329	Demography (3)
SOCI 331	Deviance and Organizations (3)
SOCI 333	Political Sociology (3)
SOCI 335	Medical Sociology (3)
SOCI 341	Class, Status and Power (3)
SOCI 359	Social Gerontology (3)
SOCI 470-479	Special Topics in Sociology (3) (Topics offered here may be accepted with approval of the Department of Geography and Environmental Planning adviser.)

IV. Two of the following geography courses must be taken:

GEOG 329	Medical Geography (3)
GEOG 351	Urban Design (3)
GEOG 355	Historical Geography of Urbanization (3)
GEOG 357	Cultural Geography (3)
GEOG 381	Political Geography (3)
GEOG 383	Natural Resources and Society (second writing course) (3)
GEOG 385	Population Geography (3)
GEOG 391	Urban Systems (3)
GEOG 405	Comprehensive Planning (3)
GEOG 407	Geography of the Aged (3)
GEOG 470-479	Seminar: Selected Topics in Geography (3) (Topics offered here may be accepted with approval of the Department of Sociology, Anthropology and Criminal Justice adviser.)
GEOG 494	Travel Study (3)
GEOG 495	Directed Reading in Geography (with approval of Department of Sociology, Anthropology and Criminal Justice adviser) (3)
GEOG 496	Independent Study in Geography (with approval of the Department of Sociology, Anthropology and Criminal Justice adviser) (3)

V. The following courses are required to complete the Geography major portion of the combined major:

A. Required Courses

GEOG 102	World Regional Geography (3)
	or
GEOG 105	Geography of International Affairs (3)
	or
GEOG 109	Human Geography (3)
GEOG 221	Interpretation of Maps (3)
GEOG 232	Introduction to GIS (4)
GEOG 401	Growth of Geographic Thought (3)

B. Regional Geography Course (one 400-level regional course)

C. Elective Geography Course (one upper-level course)

VI. The following courses are required to complete the Sociology Concentration in the double major:

A. Required Courses

SOCI 381	Sociological Theory (3)
SOCI 391	Research Methods (3)

B. Electives

Students must complete 18 units of electives in sociology, at least 12 of which must be upper division. Two elective courses (6 units) may be in anthropology.

COMBINED MAJOR IN GEOGRAPHY AND POLITICAL SCIENCE

See Department of Political Science for details.

COMBINED MAJOR IN ECONOMICS AND GEOGRAPHY AND ENVIRONMENTAL PLANNING

Completion of individual majors in Geography and Environmental Planning and Economics requires the successful completion of 73 units (40 in geography and environmental planning and 33 in economics). However, by electing the combined major in Geography and Environmental Planning and Economics, students will be able to complete both majors with a total of 61 units.

I. In economics, students must complete all requirements for the major.

II. One of the following statistics courses must be taken:

ECON 205	Statistics for Business and Economics (3)
	or
GEOG 375	Quantitative Methods in Geography (3)

III. Students may substitute two of the following courses in geography and environmental planning toward fulfillment of the required 12 units of upper-level economics electives:

GEOG 355	Historical Geography of Urbanization (3)
GEOG 359	Economic Geography (3)
GEOG 381	Political Geography (3)
GEOG 385	Population Geography (3)
GEOG 391	Urban Systems (3)
GEOG 393	Transportation and Infrastructure Planning (3)
GEOG 405	Comprehensive Planning
GEOG 427	The Global Economy (3)
GEOG 470-479	Seminar: Selected Topics in Geography* (3)
GEOG 481	Environmental Impact Analysis (3)
GEOG 484	Land Use Planning (3)

* Approval from Department of Economics depending on course topic.

IV. In geography and environmental planning, students must complete all requirements for the major. In addition, they may substitute two of the following upper-level courses in economics toward fulfillment of the required upper-level elective courses in geography and environmental planning:

ECON 322	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 334	Poverty and Discrimination (3)
ECON 351	Urban Economics (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)
ECON 470-479	Topics in Economics* (3)

*Approval from Department of Geography and Environmental Planning depending on course topic.

For further information on this program contact the chairperson of the Department of Economics, or Dr. James DiLisio of the Department of Geography and Environmental Planning.

MINOR IN GEOGRAPHY

Students minoring in Geography must complete a minimum of 21 units. Six units will be at the 100 level (physical geography and either GEOG 102, 105, or 109/110) with the remainder at the 200–400 level. A maximum of 6 units may be taken at the 200 level and all course selections must be made in consultation with a faculty adviser. A grade equivalent of 2.00 or higher is required in all courses in the minor.

MINOR IN GEOGRAPHIC INFORMATION SCIENCES

Geographic Information Sciences (GISciences) is an integrative, skills-based discipline that facilitates observation and analysis at global scales, employing a spatial perspective that is useful to many disciplines. The minor in GISciences provides students with basic professional skills for conducting spatial analysis, combining conceptual frameworks with technical proficiencies in tools such as geographic information systems, remote sensing, global positioning systems, cartography, and spatial statistics.

The minor works well with a variety of majors from the College of Business and Economics, the College of Health Professions, the College of Liberal Arts, and the College of Science and Mathematics. GISciences is a growing field and Towson University is recognized as a GISciences leader in Maryland. Students graduating with GISciences skills are in demand by employers, due to the large number of academic, private, government, and nonprofit organizations that are creating or expanding their GIS capabilities.

The minor is awarded upon completion of a minimum of 21 units of required and elective courses. A maximum of 6 units from other departments may be counted toward the minor, with the approval of the program director. Students are strongly encouraged to complete a GIS internship with a government agency or business.

Required Courses (13 units)

GEOG 221	Interpretation of Maps (3)
	or
GEOG 232	Introduction to GIS (4)
GEOG 323	Cartography and Graphics I (3)
	or
GEOG 418	Computer Mapping (3)
GEOG 375	Quantitative Methods in Geography (3) or approved statistics course

Electives (9 units)

GEOG 321	Interpretation of Aerial Photographs (3)
GEOG 414	GIS Applications (Spatial Analysis and Geographic Information Systems) (3)
GEOG 416	Remote Sensing and Digital Image Processing (3)
GEOG 470–479	Seminar: Selected Topics (in GIS) (3)
GEOG 491	Internship (1–6; 3 maximum toward minor)
GEOG 495	Directed Readings in Geography (GIS topics) (3)
GEOG 496	Independent Study in Geography (GIS topics) (3)

Other lower- and upper-division computer science courses, as well as GIS applications courses offered by other departments may be considered as electives, with the approval of the department chair.

MINOR IN METEOROLOGY

Students minoring in meteorology will be provided with an introduction to atmospheric principles and meteorological phenomena such as heat waves, drought, hurricanes and severe thunderstorms. It is suitable for students who wish to be informed about this field and might pursue careers in which a background in meteorology is relevant or important, such as environmental policy, mass communication, government and industry. Students should note that the minor in meteorology does not require the type of course work in calculus, physics and chemistry necessary for careers and graduate work in meteorology.

The minor is awarded upon completion of a minimum of 24 units of required and elective courses. At least one course elective must come from outside the department, with the Department of Geography and Environmental Planning accepting up to 12 units of electives from other departments. Note that some of the electives may have prerequisites associated with them.

Required Courses (12 units)

GEOG 101	Physical Geography (3)
GEOG 373	Climatology (3)
GEOG 377	Meteorology (3)
GEOG 419	Severe and Hazardous Weather (3)

Electives (12 units)

GEOG 416	Remote Sensing of the Environment (3)
GEOG 460	Applied Climatology (3)
GEOG 491	Internship (1–6; 3 maximum toward minor) (3)
GEOG 496	Independent Study in Geography (Meteorology topics) (3)
GEOL 357	Physical Oceanography (3)
CHEM 104	Introduction to Environmental Chemistry (3)
MATH 211	Calculus for Applications
	or
MATH 273	Calculus I
PHYS 211	General Physics I
	or
PHYS 241	General Physics I with Calculus
PHYS 212	General Physics II
	or
PHYS 242	General Physics II with Calculus

Students wishing to pursue a minor with an emphasis in broadcast meteorology could also consider the following courses as part of the 12 units of electives, with approval from the department chair:

EMF 370	News Production
EMF 351	WMFJ-TV Station Operations
EMF 375	Broadcast Performance
EMF 481	TV News

GEOGRAPHY SECONDARY EDUCATION PROGRAM

Required in major (40 units): lower-division (100–200) courses (12–18); upper-division (300–400) courses (21–27), at least 12 units of which must be courses designated as systematic or technique courses.

Required in related subjects (33 units): history courses: HIST 145, HIST 146, HIST 101, plus 6 units of history electives; political science: POSC 103; sociology: SOCI 101; economics: ECON 201 and ECON 202; anthropology: either ANTH 207, ANTH 208 or ANTH 209; and a specified topics in social science course.

Note: The standards for students enrolled in Teacher Education Programs require a GPA of 2.75 in academic majors prior to student teaching. Please be aware that this GPA is higher than that required by the department for its majors. Students must contact the Department of Secondary Education about admission to the Secondary Teacher Education Program.

TRANSFER CREDIT POLICY

Geography and Environmental Planning majors may transfer up to 12 credits toward a major, and Geography minors may transfer up to 6 credits. All transfer credits require department approval.

INTERNSHIPS

Majors have the opportunity to participate in the university's Internship/Cooperative Education Program. This valuable adjunct to the educational program provides qualifying students with both academic credit and work experience with participating government agencies (federal, state and local) and private businesses. The internship offers the student a way of trying out a potential career choice prior to actual entry into the job market. Because the benefits of this experience are so positive, majors are strongly urged to participate in this program.

SPECIAL DEPARTMENTAL PROGRAMS

The department sponsors the Beta Delta Chapter of Gamma Theta Upsilon, an international geography honorary society. GTU holds lectures and presents films and speakers on topics in geography and environmental planning. All Geography majors are welcome to join.

Travel studies are available during the summer within the United States and to foreign locations.

The National Council for Geographic Education awards are given to academically outstanding graduating majors.

DEPARTMENTAL HONORS IN GEOGRAPHY

The department offers an honors program in geography. To be admitted, students must have a cumulative GPA of 3.25, and a 3.50 in the major, or consent of their faculty adviser. Students may be admitted to the program no sooner than the spring of their sophomore year.

The honors program requires a minimum of 40 units, including 6 to 9 units in seminars, directed readings and research projects. A senior thesis and oral defense are also required. Students should consult their faculty adviser for more information.



CAREERS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING

Faculty of the department are active in career advising. Occasional careers days are held, and the department participates in a regional network of career advising in geography. Graduates of the department are currently employed in a wide array of jobs such as teachers, professors, meteorologists, intelligence analysts with the Department of Defense, cartographers, planners, statisticians, travel agents and environmental engineers.

GRADUATE PROGRAM

The Master of Arts degree program in Geography and Environmental Planning is designed to prepare students for doctoral programs as well as for career opportunities in private business and public agencies. The program is oriented toward applied geography and presents possibilities for an emphasis in the following areas: urban and regional planning, urban studies, public policy issues, physical geography, environmental assessment, energy resources, cultural and historical geography, medical geography, population, area studies, cartography and geographic information systems.

Graduate students in Geography and Environmental Planning are encouraged to take pertinent course work in other departments. Students may pursue either the thesis program (30 units and a 6-unit thesis) or the non-thesis program (36 units). Detailed information is given in the *Graduate Catalog*.

Qualified Geography undergraduates are eligible to participate in an accelerated 3+2 M.A. program in Geography.

Department of History

Professors: Terry Cooney, Cindy Gissendanner, Steven Phillips, Ronn Pineo (*Chair*), Robert Rook

Associate Professors: Nicole Dombrowski, Rita Costa-Gomes, Elizabeth Kelly Gray, Kimberly Katz, Akim Reinhardt, Allaire Stallsmith

Assistant Professors: Andrew Diemer, Alhena Gadotti, Christian Koot, Michael Masatsugu, Karen Oslund, Valerie Thaler, Benjamin Zajicek

Part-time Faculty: Patricia Anderson, Robert Brugger, Don McNeilly, Jakub Zejmis

Lecturers: John Mancini, Meghan Warner

OFFICE

LA 4210, 410-704-2923

www.towson.edu/history

PROGRAMS OF THE DEPARTMENT

The Department of History offers the following programs: the major in History; the History Secondary Education major, for students planning to teach history at the secondary level; and the minor in History. Each of these programs encourages students to explore the study of history in depth. Such investigation leads to an appreciation of the structure and function of the discipline and prepares the student for teaching, for graduate work and for the study of law, theology, archival management, library science, historical preservation and museology.

Skills, as well as historical knowledge acquired through the study of the discipline, may also lead to career opportunities in public history; federal, state and local government; and in business and industry. Students may opt for more career flexibility by choosing double majors or by combining History with a minor: History and Museum Studies, History and Art, History and English, History and Women's Studies, History and Business, History and Communication, for example.

History majors and minors are also expected to take correlative courses that broaden their academic backgrounds and offer valuable insights into their subjects. The department also strongly recommends the completion of the intermediate level of a foreign language. The department offers courses in the fields of American, European, Asian, African, Latin American, Middle Eastern and World history. The offerings are varied. Some courses are chronological, topical or national in scope. Others are in women's, ethnic, business, social, cultural or political history.

All courses offered encourage an appreciation of the historical past through lecture/discussion, reading, analysis and writing. Because history explores all aspects of human endeavor, history courses touch upon the insights of all disciplines from the historical perspective.

An internship is a practical application of historical knowledge and skill. An internship may be taken at institutions such as the Maryland Historical Society, Baltimore City Archives, Baltimore Museum of Industry, Jewish Museum of Maryland, Towson University Archives, B&O Railroad Museum and National Great Blacks in Wax Museum.

The department participates in interdisciplinary programs such as International Studies, Social

Sciences and Women's Studies; the minors in African and African American Studies, Jewish Studies, Classical Studies, and Lesbian, Gay, Bisexual and Transgender Studies; and in Interdisciplinary Studies, tracks in American Studies, African-American Studies, Comparative Ethnic Studies, Latin American Studies and Asian Studies.

COMBINED MAJOR IN HISTORY AND GEOGRAPHY

In addition to the Core Curriculum requirements, completion of individual majors in History and Geography requires the successful completion of 85 units (45 in History and 40 in Geography) with a grade equivalent of 2.00 or higher. However, by electing the combined major in History and Geography, students will be able to complete both majors with a total 73 units (39 in History and 34 in Geography).

The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate courses (or their equivalent) of a modern foreign language.

The major requirements listed below are for the History side of the combined major. For the requirements for completion of the Geography side of the combined major, students should consult the Department of Geography and Environmental Planning. Students interested in this combined major should consult with an adviser in both departments to review the requirements.

MAJOR IN HISTORY

In addition to the Core Curriculum requirements, History majors are required to complete 45 units with a grade equivalent of 2.00 or higher. The Bachelor of Arts degree may be earned by adding a foreign language to the major course requirements. The language requirement can be met by completing the intermediate courses (or their equivalent) of a modern foreign language.

Required Courses (6 units)

HIST 100 Using Information Effectively in History*(3)
HIST 300 Introduction to Historical Study**(3)

History Electives (39 units)

Five lower-division survey courses (15 units) including the following:

- minimum of one course in pre-modern history (history prior to 1500)
- minimum of one course in U.S. survey (HIST 145, HIST 146 or HIST 148)
- minimum of one course in European survey (e.g. HIST 101, HIST 102, HIST 103 or HIST 105)
- minimum of two courses in global surveys (must be non-U.S. AND non-European history, such as HIST 117, HIST 118, HIST 121 or HIST 122, HIST 160 or HIST 161)***

Eight upper-division courses (24 units) including the following:

- minimum of two courses in pre-modern history (history prior to 1500)
- minimum of one course in U.S. history
- minimum of one course in European history
- minimum of two courses in global history***

*Course must be taken during the first year as a declared major.

**Course must be taken during the junior year or equivalent.

***Of the four required global history courses (two lower and two upper), students must take at least one course from two of the five sub-regions (Africa, Middle East, Asia, Latin America, World History).

MINOR IN HISTORY

History minors are required to complete 24 units with a grade equivalent of 2.00 or higher in each course taken from among the following courses.

Required Courses (6 units)

HIST 100	Using Information Effectively in History** (3)
HIST 300	Introduction to Historical Study (3)

History Electives (18 units)

Three lower-division survey courses (9 units) including the following:

- minimum of one course in pre-modern history (history prior to 1500)
- minimum of two different geographic categories (U.S., Europe, global)

Three upper-division courses (9 units) including the following:

- minimum of two different geographic categories (U.S., Europe, global)

*HIST 100 may be waived as a requirement for the major, under special circumstances, with permission of the chair.

HISTORY SECONDARY EDUCATION PROGRAM

History majors may wish to obtain certification to teach history at the secondary level. Students in this Secondary Education Program receive certification to teach in Maryland upon graduation. See Department of Secondary Education requirements. Students must contact the Department of Secondary Education about admission to the Secondary Education Program.

In addition to the Core Curriculum requirements, and the requirements specified by the Department of Secondary Education, students must complete 57 units with a grade equivalent of 2.00 or higher in each course taken from among the courses listed below. Of the 57 units, 24 must be completed in the required history courses, 24 in social sciences courses, and 9 units in history electives before student teaching.

Required History Courses (24 units)

HIST 100	Using Information Effectively in History (3)(or ISTC 201 with permission of history chair)*
HIST 102	History of European Civilization through the 17th Century (3)
HIST 103	History of European Civilization from the 17th Century (3)
HIST 145	History of the United States to the Mid-19th Century (3)
HIST 146	History of the United States since the Mid-19th Century (3)
	or
HIST 148	Honors History of the United States since the Mid-19th Century (3)
HIST 300	Introduction to Historical Study** (3)
Plus two courses in lower-division global surveys	

History Electives (9 units)

Three upper-division survey courses including the following:

- minimum of two different geographic categories (U.S., Europe, global)

*Course must be taken during the first year as a declared major.

**Course must be taken during the junior year or equivalent.

Required Social Sciences Courses (24 units)

ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)
SOSC 401	Topics in Social Science (3)
SOCI 101	Introduction to Sociology (3)
POSC 103	American National Government (3)

One of the following:

GEOG 101	Physical Geography (3)
GEOG 102	World Regional Geography (3)
GEOG 105	Geography of International Affairs (3)
GEOG 109	Introduction to Human Geography (3)

One of the following:

POSC 101	Introduction to Political Science (3)
POSC 105	Governments of the World (3)
POSC 107	Introduction to International Relations (3)
POSC 207	State Government (3)

One of the following:

ANTH 207	Cultural Anthropology (3)
ANTH 209	American Culture (3)

SPECIAL RECOMMENDATIONS FOR MAJORS AND MINORS

Students must declare their majors and minors in the department. The major or minor should be declared during the second term of the freshman year or at the beginning of the sophomore year. Students will be given major/minor forms listing additional rules for a History major/minor. They will also be assigned an academic adviser who will help in preparing a program of courses. Students should consult their advisers regularly. Students also must update their records each term. A History minor who wishes to student teach must have completed 15 units of the required courses in history.

Additionally, all majors must complete a History portfolio prior to graduation.

TRANSFER CREDIT POLICY

No more than 18 credits in history will be accepted toward a major or a minor from a regionally accredited four-year college. No more than 12 lower-division credits in history will be accepted toward a major or a minor from a regionally accredited two-year college. The 12 credits must be in lower-division courses which have Towson University equivalents at the 100–200 level.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The department awards credit through the Advanced Placement Program of the university for scores of 4 or 5 only. The department also offers units for lower-division courses, and for upper-division courses upon appeal, through the Credit for Prior Learning Program. Students applying for credit under this program complete a departmental examination, an interview and a paper or book review in the field.

DEPARTMENTAL HONORS AND ACTIVITIES

The department offers an honors program in history. Eligibility requirements and rules governing the departmental honors programs are described elsewhere in this catalog. Students interested in the history honors program should consult their adviser and the department chair no later than the first term of their junior year.

The department sponsors the Theta Beta Chapter of the national history honor society, Phi Alpha Theta. The society presents lectures, films and other programs. Students may inquire about membership requirements at the department office.

Department awards include the Medal of the Daughters of American Colonists, presented by the Cecilius Calvert Chapter of that organization, and the Disabled American Veterans Prize in History.

The Mary Catherine Kahl Prize is awarded annually to a history major or minor of outstanding promise who has not yet graduated. An essay in history written by the nominees is submitted as an integral part of the prize competition.

The Arnold Blumberg Prize is awarded annually to the senior history major who has compiled the most outstanding record in the field of European history.

The Douglas D. Martin Sr. History Award provides scholarship support for undergraduate History majors with a minimum of 85 units who have demonstrated an interest in the study of Western U.S. history or native peoples.

Each year, under an endowment established to honor Professor Herbert Duane Andrews, an outstanding scholar will be invited to lecture at the university. The lecture will emphasize scholarly research which demonstrates the integration of history with other disciplines or which utilizes newer methodologies to enhance understanding of traditional areas of specialization.

The department also offers travel-study courses that in the past have introduced students to China, Japan, Mexico and several European countries.



Interdisciplinary Studies Program

Director: James DiLisio

OFFICE

Liberal Arts 2213, 410-704-2128
www.towson.edu/idis

THE PROGRAM

The Interdisciplinary Studies Program provides students with the opportunity to pursue a course of study unavailable through any single discipline at Towson University. The program offers students three alternatives: (1) the individually designed thematic option; (2) four formally designed major tracks and (3) 10 minors.

The number of units required for a major in Interdisciplinary Studies varies by major track. All units must be completed with a grade equivalent of 2.00 or higher. Students pursuing a minor in Interdisciplinary Studies must likewise complete the requisite units with a grade equivalent of 2.00 or higher.

Interdisciplinary Studies majors may transfer up to 21 credits toward completion of the major. Interdisciplinary Studies minors may transfer up to 9 credits toward completion of the minor. Transfer credits from a Towson University study abroad program do not count toward this transfer credit limit, nor are they included in the student's GPA.

INDIVIDUALLY DESIGNED THEMATIC OPTION MAJOR

The individually designed thematic option allows students to pursue a major that is not available at Towson University but is offered at other colleges or universities. Because it is individually designed, this option places special responsibilities on the student.

First, the student finds the model for the major he or she wishes to pursue in the catalog of another accredited university and determines whether Towson University offers the courses necessary to complete the major. Second, the student meets with the director of Interdisciplinary Studies to ask for preliminary approval of the proposed major. Third, with the assistance of the director of Interdisciplinary Studies, the student identifies a professor with the necessary expertise who is willing to serve as his or her major adviser. Fourth, under the guidance of the major adviser, the student creates a program of study that includes a title for the individually designed thematic option, a description of its goals, and a list of required and elective courses (template for program of study available at www.towson.edu/idis). After formal approval by the faculty adviser, the student, and the director of Interdisciplinary Studies, this agreement will constitute the requirements of the student's major.

Students interested in the individually designed thematic option should declare their major as soon as possible, ideally no later than the first term of the junior year. Regardless of when the major is declared, students must enroll in a minimum of 21 units in the major following formal approval of the program of study. No unapproved program of study may be used for graduation.

Requirements for the Major

1. A program of study consisting of a minimum of 45 units in the major approved by the director of Interdisciplinary Studies.
2. At least 21 of these units must be taken after formal approval of the program of study.
3. The required 45 units must incorporate courses from at least three departments or programs.
4. All course work must be upper-division (300–400) unless the faculty adviser and the director of Interdisciplinary Studies approve the inclusion of some particularly significant course work (no more than 9 units) at the lower-division level.
5. Students must complete an Interdisciplinary Studies portfolio. (See director of Interdisciplinary Studies or go to www.towson.edu/idis for guidelines.)

INDIVIDUALLY DESIGNED THEMATIC OPTION MINOR

Advisory Committee: James DiLisio
(*Interdisciplinary Studies*), Matthew Durington,
(*International Studies*) Robert Rook (*History*),

The Program

The individually designed thematic option minor allows students to pursue a minor that is not available at Towson University but is offered at other colleges or universities. Because it is individually designed, this option places significant responsibility on the student.

First, the student finds a model for the minor he or she wishes to pursue in the catalog of another university and determines whether Towson University offers the courses necessary to complete the minor. Second, the student meets with the director of Interdisciplinary Studies to ask for preliminary approval of the proposed minor. Third, with the assistance of the director of Interdisciplinary Studies, the student identifies a professor with the necessary expertise who is willing to serve as his or her adviser. Fourth, under the guidance of the adviser, the student creates a program of study that includes a title for the individually designed thematic option, a description of its goals, and a list of required and elective courses. After formal approval by the faculty adviser, the student and the director of Interdisciplinary Studies, this agreement will constitute the requirements of the student's minor.

Requirements for the Minor

1. A program of study consisting of a minimum of 21 units approved by the director of Interdisciplinary Studies.
2. Each of these courses must be completed with a grade of 2.00 or higher.
3. The 21 units must incorporate course work from at least three different departments or programs.
4. A maximum of 9 units at the 100–200 level are allowed in the minor.

FORMALLY DESIGNED MAJOR TRACKS

There are at present four formally designed major tracks, each designed by an interdisciplinary faculty committee. Students interested in any of these programs should contact the director of the track.

Please note that the major that appears on your diploma will be Interdisciplinary Studies in each of these cases. Major tracks are listed on your official transcript after approval for graduation.

Tracks

American Studies
Animal Behavior
Asian Studies
Latin American and Latino/a Studies

MINORS

Interdisciplinary minors offer an excellent complement to majors in traditional disciplines. Students in any major may elect to pursue one of these minors.

African and African American Studies
American Studies
Ancient Mediterranean Studies
Asian Studies
Business, Communication and the Liberal Arts
Jewish Studies
Latin American and Latino/a Studies
Lesbian, Gay, Bisexual and Transgender Studies
Museum Studies

The specific requirements for each of the formally designed major tracks and minors are described below.

AFRICAN AND AFRICAN AMERICAN STUDIES MINOR

Director: Donn Worgs (*Political Science*)
Advisory Committee: Lena Ampadu (*English*),
Celia Bardwell-Jones (*Women's Studies & Philosophy*), Leonie Brooks (*Psychology*),
Elizabeth Clifford (*Sociology, Anthropology and Criminal Justice*), Matthew Durington
(*Sociology, Anthropology and Criminal Justice*), Art King (*Center for Student Diversity*), Wayne
McKim (*Geography and Environmental Planning*), John Murungi (*Philosophy and Religious Studies*), Esther Wangari (*Women's Studies*), Evangeline Wheeler (*Psychology*)

Office

LA 3236, 410-704-5908
www.towson.edu/idis/aaast

The Program

The African and African American Studies minor offers the student the opportunity to study, in-depth, the historical and social experiences and cultural contributions of Africans and people of African descent in a global perspective. It also provides a critical perspective on race in American society. An interdisciplinary program concentrating mainly in the humanities, the curriculum of the African and African American Studies minor offers students the opportunity to customize their course work by exploring a range of subjects in various disciplines. Students must complete 21 units for the minor.

Requirements for the Minor

The minor in African and African American Studies requires 21 units. To fulfill the requirements for the minor in African and African American Studies, students must take one required course. Students should choose the remaining 18 units from a list of elective courses approved by the advisory committee.

Required Course (3 units)

AFST 201 Main Themes in African and African American Studies (3)

Electives (18 units)

Students should take courses in at least three different disciplines; 12 units must be in upper-level courses.

ENGL 233 Survey of African American Literature (3)
or
ENGL 234 Major Writers in African American Literature (3)
ENGL 336 Post-Colonial Literature: Caribbean Literature (3)
ENGL 347 World Literature Written in English: African Women Writers (3)
ENGL 477 Topics in Black American Literature (content varies) (3)
PHIL 251 African American Philosophy (3)
PHIL 204 Race, Class and Gender (3)
PHIL 270 Topics: Philosophical Perspectives (3)
PHIL 327 African Philosophy (3)
GEOG 431 Geography of Africa (3)
ANTH 373 Anthropology of African Media (3)
ARTH 335 African American Art (3)
HIST 135 African History and Culture (3)
HIST 329 History of South Africa (3)
HIST 381 African American History to the Mid-19th Century (3)
HIST 382 African American History since the Mid-19th Century (3)
AFST 411 Topics in African and African American Studies (3)
POSC 343 African-American Politics
POSC 470 Topics: The Politics of Urban Education (3)
SOCI 241 Blacks in America: Myths and Realities (3)
SOCI 243 Sociology of Race, Class and Gender (3)
SOCI 341 Class, Status and Power (3)
SOCI 343 Sociology of Race and Ethnicity (3)
SOCI 370 Topics in Sociology
MUSC 123 History of Jazz (3)
or
MUSC 125 Honors History of Jazz
THEA 303 Cultural Diversity in Contemporary Theater (3)
or
THEA 304 Honors Cultural Diversity in Contemporary Theater (3)
PSYC 432 Cross-Cultural Psychology (3)
WMST 370 Topics in Women's Studies: Women of Color (3)
KNES 470 Racism in Sport (3)

AMERICAN STUDIES TRACK/ INTERDISCIPLINARY STUDIES MAJOR

Director: Elizabeth Clifford (*Sociology, Anthropology and Criminal Justice*)

Advisory Committee: Tara Bynum (*English*), Victor Fisher (*Sociology, Anthropology and Criminal Justice*), Christian Koot (*History*), Tracy Miller (*Academic Advising*), Nancy Siegel (*Art History*), Virginia Thompson (*Geography*), Dave Zang (*Kinesiology*)

Office

LA 3334, 410-704-5164
www.towson.edu/idis/americanstudies

The Program

The American Studies Track is an interdisciplinary program allowing students to take courses in different academic departments that focus on the concept of American culture. The American studies approach emphasizes the interrelatedness of history, literature,

the arts and popular culture. Students examine American institutions, ideas and material forms in order to better understand their past and shape their futures. The track is designed for students who may wish to have careers in fields such as teaching, law, museum work and journalism, where a broad knowledge of American history and culture is desirable.

A minor is available for students with another major who want to learn more about American culture.

Students interested in material culture or museum work have the opportunity to receive credit for internships at a number of area museums or historical sites.

Requirements for the Track

Students majoring in the American Studies Track must complete 45 units with a grade equivalent of 2.00 or higher in each course.

Required Lower-Division Courses (12 units)

AMST 201 Introduction to American Studies (3)
plus 9 units from the following;
from 3 different disciplines:
ANTH 209 Anthropology of American Culture (3)
ARTH 113 Myths and Stories in Art History (3)
ENGL 230 Main Currents in American Literature (3)
ENGL 231 American Literature to 1865 (3)
ENGL 232 American Literature since 1865
HIST 145 History of the United States to the Mid-19th Century (3)
HIST 146 History of the United States since the Mid-19th Century (3)
MUSC 111 Introduction to Music in the U.S. (3)
POSC 103 American National Government (3)
SOCI 241 Blacks in America: Myth and Reality (3)

Required Upper-Division Courses (33 units)

No more than 9 units may be taken in any one department.

Anthropology

ANTH 311 Archaeology of Maryland (3)
ANTH 365 North American Indians (3)
ANTH 383 North American Archaeology (3)
ANTH 387 Native American Archaeoastronomy (3)

American Studies

AMST 491 Directed Readings (3)
AMST 497 Internship in Material Culture (3)

Art History

ARTH 335 African American Art (3)
ARTH 337 Art and Architecture of the U.S. I (3)
ARTH 338 Art and Architecture of the U.S. II (3)
ARTH 355 African American Art (3)

English

ENGL 331 American Drama (3)
ENGL 353 History of American English (3)
ENGL 431 Literature of the American Romantic Period (3)
ENGL 432 Literature of the American Realistic Period (3)
ENGL 433 American Short Story (3)
ENGL 435 Development of the American Novel: 19th Century (3)
ENGL 436 Development of the American Novel: 20th Century (3)
ENGL 437 American Poetry through Frost (3)
ENGL 438 Modern American Poetry (3)
ENGL 473 Topics in American Literature (3)
ENGL 476 Topics in Multiethnic American Literature (3)
ENGL 477 Topics in Black American Literature (3)

Geography

GEOG 420 Geography of U.S. and Canada (3)
GEOG 423 Geography of Maryland (3)

History

HIST 306 Women in 20th-Century American History (3)
HIST 314 The United States and Vietnam (3)
HIST 331 American Military History 1898–1945 (3)
HIST 332 American Military History since 1945 (3)
HIST 345 The American Colonies: 1492–1763 (3)
HIST 346 The American Revolutionary Period: 1763–1789 (3)
HIST 347 The Early National Period (3)
HIST 349 The Civil War (3)
HIST 351 The U.S. Age of Enterprise (3)
HIST 352 The U.S. Age of Reform (3)
HIST 359 The F.D.R. Era (3)
HIST 360 Recent American History (3)
HIST 361 Gays and Lesbians in U.S. History (3)
HIST 363 Social History of the U.S. to 1865 (3)
HIST 364 Social History of the U.S. since 1865 (3)
HIST 366 History of American Business (3)
HIST 367 Development of the U.S. Constitution (3)
HIST 368 The Bill of Rights and the Constitution (3)
HIST 370 Diplomatic History of the U.S. (3)
HIST 374 The American West (3)
HIST 375 The City in American History (3)
HIST 378 Immigrants and Immigration (3)
HIST 379 History of Native Americans: The East (3)
HIST 380 History of Native Americans: The West (3)
HIST 381 African American History to the Mid-19th Century (3)
HIST 382 African American History from the Mid-19th Century (3)
HIST 385 Workers and Work in the United States (3)
HIST 389 Roots of Rock and Roll (3)
HIST 397 History of Maryland (3)

Kinesiology

KNES 357 Sport in Film (3)
KNES 441 The American Woman in Sport (3)
KNES 451 History of Sport in America (3)

Music

MUSC 421 American Music (3)
MUSC 426 Jazz History (3)

Philosophy

PHIL 326 American Philosophy (3)

Political Science

POSC 305 Urban Government and Politics (3)
POSC 355 The Latin American Policy of the U.S. (3)
POSC 381 The Presidency (3)
POSC 383 Congress (3)
POSC 384 The Judicial System (3)
POSC 417 American Political Parties (3)
POSC 418 Constitutional Law I (3)
POSC 419 Civil Rights and Civil Liberties II (3)
POSC 420 Constitutional Protections III (3)
POSC 421 Politics and Environmental Policy (3)
POSC 422 The Supreme Court (3)
POSC 430 American Political Thought (3)
POSC 432 U.S.-Russian Relations (3)
POSC 436 U.S. Foreign Policy (3)
POSC 437 Castro and the Cuban Revolution (3)
POSC 441 Contemporary U.S.-Western European Relations (3)
POSC 450 Interest Groups (3)

Sociology

SOCI 323 Social Movements (3)
SOCI 327 Urban Sociology (3)
SOCI 329 Demography (3)
SOCI 356 Prisons in America (3)

Other courses relating to American culture may be substituted with the approval of the program coordinator.

AMERICAN STUDIES MINOR

The minor in American Studies is designed for students majoring in another discipline who wish to learn more about American culture. Students minoring in American Studies must complete 21 units with a grade equivalent of 2.00 or higher in each course.

Required Lower-Division Courses (9 units)

AMST 201	Introduction to American Studies (3)
<i>Plus 6 units from the following; from 2 different disciplines.</i>	
ANTH 209	Anthropology of American Culture (3)
ARTH 113	Myths and Stories in American Art (3)
ENGL 230	Main Currents in American Literature (3)
ENGL 231	American Literature to 1865 (3)
ENGL 232	American Literature Since 1865 (3)
ENGL 233	Survey of African American Literature (3)
ENGL 234	Major Writers in African American Literature (3)
HIST 145	History of the United States to the Mid-19th Century (3)
HIST 146	History of the United States since the Mid-19th Century (3)
MUSC 111	Introduction to Music in the U.S. (3)
POSC 103	American National Government (3)
SOCI 241	Blacks in America: Myth and Reality (3)

Required Upper-Division Courses (12 units)

Students choose 12 units from the above list of upper-division courses for the major. No more than 6 units may be taken in any one department. Students should select courses in consultation with the American Studies coordinator.

ANCIENT MEDITERRANEAN STUDIES MINOR

Director: Jennifer Ballengee (*English*)

Advisory Committee: Rose Ann Christian (*Philosophy and Religious Studies*), Victor Fisher (*Sociology, Anthropology and Criminal Justice*), Alhena Gadotti (*History*), Susanna Garfein (*Philosophy and Religious Studies*), Barry Gittlen (*Philosophy and Religious Studies*), John McLucas (*Foreign Languages*), Amy Sowder (*Art History*), Allaire Stallsmith (*History*), Kate Wilkinson (*Womens Studies*)

Office

LA 4210K, 410-704-5213

E-mail: jballengee@towson.edu

The Program

Ancient Mediterranean Studies includes the study of ancient history and languages, including Biblical Hebrew, ancient Greek and Latin. The period covered extends from the Paleolithic to the fall of the Roman Empire in the West in A.D. 476, and the field's geographical boundaries cover the coasts of the Mediterranean and the civilizations which arose in the Mediterranean hinterlands.

The disciplines concerned with the Ancient Mediterranean have formed the basis of the Western liberal arts for centuries. The Ancient Mediterranean Studies minor incorporates courses drawn from Anthropology, Art History, English, Foreign Languages, Geography, History, Jewish Studies, Philosophy and Religious Studies, offering students an opportunity to specialize in the disciplines of antiquity. The Ancient Mediterranean Studies minor helps students majoring in various fields to focus their interests and gives coherence to their programs.

Trained to integrate the past with the present, students of antiquity are found not only in their traditional havens—universities, museums, archaeological projects, and research centers—but also as valuable team members in such diverse fields as international business, public educational programs, documentary filmmaking, publishing, marketing, mass communications, medicine and the law.

Students in the Baltimore-Washington area have unique opportunities for research and hands-on learning at the Walters Art Museum, the Center for Hellenic Studies, Dumbarton Oaks, the Library of Congress, the Smithsonian, and the libraries of Johns Hopkins University and the University of Maryland.

Minor in Ancient Mediterranean Studies

The minor in Ancient Mediterranean Studies consists of 24 units selected from the following:

Required Courses (9 units)

HIST 101	Introduction to Ancient Mediterranean Civilizations (3)
<i>And 6 units of an ancient language, either:</i>	
LATN 101	Latin Elements I (3)
LATN 102	Latin Elements II (3)
<i>or</i>	
GRK 103	Ancient Greek Elements I (3)
GRK 104	Ancient Greek Elements II (3)
<i>or</i>	
HEBR 103	Biblical Hebrew I (3)
HEBR 104	Biblical Hebrew II (3)

NOTE: The language requirement may be waived by passing a proficiency exam; in that case, 6 units would be made up by choices from the recommended courses listed below.

Recommended Courses (15 units)

Five additional courses (15 units) should be chosen from the following list, with no more than two courses (6 units) in any one department.

Anthropology

ANTH 207	Cultural Anthropology (3)
ANTH 208	Human Evolution and Prehistory (3)
ANTH 381	Archaeological Methods and Theory (3)

Art History

ARTH 301	Origins of Western Art (3)
ARTH 306	Classical Art and Archaeology (3)

English

ENGL 243	Introduction to Classical Mythology (3)
ENGL 341	History and Literature of the Old Testament (3)
ENGL 343	Myth and Literature (3)
ENGL 351	Historical Linguistics (3)

Geography

GEOG 109	Introduction to Human Geography (3)
GEOG 357	Cultural Geography (3)

Greek

GREK 103	Ancient Greek Elements I (3)
GREK 104	Ancient Greek Elements II (3)

History

HIST 275	History of Ancient Israel (3)
HIST 301	Ancient Near Eastern Civilizations (3)
HIST 303	Alexander the Great and His Successors (3)
HIST 304	Ancient Greek Civilization (3)
HIST 305	Roman Civilization (3)

Latin

LATN 101	Latin Elements I (3)
LATN 102	Latin Elements II (3)
LATN 201	Latin Intermediate I (3)
LATN 202	Latin Intermediate II (3)

LATN 301	Advanced Readings in Latin I (3)
LATN 302	Advanced Readings in Latin II (3)

Philosophy

PHIL 221	Ancient Greek Philosophy (3)
PHIL 322	Hellenistic and Medieval Philosophy (3)

Religious Studies

RLST 206	Judaism, Christianity and Islam (3)
RLST 355	Introduction to the New Testament (3)

Theatre

THEA 211	History of Theatre and Drama to 1600 (3)

NOTE: Courses not listed above, if appropriate, may be approved for the minor by application to the minor committee.

ANIMAL BEHAVIOR TRACK/ INTERDISCIPLINARY STUDIES MAJOR

Co-Directors: Brian Devan (*Psychology*), Erik Scully (*Biological Sciences*)

Advisory Committee: Harald Beck (*Biological Sciences*), Mark Bulmer (*Biological Sciences*), Paz Galupo (*Psychology*), Craig Johnson (*Psychology*), Scott Johnson (*Biological Sciences*), John LaPolla (*Biological Sciences*), Lynn Middleton (*Biological Sciences*), Jay Nelson (*Biological Sciences*), Herbert Petri (*Psychology*), Gerald Robinson (*Biological Sciences*), Richard Siegel (*Biological Sciences*), Joel Snodgrass (*Biological Sciences*)

Office

Smith Hall 261, 410-704-3012

www.towson.edu/idis/animalbehavior

The Program

The study of animal behavior has received an increasing amount of attention from the public because of the emphasis placed by zoological parks on behavioral biology and the large number of presentations in the media regarding animal behavior and sociobiology.

The Animal Behavior Track is designed to offer a solid foundation in the diverse approaches used to study behavioral biology. The program uses a carefully selected combination of courses in biology and psychology to achieve this goal. In addition, students are required to complete either an independent research project or an internship in order to apply their knowledge in an intensive research experience.

Students who complete the program may be qualified for positions at zoological parks, aquariums and nature centers. In addition, they will have the necessary technical knowledge to pursue a career in freelance writing about animal behavior. However, students who are considering attending graduate school will need to complete additional courses in either biology or psychology. Most of the students currently enrolled in the program are also majoring in either Biology or Psychology.

Students who are considering the Animal Behavior Track must meet with one of the program coordinators before declaring Interdisciplinary Studies as a major.

Requirements for the Track

The Animal Behavior Track requires students to complete 45 units with a grade equivalent of 2.00 or higher. If 45 units have not been reached following completion of the required courses, the additional

course or courses must be taken from the biology or psychology electives list (see below).

Required Courses (31–32 units)

BIOL 115	Biology: The Science of Life (4) or Biology I (4)
PSYC 101	Introduction to Psychology (3)
BIOL 207	General Zoology (4)
PSYC 212	Behavioral Statistics (4)
BIOL 371	Animal Behavior (4)
PSYC 460	Ethology and Comparative Psychology (3)
PSYC 314	Research Methods in Psychology (4) or Biological Literature (3)
BIOL 381	Evolution (3)
BIOL 413	Independent Investigation in Psychology (3)#
PSYC 491	Independent Research in Biology (3)# or Internship in Biology
BIOL 493	Internship in Interdisciplinary Studies (3)

Biology Electives

A minimum of two courses from the following*:

BIOL 351	Field and Systematic Vertebrate Zoology (4)
BIOL 353	Invertebrate Zoology (4)
BIOL 367	Endocrinology (3)
BIOL 402	General Ecology (4)
BIOL 456	Ornithology (4)
BIOL 458	Mammalogy (4)
BIOL 461	Entomology (4)
BIOL 467	Herpetology (4)
BIOL 481	Directed Readings in Biology (1–3)#

Psychology Electives

A minimum of two courses from the following*:

PSYC 305	Psychology of Learning (3)
PSYC 309	Psychopharmacology (3)
PSYC 315	Motivation (3)
PSYC 317	Sensation and Perception (3)
PSYC 341	Environmental Psychology (3)
PSYC 381	Readings in Psychology (1–3)#
PSYC 447	Sex Differences: Psychological Perspectives (3)
PSYC 465	Physiological Psychology (3)
PSYC 486	Advanced Experimental Design (3)
PSYC 470-479	Special Topics in Psychology#

#Must be approved by coordinator.

*Students should consult this catalog for course prerequisites and discuss all course selections with their advisers.

ASIAN STUDIES TRACK/ INTERDISCIPLINARY STUDIES MAJOR

Director: Steven Phillips (History)

Advisory Committee: Suck Choi (*Philosophy and Religious Studies*), Samuel Collins (*Sociology, Anthropology and Criminal Justice*), Kimberly Dukes (*Sociology, Anthropology and Criminal Justice*), Ping Fu (*Foreign Languages*), Maria Alegre-Gonzales (*Foreign Languages*), Kang Shoulu (*Geography*), Matthew Hoddie (*Political Science*), Kimberly Katz (*History*), Reiko Nonogaki (*Foreign Languages*), Suewei Shieh (*Asian Art Center*), James Smith (*Geography*), Jeremy Tasch (*Geography*), Nanyan Zhang (*Economics*)

Office

LA 4229, 410-704-2912

www.towson.edu/asianstudies

The Program

The Asian Studies Track within the Interdisciplinary Studies major is designed to offer students an interdisciplinary program of study of various dimensions of the Asian world. Students may plan a course of study that concentrates on a particular aspect of Asian civilization or on a particular sub-region of Asia. One might, for example, focus on the art and philosophy of various Asian peoples, or instead, one might concentrate on Chinese, Indian or Japanese civilization, studying both the traditional and modern society, its physical setting, and its political and economic development. In order to build a sound program of study, which meets both the individual student's needs and the Interdisciplinary Studies requirements, it is essential that students work closely with an adviser in planning the program and selecting courses.

Requirements for the Track

1. Twelve units of a foreign language appropriate to the student's designated area of interest in Asia. The Advisory Committee may waive the language requirement for native speakers of Japanese, Chinese or another language related to the student's course of study. In this case, students must earn a total of 45 units instead of the 33 detailed below.
2. A minimum of 33 units selected from the following list of courses, but with courses from at least three departments (in addition to language) represented. Other courses not shown on the list, but which are relevant to Asia (such as directed readings courses and Minimester courses) may be accepted with the approval of the advisory committee. Excluding language courses, no more than 12 units below the 300 level may be taken for credit in this program.
3. All courses must be completed with a grade equivalent of 2.00 or higher.
4. Students may transfer up to 21 credits toward the completion of the major. Transfer credits from a Towson University study abroad program do not count toward this transfer credit limit, nor are they included in the student's GPA.
5. Asian language courses above the 202 level may be counted toward the 33-unit elective requirements. Students taking a second Asian language must petition to have those upper-level units included in the 33-unit elective requirement. Normally, however, students are expected to concentrate on one Asian language. Native speakers may receive Asian Studies credit for language courses in their own language above the 302 level.

Approved Courses

Art History

ARTH 330	East Asia Art and Architecture (3)
ARTH 331	Art of China (3)
ARTH 333	Art of Japan (3)
ARTH 370	Special Topics: Arts of Modern China (3)

Asian Studies

ASST 270-2	Special Topics in Asian Studies (1–4)
ASST 470-2	Advanced Topics in Asian Studies (1–4)
ASST 490	Directed Readings in Asian Studies (1–3)
ASST 492	Independent Study in Asian Studies (1–3)
ASST 494	Internship in Asian Studies (1–3)

Geography

GEOG 443	Geography of East Asia (3)
GEOG 445	Geography of Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)
GEOG 477	Regional Geography of the Silk Road (3)

History

HIST 107	Introduction to History of Islamic Civilization (3)
HIST 109	Introduction to the Civilization of India (3)
HIST 110	East Asian Civilizations to the 17th Century (3)
HIST 111	Modern East Asia since the 17th Century (3)
HIST 117	Islamic History (3)
HIST 118	Survey of Middle Eastern History (3)
HIST 310	Nationalism in East and Southeast Asia (3)
HIST 311	Traditional India: Its Historical Development (3)
HIST 312	History of Modern India (3)
HIST 313	History of Modern Southeast Asia (3)
HIST 315	Imperial China: The Last Dynasty (3)
HIST 316	Revolutionary China (3)
HIST 318	Modern Korea (3)
HIST 319	Japan: 1830–1930 (3)
HIST 320	Japan: 1930–Present (3)
HIST 339	Modern Middle East (3)
HIST 340	Israel/Palestine (3)
HIST 354	Cold War East Asia (3)

Interdisciplinary Studies

IDIS 494	Travel & Study in Interdisciplinary Studies (3)

Foreign Language

ARAB 101-102	Arabic Elements I, II (3, 3)
ARAB 201-202	Arabic Intermediate I, II (3, 3)
CHNS 101-102	Elementary Chinese I, II (3, 3)
CHNS 201-202	Intermediate Chinese I, II (3, 3)
CHNS 301-302	Chinese Composition and Conversation I, II (3, 3)
CHNS 311	Chinese Culture & Civilization (3)
CHNS 491	Modern Chinese Literature (3)
CHNS 492	Chinese Cinema (3)
JPNS 101-102	Japanese Elements I, II (3, 3)
JPNS 201-202	Japanese Intermediate I, II (3, 3)
JPNS 301-302	Japanese Composition and Conversation I, II (3, 3)

Philosophy-Religious Studies

PHIL 219	Introduction to Asian Philosophy (3)
PHIL 301	Philosophies of India (3)
PHIL 302	Philosophies of China and Japan (3)
PHIL 380	Philosophical Topics: Confucianism, Taoism, Buddhism, or Neo-Confucianism (3)
PHIL 357	Comparative Religion (3)
PHIL 470	Philosophical Problems: Confucianism, Taoism, Buddhism, or Neo-Confucianism (3)
RLST 203	Introduction to Islam (3)
RLST 209	Religious Traditions in Asia (3)
RLST 307	Buddhism in Tibet (3)

Political Science

POSC 334	Governments and Politics of East Asia (3)

Sociology-Anthropology-Criminal Justice

ANTH 331	Eskimo Ethnography (3)
ANTH 367	Peoples of the Middle East (3)

ASIAN STUDIES MINOR

The minor in Asian Studies is designed for students majoring in another discipline yet interested in acquiring knowledge of Asian nations and cultures without completing the major program above. Students minoring in Asian Studies must complete 21 units from the courses listed above with a grade equivalent of 2.00 or higher in each course. No more than 9 units may be lower-division. Students must select courses in at least three disciplines (in addition to the language course referenced below) in consultation with the Asian Studies director.

Asian Languages

There is no language requirement for the Asian Studies minor; however, students are encouraged to begin study of an Asian language. One 3-unit Asian language course may be applied toward the 21-unit requirement. Native speakers may receive Asian Studies credit for language courses in their own language above the 302 level.

BUSINESS, COMMUNICATION AND THE LIBERAL ARTS MINOR

Director: Lili Fox-Velez (*English*)

Advisory Committee: Cary Smedley (*Employer Relations Counselor*), William Smith (*Department of Management*), Rodney Stump (*Department of Marketing*), Sharon Jones-Eversley, Karen Goldrich Eskow (*Department of Family Studies and Community Development*)

Office

Liberal Arts 5347, 410-704-2944
www.towson.edu/idis/bcla

The Program

The interdisciplinary minor in Business, Communication and the Liberal Arts (BCLA) was developed in 1997 in response to needs expressed by national and local business executives. Students possessing this minor to complement their major will help meet the growing demand for graduates who have strong oral and written communication skills, the ability to think critically and creatively in solving problems, and a general knowledge of business culture and practices.

Students have the option of pursuing the BCLA minor with a general focus, which grants considerable flexibility in the breadth of courses taken, or with a *Nonprofit Leadership focus*.

Minor in Business, Communication and the Liberal Arts: General Focus

This rigorous minor for liberal arts majors and others consists of 24 units. The minor emphasizes the skills that are important for successful job performance over time and recognizes the business community's need for broadly educated, articulate college graduates.

Declaration of minor can be made at any time, but please see the director, as well as include the minor on your declaration of major/minor form.

Required Courses (24 units)

ACCT 201*	Accounting Principles I (3)
COMM 315	Business and Professional Communication (3)
ENGL 317	Writing for Business and Industry (3)
COSC 109	Computers and Creativity (3)
	or
COSC 111*	Information and Technology for Business (3)
or	
COSC 119	Using Information Effectively in the Computing Sciences (3)
	or
FMST XXX/ IDIS XXX	Fundraising, Friendraising and Volunteer Management (3)
ECON 201*	Microeconomic Principles (3)
PHIL 371	Business Ethics (3)
MNGT 361	Principles of Management (3)
or	
MKTG 341	Principles of Marketing (3)

And one course (3) selected from the following:

ANTH 209*	Anthropology of American Culture
ENGL 263	Tradition and Form in Western Fiction ENTR 120 Entrepreneurial Process
IDIS 495-498	Internship in IDIS
PHIL 101	Introduction to Philosophy
POSC 107	Introduction to International Relations

Recommended Courses

Students in the BCLA minor are encouraged to enroll in some of the following courses to fulfill graduation requirements. Students should discuss these options with their advisers. These recommended courses may not be used to replace any of the minor requirements.

COMM 304	Persuasion (3)
COMM 379	Intercultural Communication (3)
ECON 202*	Macroeconomic Principles (3)
FREN 331	French for Business (3)
GEOG 105	Geography of International Affairs (3)
GERM 331	German for Business (3)
HIST 146	History of the U.S. since the Mid-19th Century (3)
LEGL 225	Legal Environment of Business (3)
MCOM 385	Mass Media and Society (3)
MKTG 341	Principles of Marketing (3)
MNGT 361	Principles of Management (3)
PSYC 327	Industrial Psychology (3)
SPAN 331	Spanish for Business (3)

*Honors College versions of the courses count toward the minor.

Minor in Business, Communication and the Liberal Arts: Nonprofit Leadership Focus

Students hoping to enter a career in the nonprofit sector may also select a series of courses within the BCLA minor which are aligned with the certification requirements of the Nonprofit Leadership Alliance. In addition to the course work below, certification in Nonprofit Leadership also requires 300 hours of internship experience. Students should discuss the internship requirement with the Nonprofit Leadership Alliance Campus Executive Director. The internship experience may not be used to replace any of the BCLA minor Nonprofit Leadership focus course requirements.

Required Courses (24 units)

ACCT 201*	Accounting Principles I (3)
COMM 315	Business and Professional Communication (3)
	or
ENGL 317	Writing for Business and Industry
ECON 201*	Microeconomic Principles (3)
	or
ACCT 202*	Accounting Principles II (3)
FMST 350:	Leadership in the Nonprofit Sector (3)
FMST XXX/ IDIS XXX	Fundraising, Friendraising and Volunteer Management (3)
MNGT 361	Principles of Management (3)
MKTG 341	Principles of Marketing (3)
PHIL 371	Business Ethics (3)

Recommended Courses

Students in the BCLA minor are encouraged to enroll in some of the following courses to fulfill graduation requirements. Students should discuss these options with their advisers. These recommended courses may not be used to replace any of the minor requirements.

COMM 304	Persuasion (3)
COMM 379	Intercultural Communication (3)
ECON 202*	Macroeconomic Principles (3)
FREN 331	French for Business (3)
GEOG 105	Geography of International Affairs (3)
GERM 331	German for Business (3)
HIST 146	History of the U.S. since the Mid-19th Century (3)
LEGL 225	Legal Environment of Business (3)
MCOM 385	Mass Media and Society (3)
MKTG 341	Principles of Marketing (3)
MNGT 361	Management and Organization Theory (3)
PSYC 327	Industrial Psychology (3)
SPAN 331	Spanish for Business (3)

*Honors College versions of these courses may be used to also fulfill Honors College requirements.

JEWISH STUDIES MINOR

Advisory Committee: Barry Gittlen (*Philosophy and Religious Studies*) Evelyn Avery (*English*) Rose Ann Christian (*Philosophy and Religious Studies*), Karen Eskow (*Family Studies*), Bernard Freundel (*Philosophy and Religious Studies*), Susanna Garfein (*Philosophy and Religious Studies*), Howard Kaplon (*Mathematics*), Susan Isaacs (*Art History*), Carl Olson (*Library*), Robert Rook (*History*), Allaire Stallsmith (*History*)

Office

LA 3132, 410-704-7113
bgittlen@towson.edu
www.towson.edu/idis/jewishstudies

The Program

The Jewish Studies Minor introduces students to the full range of the Jewish experience. Focusing on the breadth and depth of Jewish Civilization, the minor illuminates the history, literature, values and religion of Judaism from its inception in Biblical times to today. Moreover, the Jewish Studies program places Judaism and Jewish civilization within its broader world context and examines its interaction with surrounding societies from antiquity to today.

This interdisciplinary minor draws on the resources of six different departments and is designed for students who want to deepen their knowledge of Jewish history, literature and religion in an organized, directed manner. Such knowledge may also lead to a fuller understanding of the inception and development of Christianity and Islam.

Students in the program may gain additional opportunities, such as study abroad, departmental internships, and work within the greater Jewish community. Finally, Jewish Studies students have gone on to pursue careers in journalism, education, fundraising, social work, counseling, Jewish organizational work and community leadership.

Students from throughout the university are welcome to undertake the minor, despite its course concentration in the College of Liberal Arts.

The Jewish Studies minor will be subject to revision and expansion in the future, as courses are evaluated by an advisory committee which will monitor the program. New courses, special topics or Minimester courses may be accepted for the minor, or counted toward it, with the approval of the advisory committee.

Minor in Jewish Studies

A minimum of 21 units is required for the minor in Jewish Studies.

Required Courses (6 units)

HIST 277	A Survey of Jewish History (3)
RLST 210	Introduction to Judaism

Electives (15 units, 12 upper-level)

No more than two courses may be taken in any discipline.

English

ENGL 235	Ethnic-American Literature (3)
ENGL 239	Modern Jewish Literature (3)
ENGL 253	The Bible and Literature (3)
ENGL 341	History and Literature of the Old Testament (3)
ENGL 476	Topics in Multiethnic Literature (when applicable to Jewish Studies) (3)
ENGL 363	Film and Literature (3) (when applicable to Jewish Studies)

History

HIST 275	Ancient Israel (3)
HIST 462	The Holocaust in Historical and Comparative Perspective (3)
HIST 484	Topics in History (when applicable to Jewish Studies) (3)

Philosophy and Religious Studies

PHIL 353	Philosophy of Religion (3)
RLST 103	Exploring Biblical Archaeology
RLST 105	Introduction to the Study of Religion (3)
RLST 206	Judaism, Christianity and Islam (3)
RLST 331	Exploring Genesis
RLST 357	Comparative Religions (3)

Sociology-Anthropology

SOCI 343	Sociology of Race and Ethnicity (3)
SOCI 370-379	Topics in Sociology (The American Jewish Community, when offered) (3)

Hebrew

HEBR 101-102	Elements of Hebrew I, II (3, 3)
HEBR 103	Biblical Hebrew Elements I (3)
HEBR 104	Biblical Hebrew Elements II (3)

Other courses related to Jewish Studies may be elected with the permission of the Jewish Studies advisers.

LATIN AMERICAN AND LATINO/A STUDIES TRACK—INTERDISCIPLINARY STUDIES MAJOR

Director: Lea Ramsdell (*Foreign Languages*)

Advisory Committee: Anne Ashbaugh (*Philosophy*), Colleen Ebacher (*Foreign Languages*), Nicole Fabricant (*Anthropology*) Seth Gitter (*Economics*), José López-González (*Philosophy and Religious Studies*), Cristina Magaldi (*Music*), James Manley (*Economics*), Alan Marcus (*Geography*), Ronn Pineo (*History*), Leticia Romo (*Foreign Languages*)

Office

LA 4210E, 410-704-5369
www.towson.edu/last

The Program

The Latin American and Latino/a Studies Track within the Interdisciplinary Studies major allows students to approach the study of Latin America and Latinos/as in the United States from an interdisciplinary perspective. It is an appropriate track for those intending to pursue Latin American and

Latino/a Studies or Spanish at the graduate level, for those anticipating living or working in Latin America, or for those wishing to acquire expertise in Latin America for a career in government or business.

The Latin American and Latino/a Studies Committee administers the program. Students should select one of the members of the committee as an adviser.

Training in Latin American and Latino/a studies is an excellent preparation for careers in education, business and government. Graduates find employment with business such as export/import companies, international banks, tour and travel companies, and the international media. Government agencies, such as the State Department and the Department of Immigration seek individuals trained in Latin American and Latino/a studies. Employment opportunities exist for translators and researchers, and in other areas.

Requirements for the Track

Students in the Latin American and Latino/a Studies Track complete SPAN 301 or its equivalent, and a minimum of 36 units. The track requires 6 units in foundations courses, 6 units in advanced study courses, a 6-unit capstone experience, and 18 units of electives. Students must complete a minimum of 6 units in at least three of the following disciplines: anthropology, art history, economics history, geography, music, applied music, political science, sociology or Spanish.

All course work must be completed with a grade equivalent of 2.00 or higher.

I. Foundations (6 units)

LAST 100*	Latin America: Issues and Approaches (3) (Core 12)

HIST 122	Latin America: National Period (3)

*LAST 100 may be waived by the coordinator of Latin American Studies if the student has already completed the Core 12 requirement at the time the student enters the Latin American and Latino/a Studies Program. The student may select any 3-unit elective as a replacement.

II. Advanced Study (6 units)

Choose two of the following:

ANTH 353	Latinas in the Americas (3)
GEOG 461	Geography of Latin America and the Caribbean (3)
POSC 351	The Government and Politics of Latin America (3)
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 455	Hispanic Popular Cultures (3)

III. Capstone Experience (6 units)

Latin American and Latino/a Studies students should plan early how they intend to fulfill their capstone requirement. Participation in the study abroad program in Latin America is strongly recommended.

Option One (recommended)

Study Abroad Experience in Latin America (see guidelines)

Option Two

Choose two of the following:

LAST 385	Model Organization of American States (3)
LAST 491-492	Directed Readings in Latin American and Latino/a Studies (3-6)
LAST 497	Internship in Latin American and Latino/a Studies (3-6)
HONR 499	Honors Thesis (in Latin American and Latino/a Studies Themes) (3)*

*open to departmental honors program students only

IV. Electives (18 units)

Choose an additional 18 units from the list of approved units in Latin American and Latino/a Studies below.

Anthropology

ANTH 351	Drugs in the Americas (3)
ANTH 353	Latinas in the Americas (3)
ANTH 366	South American Indians (3)
ANTH 369	Tradition and Revolution in Latin American Society (3)

ANTH 370-379	Topics in Anthropology* (3)
ANTH 470-479	Special Topics in Anthropology* (3)
ANTH 491	Internship I in Anthropology* (3)
ANTH 492	Internship II in Anthropology* (3)
ANTH 495	Independent Research* (3)
ANTH 498	Honors Readings in Anthropology* (4)
ANTH 499	Honors Thesis in Anthropology* (4)

*when concerned with Latin America

Art History

ARTH 339	Latin American Art: 1800 to Present (3)

Economics

ECON326	Economic Development (3)

Geography

GEOG 461	Geography of Latin America and the Caribbean (3)
GEOG 470-479	Topics in Geography* (3)
GEOG 494	Travel and Study* (3-6)
GEOG 495	Directed Readings in Geography* (3)
GEOG 496	Directed Study in Geography* (1-6)

*when concerned with Latin America

History

HIST 121	Latin America: Colonial Period (3)
HIST 307	The Andean Republics (3)
HIST 321	History of Mexico: Colonial Period (3)
HIST 322	History of Mexico: National Period (3)
HIST 324	Democratization in Latin America (3)
HIST 482	Special Topics: The Making of the African Diaspora (3)

HIST 484	Historical Themes* (3)
HIST 493	Internship* (3-6)
HIST 497	Directed Readings* (1-4)
HIST 498	Honors Directed Readings* (2-4)
HIST 499	Honors Thesis* (4-8)

*when concerned with Latin America

International Studies

INST 494	International Studies Abroad* (3)
INST 496	International Studies Research* (3)

*when concerned with Latin America

Latin American and Latino/a Studies

LAST 385	Model Organization of American States (3)
LAST 484	Special Topics in Latin American and Latino/a Studies (3)
LAST 491-492	Directed Readings in Latin American and Latino/a Studies (3)
LAST 497	Internship in Latin American and Latino/a Studies (3-6)

Music Applied

MUSA 170, 370	World Music Ensemble*(1)

*when concerned with Latin America

Music

MUSC 110	Honors Introduction to World Music* (3)
MUSC 471	Special Topics in Music* (3)

*when concerned with Latin America

Philosophy

PHIL 328	Latin American Philosophy (3)

Political Science

POSC 351	Government and Politics of Latin America (3)
POSC 355	Latin American Policy of the U.S. (3)
POSC 437	Castro and the Cuban Revolution (3)
POSC 470-479	Special Topics in Political Science* (3)
POSC 490	Independent Study* (1-3)
POSC 491	Seminar: Contemporary U.S. Foreign Policy* (3)
POSC 493	Internship* (3-9)
POSC 498	Directed Readings in Political Science* (1-3)
POSC 499	Honors Thesis* (3)

*when concerned with Latin America

Sociology

SOCI 440	Sociology of Immigration (3)

Spanish

SPAN 302	Composition and Conversation II (3)
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 322	Survey of Spanish-American Literature (3)
SPAN 331	Spanish for Business (3)
SPAN 455	Hispanic Popular Culture (3)
SPAN 470	Special Topics* (3)
SPAN 491	Directed Readings in Spanish Literature* (1-3)
SPAN 492	Directed Readings in Spanish* (1-3)
SPAN 494	Travel Study Abroad* (3-16)
SPAN 497	Internship in Spanish* (3)

*when concerned with Latin America

MINOR IN LATIN AMERICAN AND LATINO/A STUDIES

The minor in Latin American and Latino/a Studies requires SPAN 301 or its equivalent, and a minimum of 21 units. Students complete 6 units in foundations courses, 3 units in advanced study courses, a 3-unit Capstone experience, and 9 units of electives. Courses must be selected from at least three of the following disciplines: anthropology, economics, history, geography, music, political science, sociology or Spanish. All course work must be completed with a grade equivalent of 2.00 or higher.

I. Foundations (6 units)

LAST 100	Latin America: Issues and Approaches* (Cornerstone) (Core 12)
HIST 122	Latin America: National Period (3)

*LAST 100 may be waived by the coordinator of Latin American and Latino/a Studies if the student has already completed the Core 12 requirement at the time the student enters the Latin American and Latino/a Studies Program. The student may select any 3-unit elective as a replacement.

II. Advanced Study (3 units)

Select one of the following:

ANTH 353	Latinas in the Americas (3)
GEOG 461	Geography of Latin America and the Caribbean (3)
POSC 351	The Government and Politics of Latin America (3)
SPAN 312	Culture and Civilization of Latin America (3)
SPAN 455	Hispanic Popular Culture (3)

III. Capstone Experience (3 units)

Latin American and Latino/a Studies students should plan early how they intend to fulfill their capstone requirement.

Option One (recommended)

Study Abroad Experience in Latin America (see guidelines)

Option Two

Choose one of the following:

LAST 385	Model Organization of American States (3)
LAST 493	Internship in Latin American and Latino/a Studies (3)

LAST 491-2	Directed Readings in Latin American and Latino/a Studies (3)
HONR 499	Honors Thesis in Latin American and Latino/a Studies Themes (3)*

*open to departmental honors program students only

IV. Electives (9 units)

Select an additional 9 units from the list of approved courses in Latin American and Latino/a Studies.

Suggested Majors to Combine with Latin American and Latino/a Studies Minor

The minor in Latin American and Latino/a Studies provides an excellent complement to the following majors: Anthropology, Business Administration, International Business, International Studies, History, Political Science and Spanish. See the coordinator of Latin American and Latino/a Studies for details.

Guidelines for Study Abroad

Students may attend any Latin American study abroad program approved by the Towson University Study Abroad Office. Students studying abroad earn units toward fulfilling the Towson University Latin American and Latino/a Studies Program requirements only by completing courses in Latin American and Latino/a Studies-related disciplines (for Spanish grammar, composition and conversation courses, only SPAN 301, SPAN 302, SPAN 331 or their equivalents may be counted), and are subject to the approval of the Latin American and Latino/a Studies coordinator. Units earned abroad may not be counted more than once toward fulfilling any Latin American and Latino/a Studies Program requirement.

Study abroad courses to Latin America may also count toward the Study Abroad Option of the Latin American and Latino/a Studies Capstone Experience requirement, subject to the approval of the Latin American and Latino/a Studies coordinator.

Internships

Internships may be taken with any department participating in the Latin American and Latino/a Studies Program. All internships must be concerned with Latin America or Latinos/as in the United States, and are subject to the approval of the coordinator of Latin American and Latino/a Studies.

LESBIAN, GAY, BISEXUAL AND TRANSGENDER STUDIES MINOR

Director: M. Paz Galupo (*Psychology*)
Advisory Committee: David Bergman (*English*), K Edgington (*English*), Cindy Gissendanner (*History*), Steve Satta (*Theatre Arts*), Deborah Shaller (*Writing Lab/English*)

Office

LA 2131
www.towson.edu/idis/lgbt

The Program

The Lesbian, Gay, Bisexual and Transgender (LGBT) Studies minor addresses issues of sexual orientation from interdisciplinary and multicultural perspectives. The growing public visibility and awareness of diverse sexualities and their cultural and political ramifications for individuals, social institutions and communities are evident in increased media coverage of political activism and debate related to issues of sexual orientation. LGBT Studies is a response to these forces in the contemporary world but also represents a growing field of scholarship which is in

the forefront of developing theoretical and methodological innovations in interdisciplinary studies. The LGBT Studies minor aims to give students the critical skills to analyze a wide range of issues, including the historical evolution of sexual identities in different cultural settings, the relationship between gender systems and sexual orientation, the development of lesbian and gay cultural institutions, institutionalized forms of heterosexism and homophobia, and the social and political mobilization of LGBT individuals and their allies in efforts to eliminate discrimination on the basis of sexual orientation.

Educational Objectives

1. To familiarize students with major concepts, theories, substantive findings and works of fiction and nonfiction in the field of lesbian, gay, bisexual and transgender (LGBT) studies
2. To make students aware of the diversity of the attitudes toward and the experiences of LGBT individuals in different cultures and historical periods
3. To examine institutionalized homophobia and heterosexism and their impact on the political, social and economic status of LGBT individuals
4. To investigate the relations between prevailing gender norms and systems and the social construction of sexualities and the cultural images associated with them
5. To examine differences within LGBT communities along lines of race, class, gender, ethnicity, age and region and the social and political ramifications of such differences for those communities
6. To understand the wide range of political strategies used by LGBT individuals in the past and the present in their struggles against oppression
7. To trace the historical evolution of sexual identities and the roles of LGBT individuals in reshaping them

Required Courses (6 units)

LGBT 101	Introduction to Lesbian, Gay, Bisexual and Transgender Studies (3)
LGBT 474	Seminar in Lesbian, Gay, Bisexual and Transgender Studies (3) or
LGBT 491	Independent Investigations in LGBT Studies (3)

Electives (12 units)

Four of the following:

HIST 361	Gays and Lesbians in U.S. History (3)
ENGL 376	Themes in Literature: Gay Themes in American Literature (3)
PSYC 447	Sex Differences: Psychological Perspectives (3)
PSYC 457	Gender Identity in Transition (3)
PSYC 449	Psychology of Lesbian Culture (3)
WMST 338	Women and Sexuality (3)
EDUC 203	Teaching and Learning in a Diverse Society
CLST 303	Identity and Culture (3)
IDIS 495	Internship in Interdisciplinary Studies
LGBT 381	Directed Readings in Lesbian, Gay, Bisexual and Transgender Studies (1-3)
LGBT 485	Internship in LGBT Studies

Relevant topics courses, directed readings, and directed individual research approved by the advisory committee.

MUSEUM STUDIES MINOR

Director: Nancy Siegel (*Art History*)
Advisory Committee: Robert Rook (*History*), Matthew Durlington (*Anthropology*), Nancy Siegel (*Art History*), Susan Isaacs (*Art History*)

Office

Center for the Arts 3103P, 410-704-4693,
www.towson.edu/idis/ms

The Program

This interdisciplinary minor in Museum Studies provides students with a comprehensive education in the field of museology by looking at the history, philosophy, role, operation and multiple functions of museums in American society. Academic theory in the political, social, business, legal and ethical issues that confront museum professionals is combined with practical experience in the form of museum internships, field trips and directed research projects to give students a foundation for work in university, public and private museums. This minor is designed to complement majors in the fields of studio art, art history, art education, history, anthropology, business, interdisciplinary studies, environmental science and studies, among others.

Minor in Museum Studies

The minor in Museum Studies consists of 21 units of required and elective courses. Each of these courses must be completed with a grade equivalent of 2.00 or higher. Students are required to meet with the director of Museum Studies to develop a Program of Study listing all required and elective courses in the program; the director's signature of approval is required for the Program of Study.

Required Courses (6 units)

ARTH 300	Introduction to Museum Studies (3)
ARTH 302	Museum and Community (3)

Electives (12 units)

With the exception of Art History, no more than two courses may be taken in a single discipline.

ANTH 370	Anthropology of Art (3)
ANTH 381	Archeological Methods and Theory (3)
ANTH 382	Visual Anthropology (3)
ART 377	Exhibit Design (3)
ARTH 403	Care and Handling of Objects (3)
ARTH 404	Museum Education (3)
ARTH 405	Exhibition Design History and Theory (3)
ARTH 406	Museum Management (3)
ARTH 407	Collections Management (3)
ARTH 408	Curatorial Vision and Planning (3)
ARTH 409	Marketing and Public Relations for Cultural Institutions (3)
ARTH 410	Development and Great Writing for Cultural Institutions (3)
HIST 475	Public History: Theory and Practice (3)
MCOM 323	Advertising Media Planning (3)
MCOM 357	Public Relations Writing (3)
MNGT 361	Principles of Management (3)
MNGT 381	Human Resource Management (3)
WRIT 375	Public Administration (3)
	or
POSC 375	Public Administration (3)
ANTH 495	Independent Research
	or
HIST 496	Directed Individual Research (3)
	or
ARTH 495	Independent Study in Art History (3)

Capstone (3 units)

Choose one of the following:

AMST 497	Internship in Material Culture (3)
ANTH 491-492	Internship in Anthropology I, II (3)
ARTH 498	Internship in Art History (3)
HIST 493	Internship in History (3)
IDIS 498	Internship in Interdisciplinary Studies (3)

International Studies Program

Director: Matt Durlington (*Sociology, Anthropology and Criminal Justice*)

Affiliated Faculty: Alison McCartney (*Political Science*), George McCool (*Foreign Languages*), Wayne McKim (*Geography*), Melissa Osborne (*Economics*), Steven Phillips (*Asian Studies*), Lea Ramsdeil (*Foreign Languages*), James Roberts (*Political Science*), Katia Sainson (*Foreign Languages*), Jeremy Tasch (*Geography*)

Ex-officio: Glenda Henkel (*Career Center*)

OFFICE

LA 3347, 410-704-5256

Fax: 410-704-2960

E-mail: inst@towson.edu

www.towson.edu/idis

THE PROGRAM

The International Studies Program provides a rigorous interdisciplinary curriculum in international affairs that is designed to appeal to students interested in addressing international problems and issues through careers in public service, education, business and nonprofit enterprises. The program also provides excellent preparation for students wishing to pursue graduate education in international studies, law or international business. The program aims to achieve a global perspective through an interdisciplinary network of courses and experience that will lead to a Bachelor of Arts degree in International Studies. The program is administered by a committee of faculty members from the various departments and colleges from which the courses are taken.

BACHELOR OF ARTS IN INTERNATIONAL STUDIES

All students must complete 48 units (16 courses) in international studies to complete the major. Students must complete the curriculum described below (27 units) and one of five tracks of courses (21 units). The five tracks are the General Track, International Development Track, Asia Track, Europe Track and Latin America Track. The purpose of the tracks is to provide students an opportunity to focus on an issue or region of their choice. All 16 courses must be completed with a grade of 2.00 or higher. It is recommended that students complete the required courses before proceeding to the rest of the curriculum.

FOREIGN LANGUAGE REQUIREMENTS

Students must achieve a level of proficiency equivalent to four terms of college-level language training in a modern foreign language that is offered by or can be tested by the Department of Foreign Languages. The language selected may depend upon the International Studies track the student chooses. For example, students in the Latin America Track must achieve proficiency in Spanish. Students can fulfill the language requirement for the International Studies major through any of the procedures outlined in the

Meeting B.A. Requirements section of the Department of Foreign Languages entry in this catalog. Lower-division courses taken in a foreign language do not count toward the 48 units needed to complete the International Studies major.

INTERNATIONAL STUDIES REQUIRED COURSES

The courses meet Core Curriculum requirements as noted. Courses used to fulfill a requirement in the core cannot also be used to fulfill a requirement in a track.

Foundation Courses (15 units)

*All of the following:**

ANTH 207	Cultural Anthropology (3)
ECON 202	Macroeconomic Principles (3)
GEOG 105	Geography of International Affairs (3)
HIST 161	World History Since 1300 (3)
POSC 107	Introduction to International Relations (3)

**Honors equivalents of these courses can be substituted.*

Economics and Management (3 units)

One of the following:

ECON 305	Survey of International Economics (3)
ECON 322	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 421	International Economics (3)
MNGT 375	International Business (3)

Geography and History (3 units)

One of the following:

GEOG 381	Political Geography (3)
GEOG 427	The Global Economy (3)
HIST 103	European Civilization since the 17th Century (3)
HIST 324	Democratization in Latin America (3)
HIST 370	Diplomatic History of the United States since 1900 (3)

Political Science (3 units)

One of the following:

POSC 303	Theory of International Relations (3)
POSC 337	Comparative Governments of Foreign Powers (3)
POSC 339	Comparative Political Systems (3)
POSC 428	Political Theory II (3)
POSC 434	Comparative Foreign Policies (3)

Research and Practicum (3 units)

One of the following:

Any 3-unit course in an approved study abroad program

or

ANTH 491	Internship in Anthropology* (3)
ANTH 37x	Ethnographic Field Methods (3)
ECON 205	Statistics for Business and Economics* (3)
ECON 497	Internship in Economics* (1-3)
FREN 497	Internship in French* (3)
GEOG 491	Internship in Geography* (1-6)
GERM 497	Internship in German* (3)
HIST 300	Introduction to Historical Study (3)
HIST 493	Internship in History* (3-6)
INST 493	Internship in International Studies* (3)
LAST 493	Internship in Latin American Studies* (3)
POSC 461	Research Methods in Political Behavior (3)
POSC 493	Internship in Political Science* (3-9)
SPAN 497	Internship in Spanish* (3)

or

An honors thesis if the topic is approved by the director of International Studies

** Internships must be taken for 3 units, must be in work related to international studies and must be approved by the director of International Studies.*

**INTERNATIONAL STUDIES TRACKS
(21 UNITS)**

The tracks are intended to provide students with flexibility in designing a curriculum in international studies that addresses their interests while maintaining academic rigor and focus. Students must complete the course requirements listed for one of the following tracks. Courses with an asterisk require approval of the INST program director.

**GENERAL TRACK
(21 UPPER-DIVISION UNITS)**

The General Track is intended to give students a flexible approach to developing their skills and knowledge in international studies. Students may choose to focus their courses on a particular discipline (such as economics or geography), to focus their courses on a particular topic (such as international development), or to select a broad range of courses that provides them with a general understanding of international affairs. The student's academic adviser must approve the entire track.

To complete the General Track, students must take at least 21 units (seven courses) from the courses listed below. Courses must be taken in at least three different departments. No more than two lower-division courses (6 units) may be counted toward the General Track. Other courses, not listed below, that are relevant to international studies (such as special topics courses or directed readings courses) may be accepted with the approval of the student's academic adviser. Courses cannot be counted in both the International Studies required courses and the General Track.

Students must complete through the 202 level or equivalent in a foreign language that is offered by or can be tested by the Department of Foreign Languages. Language units through the 202 level do not count toward the 21 units needed for the track or the 48 units needed for the International Studies major.

**Approved Courses for the General Track
in International Studies****Anthropology**

ANTH 321	Gender in Cross-Cultural Perspective (3)
ANTH 346	Wealth, Power and Politics in Cross-Cultural Perspective (3)
ANTH 351	Drugs in the Americas (3)
ANTH 353	Latinas in the Americas (3)
ANTH 367	Peoples of the Middle East (3)
ANTH 368	Globalization in a Cross-Cultural Perspective (3)
ANTH 370-379	Special Topics in Anthropology (3)*
ANTH 369	Tradition and Revolution in Latin America (3)
ANTH 388	Peasant Cultures (3)
ANTH 47x	Special Topics in Anthropology (1-3)*

Art History

ARTH 330	East Asian Art and Architecture (3)
ARTH 331	The Art of China (3)
ARTH 333	The Art of Japan (3)
ARTH 339	Latin American Art: 1800 to Present (3)
ARTH 340	Art of Modern China (3)

Chinese

CHNS 301	Chinese Composition and Conversation I (3)
CHNS 491-492	Directed Readings in Chinese (3)*

Economics

ECON 305	Survey of International Economics (3)
ECON 321	History of Economic Thought (3)
ECON 324	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)
ECON 47x	Topics in Economics * (3)

English

ENGL 345	Perspectives in World Drama (3)
ENGL 347	World Literature Written in English (3)
ENGL 439	Modern World Poetry (3)
ENGL 441	Modern Fiction to World War II (3)
ENGL 442	Modern Fiction since World War II (3)
ENGL 471	Topics in World Literature * (3)

Finance

FIN 435	International Finance (3)

French

FREN 301	French Composition and Conversation I (3)
FREN 328	20th-Century French Literature and Civilization (3)
FREN 329	Contemporary French Literature and Civilization (3)
FREN 331	French for Business (3)
FREN 370-379	Special Topics in French (3)*
FREN 411	The French Novelle (3)
FREN 420	France Today Through the media (3)
FREN 441	French Literature of the 20th Century (3)

Geography

GEOG 357	Cultural Geography (3)
GEOG 359	Economic Geography (3)
GEOG 381	Political Geography (3)
GEOG 385	Population Geography (3)
GEOG 410	Environmental Geography (3)
GEOG 427	The Global Economy (3)
GEOG 431	Geography of Africa (3)
GEOG 443	Geography of East Asia (3)
GEOG 445	Geography of South and Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)
GEOG 448	Conflict in Ireland (3)
GEOG 451	Geography of Europe (3)
GEOG 452	Geography of the European Union (3)
GEOG 453	Geography of the Former U.S.S.R. (3)
GEOG 461	Geography of Latin America (3)

German

GERM 301	German Composition and Conversation I (3)
GERM 311	Culture and Civilization (3)
GERM 321	Survey of German Literature (3)
GERM 331	German for Business (3)
GERM 341	Readings in Contemporary German (3)
GERM 370-379	Special Topics in German (3)*
GERM 441	Modern German Literature (3)
GERM 442	German Literature since 1945 (3)
GERM 481	The German Novelle (3)

Hebrew

HEBR 301	Composition and Conversation I (3)
HEBR 391	Readings in Modern Hebrew Literature (3)

History

HIST 307	The Andean Republics (3)
HIST 310	20th Century Nationalism in East and Southeast Asia (3)
HIST 312	History of Modern India (3)
HIST 313	History of Modern Southeast Asia (3)
HIST 314	U.S. and Vietnam (3)
HIST 315	Imperial China: The Last Dynasty (3)
HIST 316	Revolutionary China (3)

HIST 319	Japan, 1830 to 1930 (3)
HIST 320	Japan, 1930 to Present (3)
HIST 322	History of Mexico: National Period (3)
HIST 324	Democratization in Latin America (3)
HIST 328	History of East Africa from 1820 to Present (3)
HIST 329	History of South Africa (3)
HIST 331	American Military History 1898-1945 (3)
HIST 332	American Military History Since 1945 (3)
HIST 339	Making of Modern Middle East (3)
HIST 340	Israel/Palestine: Conflicting Past, Conflicting Present (3)
HIST 354	Cold War in East Asia (3)
HIST 370	Diplomatic History of the U.S. Since 1900 (3)
HIST 384	Life Histories of African Women (3)
HIST 391	History of Canada (3)
HIST 406	Europe: 1815-1914 (3)
HIST 415	Diplomatic History of Europe: 1815-1939 (3)
HIST 420	European Ideas, French Revolution to Present (3)
HIST 421	Britain in the 20th Century (3)
HIST 427	European Military History 1831-1945 (3)
HIST 441	Germany: 1871-1945 (3)
HIST 452	Russia/Soviet Union: 1894-1953 (3)
HIST 453	History of Soviet Russia from Khrushchev to Gorbachev (3)
HIST 477	Europe in the Third World (3)
HIST 478	History of Terrorism since Mid-19th Century (3)
HIST 479	A History of Diplomacy (3)

Italian

ITAL 301	Italian Composition and Conversation I (3)
ITAL 321	Survey of Italian Literature I (3)
ITAL 322	Survey of Italian Literature II (3)
ITAL 370-379	Special Topics in Italian (3)*

Japanese

JPNS 301	Japanese Composition and Conversation I (3)
JPNS 492	Directed Readings in Japanese (3)*

Latin American Studies

LAST 385	Model Organization of American States (3)
LAST 484	Special Topics in Latin American Studies* (3)

Management

MNGT 375	International Business: Theory and Practice (3)
MNGT 438	Multinational Management and Strategies (3)

Marketing

MKTG 445	International Marketing (3)

Philosophy and Religion

PHIL 301	Philosophies of India (3)
PHIL 302	Philosophies of China and Japan (3)
PHIL 327	African Philosophy (3)
PHIL 353	Philosophy of Religion (3)
PHIL 357	Topics in Comparative Religion (3)
PHIL 380-389	Topics in Religion (3)*
PHIL 440-449	Philosophical Systems (3)

Political Science

POSC 303	Theory of International Politics (3)
POSC 307	Contemporary International Politics (3)
POSC 337	Comparative Government of Foreign Powers (3)
POSC 339	Comparative Political Systems (3)
POSC 340	Comparative Public Policy (3)
POSC 351	The Government and Politics of Latin America (3)
POSC 355	The Latin American Policy of the U.S. (3)
POSC 385	Model Organization of American States (3)
POSC 428	Political Theory II (3)

POSC 432	United States – Russian Relations (3)
POSC 434	Comparative Foreign Policy (3)
POSC 436	U.S. Foreign Policy (3)
POSC 441	Contemporary U.S. – European Relations (3)
POSC 455	International Law and Organization I (3)
POSC 456	International Law and Organization II (3)
POSC 457	Use of Force in International Law (3)
POSC 470-479	Special Topics in Political Science (3)*
POSC 48X	Seminar in Political Science (3)*
POSC 491	Seminar in U.S. Foreign Policy (3)

Religion

RLST 357	Topics in Comparative Religion (3)

Sociology

SOCI 329	Demography (3)
SOCI 333	Political Sociology (3)

Spanish

SPAN 301	Spanish Composition and Conversation I (3)
SPAN 311	Culture and Civilization of Spanish-Speaking Peoples I (3)
SPAN 312	Culture and Civilization of Spanish-Speaking Peoples II (3)
SPAN 321	Survey of Spanish Literature I (3)
SPAN 322	Survey of Spanish Literature II (3)
SPAN 331	Spanish for Business (3)
SPAN 370-379	Special Topics in Spanish (3)*
SPAN 412	Contemporary Spanish Novel (3)
SPAN 439	Literary Movements in Spanish-American Literature (3)
SPAN 444	20th-Century Spanish-American Literature II (3)
SPAN 455	Hispanic Popular Culture (3)
SPAN 462	Contemporary Spanish Drama (3)
SPAN 481	Spanish Short Stories (3)

Women's Studies

WMST 233	International Perspectives on Women (3)

** Special topics, seminars, and independent study and readings courses must be related to international topics to count toward the General Track in International Studies and must be approved prior to enrollment by the Director of International Studies.*

INTERNATIONAL DEVELOPMENT TRACK (21 UNITS)

The International Development Track is intended to provide students with a thorough understanding of the causes and effects of the problems of persistent international underdevelopment. The track also provides skills that will prepare students to work in international development or to pursue development studies at the graduate level.

Requirements for the International Development Track

1. To complete the International Development Track, students must take at least 21 units from the courses listed below. Students must complete the three required courses. Students must take four elective courses covering at least three of the four areas listed below. Other courses, not listed below, that are relevant to international studies (such as special topics courses or directed readings courses) may be accepted as elective courses with the approval of the director of International Studies. No more than 3 units of lower-division courses may be counted toward the International Development Track. Courses cannot be counted in both the International Studies required courses and the International Development Track.

2. Students must complete through the 202 level or equivalent in a foreign language that is offered by or can be tested by the Department of Foreign Languages. Language units through the 202 level do not count toward the 21 units needed for the track or the 48 units needed for the International Studies major.

Required Courses

ANTH 368	Globalization in Cross-Cultural Perspective (3)
ECON 326	Economic Development (if ECON 325 is counted in the International Studies required course area, an additional course must be taken from the electives below for the International Development Track)
GEOG 359	Economic Geography (3)

Electives

Four courses selected from at least three of the following areas:

Topical Courses

ANTH 351	Drugs in the Americas (3)
ANTH 353	Latinas in the Americas (3)
ANTH 370-379	Special Topics in Anthropology (3)*
ANTH 388	Peasant Cultures (3)
ECON 305	Survey of International Economics (3)
GEOG 357	Cultural Geography (3)
GEOG 385	Population Geography (3)
GEOG 410	Environmental Geography (3)
SOCI 329	Demography (3)
WMST 233	International Perspectives on Women (3)

Regional Courses

ANTH 369	Tradition and Revolution in Latin American Society (3)
ANTH 370	Korea and Globalization (3)
GEOG 431	Geography of Africa (3)
GEOG 443	Geography of East Asia (3)
GEOG 445	Geography of South and Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)
GEOG 461	Geography of Latin America (3)
SPAN 312	Culture and Civilization of the Spanish-Speaking People II (3)
SPAN 322	Survey of Spanish Literature II* (3)
SPAN 455	Hispanic Popular Culture (3)

History and Culture

PHIL 327	African Philosophy (3)
ENGL 336	Post-Colonial Literature (3)
GEOG 357	Cultural Geography (3)
HIST 121	Latin America: Colonial Period (3)
HIST 111	Modern East Asia since the 17th Century (3)
HIST 122	Latin America: National Period (3)
HIST 307	The Andean Republics (3)
HIST 310	20th Century Nationalism in East and Southeast Asia (3)
HIST 312	History of Modern India (3)
HIST 313	History of Modern Southeast Asia (3)
HIST 316	Revolutionary China (3)
HIST 322	History of Mexico: National Period (3)
HIST 328	History of East Africa from 1820 to Present (3)
HIST 329	History of South Africa (3)
HIST 339	The Making of the Modern Middle East (3)
HIST 340	Israel/Palestine: Conflicting Past, Conflicting Present (3)

Institutions

ECON 421	International Economics (3)
GEOG 427	The Global Economy (3)
HIST 324	Democratization in Latin America (3)
LAST 385	Model Organization of American States (3)

POSC 341	African Government and Politics (3)
POSC 351	The Government and Politics of Latin America (3)
POSC 470-479	Special Topics in Political Science (3)

** Credit toward the track is only granted for these courses when the topic of the course is related to this track and must be approved prior to enrollment by the director of International Studies.*

ASIA TRACK (21 UPPER-DIVISION UNITS)

The Asia Track is designed to offer students an interdisciplinary program of study in various dimensions of the Asian world. Students may plan a course of study that concentrates on a particular aspect of Asian civilization or on a particular sub-region of Asia. One might, for example, focus on the art and philosophy of various Asian peoples or, instead, concentrate on Chinese, Indian or Japanese civilizations, studying both the traditional and modern society, its physical setting, its political and economic development, etc. Students interested in Asia should also see the Asian Studies Track offered under the Interdisciplinary Studies major.

To complete the Asia Track, students must take a total of 21 units (seven courses) from the courses in the categories listed below. Courses must be taken in at least three different departments. No more than two lower-division courses (6 units) may be counted toward the Asia Track. Other courses, not listed below, that are relevant to Asia (such as special topics courses or directed readings) may be accepted with the approval of the director of International Studies. Courses may not be counted in both the Asia Track and the International Studies required courses.

Students must complete through the 202 level or equivalent in Chinese, Japanese or another language that can be tested by the Department of Foreign Languages if it is appropriate to the student's interests in Asia. Language units through the 202 level do not count toward the 21 units needed for the track or the 48 units needed for the International Studies major.

Approved Courses for the Asia Track in International Studies**Anthropology**

ANTH 367	Peoples of the Middle East (3)
ANTH 370-379	Special Topics in Anthropology (3)*

Art History

ARTH 330	East Asian Art & Architecture (3)
ARTH 331	The Art of China (3)
ARTH 333	The Art of Japan (3)
ARTH 370	Art of Modern China (3)

Geography

GEOG 443	Geography of East Asia (3)
GEOG 445	Geography of South and Southeast Asia (3)
GEOG 447	Geography of the Middle East (3)

History and Political Science

HIST 107	Introduction to the History of Islamic Civilization (3)
HIST 109	Introduction to the Civilization of India (3)
HIST 311	Traditional India: Its Historical Development (3)
HIST 312	History of Modern India (3)
HIST 313	History of Modern Southeast Asia (3)
HIST 315	Imperial China: The Last Dynasty (3)
HIST 316	Revolutionary China (3)

HIST 319	Japan, 1830 to 1930 (3)
HIST 320	Japan, 1930 to Present (3)
POSC 470-479	Special Topics in Political Science (3)*

Languages

CHNS 301	Chinese Composition and Conversation I (3)
CHNS 491-492	Directed Readings in Chinese (3)*
JPNS 301	Japanese Composition and Conversation I (3)
JPNS 491-492	Directed Readings in Japanese (3)*

Philosophy and Religion

PHIL 205	Women in World Religions (3)
PHIL 219	Introduction to Asian Philosophy (3)
PHIL 301	Philosophies of India (3)
PHIL 302	Philosophies of China and Japan (3)
PHIL 357	Topics in Comparative Religion (3)
PHIL 440-449	Philosophical Systems (3)*

* Credit toward the Asia track is only granted for these courses when the topic centers on Asia and must be approved prior to enrollment by the director of International Studies.

EUROPE TRACK (21 UPPER-DIVISION UNITS)

The Europe Track permits students to apply what they have learned in the International Studies curriculum to European issues and problems. Students may choose courses that focus their studies on a specific issue, such as European integration, or they can choose courses that permit them to gain a broader perspective on European politics, economics and cultures. The entire track must be approved by either the student's academic adviser or the director of the International Studies Program.

To complete the Europe Track, students must take a total of 21 units (seven courses) from the courses listed in the categories below. No more than two lower-division courses (6 units) may be counted toward the Europe Track. Other courses, not listed below, that are relevant to Europe (such as special topics courses or directed readings) may be accepted with the approval of the student's academic adviser. Courses may not be counted in both the Europe Track and the International Studies required courses. Students may not pursue both the Europe Track in International Studies and a European Studies minor.

Students must complete through the 202 level or equivalent in any modern foreign language that is offered by or can be tested by the Department of Foreign Languages. Language units through 202 do not count toward the 48 units needed for the International Studies major.

Approved Courses in the Europe Track in International Studies

Fine Arts and English

One of the following:

ARTH 309	Italian Renaissance Art and Architecture (3)
ARTH 311	Northern Renaissance Art and Architecture (3)
ENGL 325	18th-Century British Literature (3)
ENGL 326	Literature of the British Romantic Period (3)
ENGL 327	The Victorian Age (3)
ENGL 420	Development of the British Novel 18th Century (3)
ENGL 421	Development of the British Novel 19th Century (3)
ENGL 422	Development of the British Novel 20th Century (3)
ENGL 423	Modern British Poetry (3)
MUSC 302	History of Music II (3)

MUSC 402	Music of the Baroque Period (3)
MUSC 403	Music of the Classical Period (3)
MUSC 404	Music of the Romantic Period (3)
MUSC 411	Survey of Opera (3)

Foreign Languages

One of the following:

FREN 301	French Composition and Conversation I (3)
FREN 325	Early French Literature and Civilization (3)
FREN 326	18th-Century French Literature and Civilization (3)
FREN 327	19th-Century French Literature and Civilization (3)
FREN 328	20th-Century French Literature and Civilization (3)
FREN 329	Contemporary French Literature and Civilization (3)
GERM 301	German Composition and Conversation I (3)
GERM 311	German Culture and Civilization (3)
GERM 321	Survey of German Literature (3)
GERM 341	Readings in Contemporary German (3)
ITAL 301	Italian Composition and Conversation I (3)
ITAL 321	Survey of Italian Literature I (3)
ITAL 322	Survey of Italian Literature II (3)
ITAL 370-379	Special Topics in Italian (3)*
SPAN 301	Spanish Composition and Conversation I (3)
SPAN 311	Spanish Culture and Civilization I (3)
SPAN 321	Survey of Spanish Literature I (3)
SPAN 370-379	Special Topics in Spanish (3)*
SPAN 412	Contemporary Spanish Novel (3)
SPAN 462	Contemporary Spanish Drama (3)
SPAN 481	Spanish Short Stories (3)

Social Sciences and Humanities

One of the following:

ANTH 370-379	Special Topics in Anthropology (3)*
GEOG 451	Geography of Europe (3)
GEOG 452	Geography of the European Union (3)
GEOG 453	Geography of the Former Soviet Union (3)
HIST 150	Europe and the Non-European World (3)
HIST 241	History of European Civilization Through the 17th Century (3)
HIST 242	History of European Civilization from the 17th Century (3)
HIST 406	Europe: 1815–1914 (3)
HIST 415	Diplomatic History of Europe: 1815–1939 (3)
HIST 416	British History: 1760–1902 (3)
HIST 420	European Ideas: French Revolution to the Present (3)
HIST 427	European Military History: 1871–1925 (3)
HIST 429	European Military History: 1925–1945 (3)
HIST 431	France: 1763–1871 (3)
HIST 441	Germany: 1871–1945 (3)
HIST 452	Russia/Soviet Union: 1894–1953 (3)
HIST 453	History of Soviet Russia from Khrushchev to Gorbachev (3)
HIST 477	Europe in the Third World: The Age of High Imperialism (3)
PHIL 322	Hellenistic and Medieval Philosophy (3)
POSC 337	Comparative Governments of Foreign Powers (3)
POSC 432	United States - Russian Relations (3)
POSC 441	Contemporary U.S. - Western European Relations (3)
POSC 470-479	Special Topics in Political Science (3)*

* Credit toward the Europe track is only granted for these courses when the topic centers on Europe and must be approved prior to enrollment by the Director of International Studies.

LATIN AMERICA TRACK (21 UPPER-DIVISION UNITS)

The Latin America Track permits International Studies majors to apply what they learn about international affairs to the problems and cultures in Central America, South America and the Caribbean. Students can choose courses to focus their studies on specific countries or issues or they can choose courses that provide a broad overview of international affairs in the region. The entire track must be approved by either the student's academic adviser or the director of the International Studies Program. Students interested in Latin America should also see the Latin American Studies Track offered under the Interdisciplinary Studies major. However, students may not pursue both the Latin America Track in International Studies and a Latin American Studies minor offered under the Interdisciplinary Studies Program.

To complete the Latin America Track in International Studies, students must take a total of 21 units (seven courses) from the courses listed in the categories below. No more than two lower-division courses (6 units) may be counted toward the Latin America Track. Other courses, not listed below, that are relevant to Latin America (such as special topics courses or directed readings) may be accepted with the approval of the student's academic adviser. Courses may not be counted in both the Latin America Track and the International Studies required courses.

Students must complete through Spanish 202 or equivalent. Language units through 202 do not count toward the 48 units needed for the International Studies major or the 21 units needed to complete the Latin America Track.

Approved Courses for the Latin America Track in International Studies

Introductory Latin America Courses

Both of the following:

HIST 122	Latin America: National Period (3)
LAST 100	Latin America: Issues and Approaches* (3)

Note: LAST 100 may be waived by the director of International Studies if the student has already completed his or her Core Curriculum requirement at the time the student enters the International Studies Program.

Advanced Latin America Courses

One of the following:

ANTH 369	Tradition and Revolution in Latin America (3)
GEOG 461	Geography of Latin America (3)
POSC 351	Government and Politics of Latin America (3)
SPAN 312	Culture and Civilization of the Spanish-Speaking Peoples II (3)

Latin America Electives

Students must take at least 12 units (four courses) selected from the following list of courses. Courses must be taken in at least three different departments.

ANTH 353	Latinas in the Americas (3)
ANTH 366	South American Indians (3)
ANTH 369	Tradition and Revolution in Latin American Society (3)
ANTH 370-379	Topics in Anthropology* (3)
ANTH 339	Latin American Art 1800 to present (3)
GEOG 461	Geography of Latin America (3)

GEOG 495	Directed Readings in Geography * (3)
HIST 121	Latin America: Colonial Period (3)
HIST 122	Latin America: National Period (3)
HIST 307	The Andean Republics (3)
HIST 321	History of Mexico: Colonial Period (3)
HIST 322	History of Mexico: National Period (3)
HIST 324	Democratization in Latin America (3)
LAST 385	Model Organization of American States (3)
LAST 484	Special Topics in Latin American Studies (3)*
POSC 351	Government and Politics of Latin America (3)
POSC 355	Latin American Policy of the United States (3)
POSC 385	Model Organization of American States (3)
POSC 470-479	Special Topics in Political Science * (3)
POSC 48X	Seminar in Political Science * (3)
SPAN 301	Spanish Composition and Conversation I (3)
SPAN 312	Culture and Civilization of Spanish-Speaking People II (3)
SPAN 322	Survey of Spanish Literature II (3)
SPAN 370-379	Special Topics in Spanish * (3)
SPAN 439	Literary Movements in Spanish-American Literature (3)
SPAN 444	20th-Century Spanish-American Literature (3)
SPAN 455	Hispanic Popular Culture (3)
SPAN 470-479	Special Topics in Spanish (3)*
SPAN 492	Directed Readings in Spanish (1-3)*

* Special topics, seminar, independent study and readings courses must be related to Latin American topics to count toward the Latin America Track in International Studies and must be approved prior to enrollment by the director of International Studies.

TRANSFER CREDIT POLICY

Transfer students must take a minimum of 18 units of upper-division courses in international studies at Towson to fulfill the requirements for the major.

INTERNATIONAL STUDIES MINORS

In addition to the Bachelor of Arts major, the International Studies Program offers two minors for students majoring in other areas. The International Studies minor is not open to International Studies majors. The European Studies minor is not open to students who elect to pursue the Europe Track in the International Studies major.

INTERNATIONAL STUDIES MINOR (21 UNITS)

1. Two of the following:

ANTH 207	Cultural Anthropology (3)
ECON 202	Macroeconomic Principles (3)
GEOG 105	Geography of International Affairs (3)
HIST 161	The World since 1500 (3)
POSC 107	Introduction to International Relations (3)

2. All students in the International Studies minor must complete 15 units (five courses) from the list of approved courses for the General Track of the International Studies major in at least two different departments.

3. Language Requirement: Students in the International Studies minor must attain an intermediate level of proficiency (through 202) or equivalent in any modern foreign language that is offered by or can be tested by the Department of Foreign Languages. Language units through 202 do not count toward the 21 units needed for the minor.

EUROPEAN STUDIES MINOR (21 UNITS)

1. Two of the following:

HIST 150	Europe and the Non-European World (3)
HIST 102	History of European Civilization through the 17th Century (3)
HIST 103	History of European Civilization since the 17th Century (3)

2. All students in the European Studies minor must complete 15 units (five courses) from the list of approved courses for the Europe Track of the International Studies major.

3. Language Requirement: Students in the European Studies minor must attain an intermediate level of proficiency (through 202) or equivalent in any one of the following modern languages: French, German, Italian, Russian or Spanish.

Students can fulfill the language requirement for the European Studies minor through any of the procedures outlined in the **Meeting B.A. Requirements** section of the Department of Modern Languages entry in this catalog. Language units through 202 do not count toward the 21 units needed for the minor.

INTERNATIONAL STUDIES ACTIVITIES AND PROGRAMS

The International Studies Program offers students the opportunity to participate in the following special programs and activities:

- Internships for academic credit in metropolitan Baltimore and Washington, D.C.
- Participation in the Model Organization of American States
- Annual foreign affairs conferences held at the U.S. Naval Academy, U.S. Air Force Academy and U.S. Military Academy at West Point
- Editing and managing the Towson *Journal of International Affairs* for academic credit
- Study abroad opportunities worldwide
- The annual Earle T. Hawkins Symposium on International Affairs

Law and American Civilization Program

Director: Jack Fruchtman

Affiliated Faculty: Law and American

Civilization draws its faculty from several disciplines, ranging across three colleges and several departments.

OFFICE

Liberal Arts Building, 410-704-3350

THE PROGRAM

The Law and American Civilization Program introduces undergraduates to the American legal system. Students will learn the methodology and gain the knowledge necessary to participate as active citizens in a nation devoted to the rule of law and will receive intensive training in analytical reasoning and critical thinking. Students majoring in Law and American Civilization may wish to attend law school following college graduation; they may choose to apply to graduate school in one of the disciplines of the program; or they may enter the work force in government, business and industry, or politics. This course of study is not necessarily a pre-professional program. Students not contemplating law or graduate school are encouraged to major in the program if their primary academic interest in college is to learn more about the American legal system.

MAJOR IN LAW AND AMERICAN CIVILIZATION

Majors must complete 54 units. The program is divided into four parts, and writing skills are emphasized throughout. First, students must complete two introductory courses, one each in political science and economics, which acquaint students with the nature of law and its role in American society. Second, students will take four required courses: one at the lower-division, two at the upper-division level and an advanced writing course. These courses further situate students in American culture, politics, judicial policymaking and logical thinking. Third, students will have several options in choosing electives, which will be offered by several departments: Accounting, Mass Communication and Communication Studies, English, History, Philosophy and Religious Studies, and Political Science. Fourth and finally, students will undertake a 6-unit capstone experience of their choice and, if possible, design. Advanced students may wish to undertake a project in the workplace and then write an analytical essay on that experience as it fits into the overall program. Other students will participate in a senior seminar, in which they will write a research paper on some aspect of the law or develop a thesis supervised by the program director. Finally, qualified students may choose to write an honors thesis.

I. Introductory Courses (6 units)

ECON 201	Microeconomic Principles (3)
POSC 209	Introduction to Law (3)

II. Required Courses (12 units)

ENGL 310	Writing Argument (3)
COMM 331	Advocacy and Argument (3)

PHIL 111	Logic (3)
POSC 384	The Judicial System (3)

III. Electives (30 units)

Two courses in each of the following lettered topics. Students will need to fulfill each department's individual prerequisites before taking these courses.

A. Accounting

ACCT 201	Principles of Accounting I (3)
LEGL 225	Legal Environment of Business (3)
LEGL 226	Business Law (3)
	or

Communication Studies

COMM 304	Persuasion (3)
COMM 420	Communication in the Legal Process (3)
	or

Mass Communication

MCOM 350	Media Law (3)

B. English

Strongly recommended are ENGL 221 and ENGL 222 as prerequisites. These two courses will not fulfill the English requirement. Any two English literature courses at the 300- or 400- level.

C. History

Any two History courses at the 300- or 400-level with a specific geographical focus on American and U.S. history. Students should consult with the LWAC director or their LWAC adviser to ensure that appropriate History courses are selected for the History component.

D. Philosophy

PHIL 204, Race, Class and Gender (3) And one additional 300- or 400-level Philosophy course or Any two 300- or 400-level Philosophy courses

E. Political Science

Any two 300 or 400-level Political Science courses with a specific geographical focus on American politics and government. Students should consult with the LWAC director or their LWAC adviser to ensure that appropriate Political Science courses are selected for the Political Science component.

IV. Seminar and/or Capstone Experience (6 units)

Students have four options to fulfill this stage of the Law and American Civilization Program.

Option I

Any one of these Political Science seminars: POSC 481, POSC 484, POSC 485 or POSC 486 (3)

and

LWAC 491	Thesis Seminar in Law and American Civilization (3)

Option II

LWAC 497	Practicum in Law and American Civilization (3)
LWAC 491	Thesis Seminar in Law and American Civilization (3)

Option III

LWAC 497	Practicum in Law and American Civilization (3)
	and

Any one of these Political Science seminars: POSC 481, POSC 484, POSC 485 or POSC 486 (3)

Option IV

LWAC 498	Directed Readings in Law and American Civilization (3)
LWAC 499	Honors Thesis in Law and American Civilization (3)

Metropolitan Studies Program

Director: Donn Worgs

Affiliated Faculty: Kent Barnes (*Geography and Environmental Planning*), John Bullock (*Political Science*), Cynthia Cates (*Political Science*), Matthew Durlington (*Sociology, Anthropology and Criminal Justice*), Marion Hughes (*Sociology, Anthropology and Criminal Justice*), Toni Marzotto (*Political Science*), John Morgan II (*Geography and Environmental Planning*), Dennis Muniak (*Political Science*), Ronn Pineo (*History*), Douglas Pryor (*Sociology, Anthropology and Criminal Justice*), Cecilia Rio (*Women's Studies*), Timothy Sullivan (*Economics*), Virginia Thompson (*Geography and Environmental Planning*), Donn Worgs (*Political Science*)

OFFICE

LA 3236, 410-704-5908

www.towson.edu/metrostudies

THE PROGRAM

The Metropolitan Studies Program is designed as a liberal arts program that offers students the opportunity to explore the complexity of metropolitan regions in the United States as well as overseas. Classes place an emphasis on contemporary issues and problems and on innovative policy solutions. The Baltimore/Washington metropolitan area provides an ideal "laboratory" for classes in metropolitan studies. Students are prepared for a number of interesting careers in the public and private sectors in planning policy and community development. The major is also an excellent preparation for graduate study in these professional fields, all of which are rapidly growing.

MAJOR IN METROPOLITAN STUDIES

Students in the Metropolitan Studies major are required to complete 39 units with a grade equivalent of 2.00 or higher. Of the total units in program requirements, a maximum of 9 may also be used to fulfill Core Curriculum requirements.

NOTE: Courses designated with "xx" did not have numbers assigned in time for publication. Please see the program director for information.

Required Courses (9 units)

MTRO 101	Introduction to Metropolitan Studies (3)
GEOG 101	Physical Geography (3)
POSC 207	State and Local Government (3)

Required Courses (27 units)

Majors must take two courses in each of the categories lettered A, B and F; and one course each in C, D and E.

A. GEOG 391	Urban Systems (3)
And one of the following:	
GEOG 355	Historical Geography of Urbanization (3)
GEOG 363	Spatial Organization of Economic Activity (3)
GEOG 393	Transportation and Infrastructure (3)
GEOG 409	Comprehensive Planning (3)
GEOG 484	Land Use Planning (3)
B. POSC 304	Politics of Metropolitan Growth and Change (3)
And one of the following:	
POSC 305	Urban Government and Politics (3)
POSC 375	Public Administration (3)
POSC 421	Politics and Environmental Policy (3)

C. Select One:

HIST 3xx	History of Metropolitan Baltimore and Washington (3)
HIST 375	The City in American History (3)
IDLA 301	Cities and Suburbs as Human Habitats (3)

D. Select One:

ECON 351	Economics of the Metropolitan Area (3)
ECON 485	Seminar in Economic Issues (3)

E. Select One:

SOCI 339	Community Organization (3)
SOCI 329	Demography (3)
SOCI 327	Urban Sociology (3)

F. Select Two:

1. MTRO 470-479 Special Topics in Metropolitan Studies (3)
2. MTRO 497 Metropolitan Studies Internship (3) (open to juniors and seniors with a GPA of 3.00 and above)
3. any course listed in A-E that coincides with the student's individual interests in metropolitan studies
4. an upper-level course that the student's adviser must approve as relevant to metropolitan studies (including approved study abroad)

Capstone Experience (3 units)

MTRO 4xx	Capstone Seminar in Metropolitan Studies (3)

Department of Philosophy and Religious Studies

Professors: Anne Ashbaugh (*Chair*), Christos Evangeliou, Wolfgang Fuchs, Barry Gittlen, John Murungi, Shimon Shokek

Associate Professors: Rose Ann Christian, Stephen Scales, Paul Pojman

Assistant Professors: Celia Bardwell-Jones, Suck Choi, Barry Freundel, Susanna Garfein, Kristen Hine, Robert Tappan, Carl Yamamoto

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www.towson.edu/philosophy

PROGRAMS OF THE DEPARTMENT

The Department of Philosophy and Religious Studies offers a major and minor in Philosophy, and a major and minor in Religious Studies.

Program in Philosophy

The Philosophy Program pays close attention to the history of philosophy. The program also attends to the diverse social and cultural settings out of which philosophy develops, to which it speaks and with which it interacts. Philosophy cultivates and nourishes rigorous thinking; the development and the practice of analytic and dialectical skills are strongly emphasized. The program encourages students to take as great a diversity of courses as possible. It is flexible enough to ensure the incorporation of new interpretations and new schools of philosophy.

The program prepares students for advanced work in philosophy, humanistic studies and various professions. The sound, clear and systematic thinking that philosophy emphasizes also makes philosophical education relevant to other disciplines. Hence, the program is designed to meet not only the needs of the majors and minors but also the needs of other students in the university. Furthermore, it fosters reflection, a prerequisite for leading a good life.

Program in Religious Studies

Religious studies as an academic endeavor takes as its subject matter two distinct but related objects of investigation. On the one hand, it focuses on the varied religious traditions that figure prominently in any adequate account of the development of human culture. On the other hand, it theorizes about the phenomenon of religion itself, abstracting from its concrete manifestations and subjecting it to explanation and evaluation. Both orientations reveal religion to be complex by nature. Any specific religious tradition is impressively multifaceted. Typically, it is the outgrowth of an intricate history and the embodiment of a distinctive program for communal existence. Its vision of the nature of the cosmos and its understanding of the meaning of human life may find expression through ritual, myth, doctrine, art or philosophy. When religion is treated in more general terms, investigation may explore its psychological, sociological, anthropological, artistic, ethical or metaphysical dimensions. These considerations make it apparent that religious studies is well conceived as a multidisciplinary enterprise whose subject matter is best understood through the employment of a variety of approaches.

MAJOR IN PHILOSOPHY (33 UNITS)

In exceptional instances, students may, with the permission of the chair, make substitutions of courses within the department for required courses. Three units may, with the permission of the chair, be taken in an allied discipline.

Section A: Required Course (3 units)

PHIL 111 Introduction to Logic (3)

Section B: Required Courses (9 units)

PHIL 221 Ancient Greek Philosophy (3)
PHIL 322 Hellenistic and Medieval Philosophy (3)
PHIL 324 Modern Philosophy (3)
PHIL 325 Schools of Contemporary Philosophy (3)

Section C: Required Courses (6 units)

PHIL 301 Philosophies of India (3)
or
PHIL 302 Philosophies of China and Japan (3)
PHIL 326 American Philosophy (3)
PHIL 327 African Philosophy (3)
RLST 357 Topics in Comparative Religion (3)

Section D: Required Courses (6 units)

PHIL 201 Social and Political Philosophy (3)
PHIL 319 Science, Technology and Values (3)
PHIL 332 Feminist Philosophy (3)
PHIL 341 Ethics (3)

Section E: Required Courses (3 units)

PHIL 311 Symbolic Logic (3)
PHIL 320 Philosophy of Science (3)
PHIL 321 Philosophy of Law (3)
PHIL 339 Theories of Knowledge (3)
PHIL 343 Aesthetics (3)
PHIL 353 Philosophy of Religion (3)
PHIL 380-389 Philosophical Topics (3)

Section F: Electives (6 units)

PHIL 413 Phenomenology (3)
PHIL 417 Existentialism (3)
PHIL 427 Kant (3)
PHIL 440-449 Philosophical Systems (3)
PHIL 460-469 Writing Seminar in Philosophical Studies (3)
PHIL 470-479 Philosophical Problems (3)
PHIL 495 Research Tutorial in Philosophy (3)

MINOR IN PHILOSOPHY (24 UNITS)

Section A: Required Courses (6 units)

PHIL 111 Introduction to Logic (3)
PHIL 101 Introduction to Philosophy (3)

Section B: Required Courses (6 units)

PHIL 221 Ancient Greek Philosophy (3)
PHIL 322 Hellenistic and Medieval Philosophy (3)
PHIL 324 Modern Philosophy (3)
PHIL 325 Schools of Contemporary Philosophy (3)

Section C: Required Courses (3 units)

PHIL 301 Philosophies of India (3)
PHIL 302 Philosophies of China and Japan (3)
PHIL 326 American Philosophy (3)
PHIL 327 African Philosophy (3)
RLST 357 Topics in Comparative Religion (3)

Section D: Required Courses (3 units)

PHIL 201 Social and Political Philosophy (3)
PHIL 319 Science, Technology and Values (3)
PHIL 332 Feminist Philosophy (3)
PHIL 341 Ethics (3)

Section E: Required Courses (3 units)

PHIL 320 Philosophy of Science (3)
PHIL 321 Philosophy of Law (3)
PHIL 339 Theories of Knowledge (3)
PHIL 343 Aesthetics (3)
PHIL 353 Philosophy of Religion (3)
PHIL 380-389 Philosophical Topics (3)

Section F: Required Courses (3 units)

PHIL 413 Phenomenology (3)
PHIL 417 Existentialism (3)
PHIL 451 Philosophy of Religion (3)
PHIL 440-449 Philosophical Systems (3)
PHIL 460-469 Writing Seminar in Philosophical Studies (3)
PHIL 470-479 Philosophical Problems (3)
PHIL 495 Research Tutorial in Philosophy (3)

MAJOR IN RELIGIOUS STUDIES (36 UNITS)

Majors in Religious Studies must complete 36 units of course work, 15 from a set of required courses designed to equip students with methodological tools critical to the study of religion and to acquaint them with a broad spectrum of religious traditions. The remaining 21 units are to be selected from elective courses organized along geographical and cultural lines into four areas of study and representing various academic disciplines. Elective courses are to be distributed over at least three of the four areas and are to be selected from at least two disciplines; 15 of the 21 units are to be at the 300–400 level. In selecting electives, students are strongly encouraged to meet with the academic advisers in order to be guided to courses that will address their distinctive interests and contribute to a balanced course of study.

Required Courses (15 units)

RLST 105 Introduction to the Study of Religion (3)
or
RLST 205 Women in World Religions (3)
RLST 206 Judaism, Christianity and Islam (3)
PHIL 219 Introduction to Asian Philosophy (3)
ANTH 207 Cultural Anthropology (3)
or
ANTH 210 Honors Cultural Anthropology (3)
PHIL 353 Philosophy of Religion (3)
or
RLST 357 Topics in Comparative Religion (3)

Electives

Students complete 21 units to be distributed over at least three of the following four areas and representing at least two academic disciplines, 15 of which must be at the 300 or 400 level. Additional elective courses may be approved each term by the department.

Area 1

ANTH 331 Eskimo Ethnography (3)
ANTH 364 Religion, Magic and Witchcraft (3)
ANTH 365 North American Indians (3)
ANTH 366 South American Indians (3)
ANTH 369 Tradition and Revolution in Latin America (3)
HIST 135 African History and Culture (3)
HIST 328 History of East Africa from 1820 to the Present (3)
HIST 379 History of Native Americans: The East (3)
HIST 380 History of Native Americans: The West (3)
PHIL 327 African Philosophy (3)

Area 2

ARTH 331	The Art of China (3)
ARTH 333	The Art of Japan (3)
HIST 109	Introduction to the Civilization of India (3)
HIST 311	Traditional India (3)
HIST 312	History of Modern India (3)
PHIL 301	Philosophies of India (3)
PHIL 302	Philosophies of China and Japan (3)

Area 3

ENGL 341	History and Literature of the Old Testament (3)
HIST 107	Introduction to History of Islamic Civilization (3)
HIST 275	The History of Ancient Israel (3)
HIST 301	Ancient Near Eastern Civilizations (3)
RLST 355	Introduction to the New Testament (3)

Area 4

ARTH 221	Survey of Western Art (3)
ARTH 307	Medieval Art (3)
ENGL 243	Introduction to Classical Mythology (3)
ENGL 429	Milton (3)
HIST 101	Introduction to Ancient Civilization (3)
HIST 105	Byzantine Empire and Balkans to 1821 (3)
HIST 277	A Survey of Jewish History (3)
HIST 303	Hellenistic Civilization (3)
HIST 304	Ancient Greek Civilization (3)
HIST 305	Roman Civilization (3)
HIST 401	The Early Middle Ages: 300–1050 (3)
HIST 402	The High Middle Ages: 1050–1350 (3)
HIST 404	The Reformation: 1500–1648 (3)
PHIL 221	Ancient Greek Philosophy (3)
PHIL 322	Hellenistic and Medieval Philosophy (3)
PHIL 326	American Philosophy (3)
PHIL 417	Existentialism (3)

**MINOR IN RELIGIOUS STUDIES
(24 UNITS)****Required Courses (12 units)**

RLST 105	Introduction to the Study of Religion (3)
	or
RLST 205	Women in World Religions (3)
RLST 206	Judaism, Christianity and Islam (3)
PHIL 219	Introduction to Asian Philosophy (3)
PHIL 353	Philosophy of Religion (3)
	or
RLST 357	Topics in Comparative Religion (3)

Electives

Students complete 12 units to be distributed over at least two of the following areas. Additional elective courses appropriate to specific areas may be approved each term by the program coordinator.

Area 1

ANTH 331	Eskimo Ethnography (3)
ANTH 364	Religion, Magic and Witchcraft (3)
ANTH 365	North American Indians (3)
ANTH 366	South American Indians (3)
ANTH 388	Peasant Cultures (3)
HIST 328	History of East Africa from 1820 to the Present (3)
HIST 379	History of Native Americans: The East (3)
HIST 380	History of Native Americans: The West (3)
PHIL 327	African Philosophy (3)

Area 2

ARTH 331	The Art of China (3)
ARTH 333	The Art of Japan (3)
HIST 312	History of Modern India (3)
PHIL 301	Philosophies of India (3)
PHIL 302	Philosophies of China and Japan (3)

Area 3

ENGL 341	History and Literature of the Old Testament (3)
HIST 301	Ancient Near Eastern Civilizations (3)
RLST 355	Introduction to the New Testament (3)

Area 4

ARTH 307	Medieval Art (3)
ENGL 429	Milton (3)
HIST 303	Hellenistic Civilization (3)
HIST 304	Ancient Greek Civilization (3)
HIST 305	Roman Civilization (3)
HIST 401	The Early Middle Ages: 300–1050 (3)
HIST 402	The High Middle Ages: 1050–1350 (3)
HIST 404	The Reformation: 1500–1648 (3)
PHIL 322	Hellenistic and Medieval Philosophy (3)
PHIL 326	American Philosophy (3)
PHIL 417	Existentialism (3)

TRANSFER CREDIT POLICY

All Philosophy and Religious Studies majors must complete a minimum of 24 units toward the major at Towson University, with at least 18 units at the upper (300–400) level.

All Philosophy and Religious Studies minors must complete a minimum of 18 units toward the minor at Towson University, with at least 12 units at the upper level.

**Department of
Political Science**

Professors: Eric Belgrad, Cynthia Cates, Jack Fruchtman, Michael Korzi, Martha Kumar, Toni Marzotto (*Chair*), James Roberts, Joseph Rudolph

Associate Professors: Alison McCartney, Dennis Muniak, Donn Worgs

Assistant Professors: John Bullock, Matthew Hoddie, William Lahnenman, Paul McCartney

Lecturer: Jack Isaacs

Visiting Assistant Professor: Lynn Kirby

Part-time Faculty: John Bowen, Laslo Boyd, Antonio Campbell, Yeonmin Cho, Robert Ginsburg, Michael Goff, G. Franklin Mullen, Nitza Nachmias, Molly Ruhlman, Ted Zaleski

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**PROGRAMS OF THE
DEPARTMENT**

The program of courses in political science aims to promote understanding of the nature of political relationships. The department offers a major and minor in Political Science. In addition, the Department of Political Science offers combined majors with the Department of Economics, the Department of Mass Communication and Communication Studies, and the Department of Geography and Environmental Planning. Students wishing to major in both Political Science and Economics; Political Science and Geography and Environmental Planning; Political Science and Mass Communication; or Political Science and Communication Studies can obtain a combined major which certifies that the requirements of both departments have been completed. Students should refer to the section on combined majors listed below. The major prepares students for advanced study and provides the foundation for careers in public administration, law, public relations, business and research, and urban and regional planning.

The Prelaw Advising Program is administered by the Department of Political Science.

MAJOR IN POLITICAL SCIENCE

Thirty-nine units with a grade equivalent of 2.00 or higher are required for the major in Political Science. Students must complete the following requirements:

A. Foundation Requirements (9 units)

Students must take three of the following courses (9 units)

POSC 101*	Introduction to Political Science (3)
POSC 103	American National Government (3)
POSC 105	Governments of the World (3)
POSC 107*	Introduction to International Relations (3)
POSC 207	State and Local Government (3)
POSC 209	Introduction to Law (3)
POSC 212	Honors in Political Science (3)

*The honors courses POSC 102 and POSC 108 can be substituted for POSC 101 and POSC 107 respectively.



B. Research Requirement (3 units)

Students must take POSC 301 Political Research I.

C. Topical Areas Required Courses (12 units)

Students must take four of the following courses. Each course must be in a different topical area.

Topical Area: American Government and Public Administration

POSC 375	Public Administration (3)
POSC 381	The Presidency (3)
POSC 383	Congress (3)
POSC 384	The Judicial System (3)

Topical Area: Comparative Politics

POSC 337	Comparative Govt. of Foreign Powers (3)
POSC 339	Comparative Political Systems (3)
POSC 340	Comparative Public Policy (3)

Topical Area: International Relations

POSC 303	Theory of International Relations (3)
POSC 307	Contemporary International Politics (3)
POSC 434	Comparative Foreign Policy (3)
POSC 436	U.S. Foreign Policy (3)

Topical Area: Law and the Judicial System

POSC 418	Constitutional Law and Politics (3)
POSC 419	Civil Rights and Civil Liberties: The First and Fourteenth Amendments (3)
POSC 420	Constitutional Protections: Personal Liberty and the Rights of the Accused (3)
POSC 422	The Supreme Court (3)

Topical Area: Political Theory

POSC 427	Political Theory I (3)
POSC 428	Political Theory II (3)
POSC 430	American Political Thought (3)

Topical Area: State and Local Government

POSC 304	Politics of Metropolitan Growth and Change (3)
POSC 305	Urban Government (3)
POSC 375	Public Administration (3)

D. Electives (12 units)

Students must take four upper-division political science electives (12 units). Courses taken in Section C cannot be used to fulfill this requirement in Section D. No more than 9 units (3 courses) of special topics courses (POSC 470-POSC 479) and internship credit (POSC 493 or POSC 494) combined may be used to fulfill the requirement of Section D. All courses must be completed with a grade equivalent of 2.00 or higher except POSC 465. "Pass" will count only for POSC 465.

E. Seminar Requirement (3 units)

Students must take one of the following seminars in political science. Specific topics of the seminars vary from term to term. Students must have completed at least 15 units in political science prior to taking the seminar. POSC 301 is also a prerequisite for each seminar course. Each seminar has its own additional prerequisites that are shown in the course listing section of this catalog.

POSC 481	Seminar in American Government and Public Policy (3)
POSC 482	Seminar in Comparative Politics (3)
POSC 483	Seminar in International Relations (3)
POSC 484	Seminar in Law and the Judicial System (3)
POSC 485	Seminar in Political Theory (3)
POSC 486	Seminar in State and Local Government (3)

MINOR IN POLITICAL SCIENCE

Twenty-one units with a grade equivalent of 2.00 or higher are required for the minor in Political Science

to be completed as follows: at least 6 units at the lower division of which no more than 3 units may be at the 200 level; and at least 15 units at the upper division.

Required Courses (21 units)

At least two of the following, of which no more than one may be at the 200 level:

POSC 101	Introduction to Political Science (3)
POSC 102	Honors Introduction to Political Science (3)
POSC 103	American National Government (3)
POSC 105	Governments of the World (3)
POSC 107	Introduction to International Relations (3)
POSC 108	Honors Introduction to International Relations (3)
POSC 207	State Government (3)
POSC 209	Introduction to Law (3)
POSC 212	Honors in Political Science (3)

Electives (15 units)

Select 15 upper-division elective units in political science.

COMBINED MAJOR IN POLITICAL SCIENCE AND ECONOMICS

Completion of individual majors in Political Science and Economics requires the successful completion of 72 units (39 in political science and 33 in economics). However, by electing the combined major in Political Science and Economics, students will be able to complete both majors with a total of 60 units. Students interested in either of the combined majors should consult with an adviser in both departments to review requirements.

In Political Science, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in economics toward fulfillment of the required four courses (12 units) in Section D of the Political Science major.

ECON 322	Comparative Economic Systems (3)
ECON 326	Economic Development (3)
ECON 331	Government and Economic Life (3)
ECON 337	Public Finance (3)
ECON 339	Health Economics (3)
ECON 351	Urban Economics (3)
ECON 375	Environmental Economics (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)
ECON 470-479	Topics in Economics* (3)

*Topic to be approved by the Department of Political Science

In Economics, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in political science toward fulfillment of the required four courses (12 units) of upper-division economics electives:

POSC 305	Urban Government and Politics (3)
POSC 375	Public Administration (3)
POSC 421	Politics and Environmental Policy (3)
POSC 459	Simulation and Games in Political Science (3)
POSC 470-479	Special Topics* (3)
POSC 481	Seminar in American Government and Public Administration (3)

*Topic to be approved by the Department of Economics

COMBINED MAJOR IN POLITICAL SCIENCE AND GEOGRAPHY AND ENVIRONMENTAL PLANNING

Completion of individual majors in Political Science and Geography requires the successful

completion of 79 units (39 in political science, 40 in geography). However, by electing the combined major in Political Science and Geography, students will be able to complete both majors with a total of 67 units. Students interested in this combined major should consult with an adviser in both departments to review requirements.

In political science, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in geography and environmental planning toward fulfillment of the required eight upper-level courses (24 units) in political science:

GEOG 317	Energy Resources (3)
GEOG 355	Historic Geography of Urbanization (3)
GEOG 359	Economic Geography (3)
GEOG 381	Political Geography (3)
GEOG 385	Population Geography (3)
GEOG 391	Urban Systems (3)
GEOG 393	Transportation and Infrastructure Planning (3)
GEOG 405	Comprehensive Planning (3)
GEOG 427	Global Economy (3)
GEOG 431	Geography of Africa (3)
GEOG 461	Geography of Latin America (3)
GEOG 470-479	Seminar in Geography* (3)

*Topic to be approved by the Department of Political Science

In Geography and Environmental Planning, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in political science toward fulfillment of the required six courses (18 units) of lower/upper-division geography and environmental planning electives:

POSC 303	Theory of International Politics (3)
POSC 305	Urban Government and Politics (3)
POSC 307	Contemporary International Politics (3)
POSC 337	Comparative Government of Foreign Powers: The Western World (3)
POSC 340	Comparative Public Policy (3)
POSC 351	The Government and Politics of Latin America (3)
POSC 355	The Latin American Policy of the U.S. (3)
POSC 441	Contemporary U.S.-European Relations (3)
POSC 470-479	Special Topics in Political Science* (3)
POSC 488	Seminar: Topics in Public Policy (3)

*Topics to be approved by the Department of Geography and Environmental Planning

COMBINED MAJOR PROGRAMS WITH MASS COMMUNICATION AND COMMUNICATION STUDIES

Completion of individual majors in Political Science and Communication Studies or Political Science and Mass Communication requires the successful completion of 75 units (36 in communication studies or mass communication and 39 in political science). However, by electing the combined major in Political Science and Communication Studies or Political Science and Mass Communication, students will be able to complete both majors with a total of 69 units. Students interested in either of the double majors should consult with an adviser in both departments to review requirements.

COMBINED MAJOR IN POLITICAL SCIENCE AND COMMUNICATION STUDIES

Completion of individual majors in Political Science and Communication Studies requires the successful

completion of 75 units (39 in political science and 36 in communication studies). However, by electing the combined major in Political Science and Communication Studies, students will be able to complete both majors with a total of 60 units. Students interested in either of the combined majors should consult with an adviser in both departments to review requirements.

In Political Science, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in communication studies toward fulfillment of the required four courses (12 units) of upper-division electives in Section D of the Political Science major:

COMM 304	Persuasion (3)
COMM 331	Argument and Advocacy (3)
COMM 377	Intercultural Communication (3)
COMM 420	Communication in the Legal Process (3)
COMM 470	Special Topics* (3)

**Topic to be approved by the Department of Political Science*

In Communication Studies, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in political science toward fulfillment of the required three courses (9 units) of communication studies electives:

POSC 301	Political Research I (3)
POSC 340	Comparative Public Policy (3)
POSC 375	Public Administration (3)
POSC 381	Presidency (3)
POSC 383	Congress (3)
POSC 417	Political Parties (3)
POSC 459	Simulation and Games (3)
POSC 470-479	Special Topics* (3)

**Topic to be approved by the Department of Mass Communication and Communication Studies*

COMBINED MAJOR IN POLITICAL SCIENCE AND MASS COMMUNICATION

Completion of individual majors in Political Science and Mass Communication requires the successful completion of 75 units (39 in political science and 36 in mass communication). However, by electing the combined major in Political Science and Mass Communication, students will be able to complete both majors with a total of 69 units. Students interested in either of the combined majors should consult with an adviser in both departments to review requirements.

In Political Science, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in mass communication toward fulfillment of the required four courses (12 units) of upper-division electives in Section D of the Political Science major:

Students will need to fulfill MCOM course prerequisites in advance of taking these courses.

MCOM 350	Media Law (3)
MCOM 352	Media Criticism (3)
MCOM 385	Mass Media and Society (3)
MCOM 431	Public Opinion and the Press (3)
MCOM 433	Media Ethics (3)
MCOM 477-479	Special Topics* (3)

**Topic to be approved by the Department of Political Science*

In Mass Communication, students must complete all requirements for the major. However, they must substitute two of the following upper-level courses (6 units) in political science toward fulfillment of the required seven courses (21 units) of electives in mass communication:

Students will need to fulfill POSC course prerequisites in advance of taking these courses.

POSC 301	Political Research I (3)
POSC 340	Comparative Public Policy (3)
POSC 375	Public Administration (3)
POSC 381	Presidency (3)
POSC 383	Congress (3)
POSC 417	Political Parties (3)
POSC 459	Simulation and Games (3)
POSC 470-479	Special Topics* (3)

**Topic to be approved by the Department of Mass Communication and Communication Studies*

TRANSFER CREDIT POLICY

Students who transfer to Towson University in senior standing are expected to complete a minimum of 15 units of upper-division political science courses. Those who transfer below senior standing normally will be expected to complete 21 units of upper-division political science courses at Towson University.

CAREERS IN POLITICAL SCIENCE

Political Science majors generally prepare themselves, at the undergraduate level, for careers in law, government (federal, state and local), service in public and private interest groups, business, and journalism and the media, as well as research and teaching at various levels of the education system.

STUDENT OPPORTUNITIES

Activities

In addition to its academic curriculum, the department offers opportunities providing a broad range of related experiences. Classes travel to Annapolis and Washington, D.C., to observe first-hand the political workings of government. Political Science majors are given the opportunity to edit the *Towson Journal of International Affairs*, one of the few undergraduate academic journals in the United States.

Internships

An integral part of the Political Science curriculum is the opportunity for students to participate in an internship in their junior or senior year. Students are placed in all branches of government and at all levels of government. Placements with the Maryland General Assembly or a member of Congress are most common.

PRELAW ADVISING PROGRAM

Coordinator: Jack Fruchtmann (Political Science)

OFFICE

LA 3210, 410-704-3350

www.towson.edu/polsci/prelaw

The Program

Students contemplating law school after graduation should make an appointment with the university's Prelaw adviser, Dr. Jack Fruchtmann. He can provide prospective students with a copy of the *Towson Prelaw Handbook*, introduce them to the Prelaw Society, and offer advice concerning courses of study, preparation for the Law School Admission Test (LSAT) and other matters pertaining to what students need for their application to law school. In general, students should concentrate on improving their reading, writing, speaking and thinking skills.

Dual Law Program

Towson University offers qualified students the opportunity to apply to the early admission program at the University of Baltimore School of Law. Admission is not automatic but is contingent upon acceptance by the University of Baltimore Law School, including review of LSAT scores. Transfer to the UB law program can only take place at the end of a spring term. To qualify for entrance to the dual-degree program, students must fulfill the first three of the standards listed below; to qualify for graduation from Towson University, they must also fulfill the fourth standard listed:

1. Completion of at least 91 units at TU with at least a 3.50 GPA
2. Completion of all TU Core Curriculum requirements
3. Completion of a major at TU with at least a 3.50 GPA in the major. No specific areas of study or disciplines are required for this program; accordingly, students may choose majors in which they are most interested
4. Successful completion of 29 units at the University of Baltimore School of Law, and of all other TU graduation requirements as listed in the catalog under the heading **Degree Requirements**

Subsequent completion of all requirements at the University of Baltimore Law School is necessary in order to earn the J.D. degree from the University of Baltimore. Students interested in this program should contact the TU Prelaw adviser, Dr. Jack Fruchtmann, in the Department of Political Science.

Department of Psychology

Professors: Susan Bartels, Bethany Brand, Alan Clardy, Maria Fracasso, Lawrence Froman, M. Paz Galupo, John Govern, Craig Johnson (*Chair*), Cynthia Kalodner, Frederick Parente, Jan Sinnott

Associate Professors: Leonie Brooks, Justin Buckingham, Margaret Faulkner, Jonathan Mattanah, Bruce Mortenson, Geoffrey Munro, Ellyn Sheffield, Kim Shifren, John Webster, Evangeline Wheeler

Assistant Professors: Mark Arvisais, Gregory Chasson, Bryan Devan, Mary Anne Dunne, David Earnest, Kerri Goodwin, Mindy Gutow, Elizabeth Katz, Paul Pistell, Katie Rosenbusch, Christa Schmidt, Devin Wallace

Visiting Assistant Professors: Alicia Bembenek, Amy Bennett, Mark Chachich

Lecturer: Christopher Magalis

Adjunct Faculty: Joella Anzels, Philip Burge, Holly Davani, Katie Filling, Lora Fisher, Beth Gallihue, Scott Gehring, Christina Harnett, John Harris, Mollie Herman, John Hickey, Nancy Hoffman, Kim Houser, John Huete, Therissa Libby, Arvin Lubetkin, Lloyd McCraney, Mary Ann Michaloski, Jessica Miller, Thomas Monahan, Arthur Mueller, Sarah Murphy-Bowman, Mark Nolder, Michael Noll, Brad Piergrossi, Gary Rockwood, William Rothenbach, John Ruyter, Nana Sabet, Brian Schmitt, Mary Stapleton, Oleg Tarkovsky, Stephanie Thieme, Jeremy Tyler, Helga Walz, Geri Willen, Barbara Wilson, Marty Zimmerman

OFFICE

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www.towson.edu/psychology

PROGRAMS OF THE DEPARTMENT

The Department of Psychology offers the following programs: the major in Psychology, the minor in Psychology, an undergraduate clinical psychology specialization and an honors thesis program.

The major in Psychology prepares students for graduate work in psychology, for training in special education and general education, for careers requiring a liberal arts background and for work in clinical services.

MAJOR IN PSYCHOLOGY

Majors are required to complete 41 units in psychology and 10 units in prerequisite courses with a grade equivalent of 2.00 in all courses. No "Pass" grades are accepted for the 41 units in psychology (32 units of required psychology courses and 9 units of psychology electives). Of the 32 required psychology units, 14 units, consisting of the following courses, are required: PSYC 101 or PSYC 102, PSYC 203 or PSYC 204, PSYC 212 or PSYC 213, and PSYC 314 or PSYC 313. The remaining 18 required units are to be completed by taking one upper-level course in each of the six topical areas: Human Development, Clinical, Social, Biopsychology, Learning-Cognition and Diversity. All students must satisfy the relevant prerequisites for individual psychology courses taken.

Required Lower-Level Prerequisites (10 units)

BIOL 115	Biology: The Science of Life (4) or an equivalent general biology course with laboratory
ENGL 102	Writing for a Liberal Education (3) or
ENGL 190	Honors Writing Seminar (3)
MATH 111	Algebra for Applications (3) or higher, excluding MATH 204

Required Courses (14 units)

The following 14 units are required:

PSYC 101	Introduction to Psychology (3) or
PSYC 102	Honors Introduction to Psychology (3)
PSYC 203	Human Development (3) or
PSYC 204	Honors Human Development (3)
PSYC 212	Behavioral Statistics (4) or
PSYC 213	Research Design and Statistical Analysis in Psychology I (4)

(Prerequisite for both PSYC 212 and PSYC 213: MATH 109 or higher, excluding MATH 204)

PSYC 314	Research Methods in Psychology (4) (Prerequisites for PSYC 314: ENGL 102 or ENGL 190, PSYC 101 or PSYC 102, PSYC 212)

PSYC 313	Research Design and Statistical Analysis in Psychology II (4) (Prerequisites for PSYC 313: ENGL 102 or ENGL 190, PSYC 101 or PSYC 102, PSYC 213)

Note: PSYC 213 (offered only in the fall) and PSYC 313 (offered only in the spring) represent a two-course sequence that must be taken with the same faculty member in the same academic year. In order to receive credit for PSYC 213, students must complete PSYC 313.

Topical Areas (18 units)

I. Human Development (PSYC 203 is a required prerequisite)

One of the following is required:

PSYC 403	Infant and Child Development (3)
PSYC 404	Adolescent Psychology (3)
PSYC 405	Psychology of Aging (3)
PSYC 467	Midlife Development (3)

II. Clinical

One of the following is required:

PSYC 350	Personality (3)
PSYC 361	Abnormal Psychology* (3)
PSYC 411	Tests and Measurements (3)
PSYC 430	Systems and Techniques of Psychotherapy (3)

III. Social

One of the following is required:

PSYC 325	Social Psychology* (3)
PSYC 327	Industrial Psychology (3)
PSYC 431	Group Dynamics (3)

IV. Biopsychology

One of the following is required:

PSYC 309	Psychopharmacology (3)
PSYC 317	Sensation and Perception (3)
PSYC 460	Ethology and Comparative Psychology (3)
PSYC 465	Physiological Psychology* (3)

V. Learning-Cognition

One of the following is required:

PSYC 305	Psychology of Learning (3)
PSYC 315	Motivation (3)
PSYC 461	Cognitive Psychology* (3)

VI. Diversity

One of the following is required:

PSYC 419	Diverse Perspectives in Psychology (3)
PSYC 432	Cross-Cultural Psychology (3)
PSYC 447	Sex Differences: Psychological Perspectives (3)
PSYC 451	Introduction to the Exceptional Child (3)

*Recommended topical area course

Electives (9 units)

The elective units may be selected from any 200-, 300- or 400-level psychology courses with a MINIMUM of 3 units (of the required 9 units) completed at the 300- or 400-level. Electives include: (a) any other course(s) within a given topical area beyond the one required to fulfill the topical area requirements and (b) any other psychology courses listed in the catalog with the exception of PSYC 211 (Child Psychology), and PSYC 230 (Adjustment and Growth), or PSYC 383 (Proctoring in Psychology).

ADDITIONAL OPTIONS IN PSYCHOLOGY

The Department of Psychology offers undergraduates two options beyond the completion of the general undergraduate concentration: a Clinical Psychology Specialization and an Honors Thesis in Psychology program. More specific information about each option is provided below. Admission to each of these options is competitive; for full consideration, applications must be made to the appropriate program director by October 31 of the student's junior year. Application packets may be obtained in the Psychology department office.

In addition to the requirements of these options, students must also complete the Core Curriculum requirements of the university and any additional requirements of the Psychology major.

CLINICAL PSYCHOLOGY AREA OF FOCUS

The Clinical Psychology Specialization offers more extensive training in Clinical Psychology beyond that gained by completion of the Psychology major. The area of focus provides a three-term course sequence (14 units), beginning in the spring term of the junior year. Courses are organized around practicum experience with extensive supervision so that there is continuity between theory and practice of clinical skills.

Following are the Clinical Psychology Area of Focus courses:

Term 1 (spring of junior year)

PSYC 439	The Initial Interview (3)
PSYC 433	Group Psychotherapy Internship (3)

Term 2 (fall of senior year)

PSYC 454	Internship in Psychotherapy (4)

Term 3 (spring of senior year)

PSYC 454	Internship in Psychotherapy (4)

For a student to be admitted to the Clinical Psychology Area of Focus, the following criteria must be met by the spring term of the junior year:

1. Completion of PSYC 205 (Introduction to the Helping Relationship) and PSYC 361 (Abnormal Psychology) with a grade of "B" (3.00) or better in both courses
2. A minimum cumulative GPA of 3.40 and a Psychology GPA of 3.60
3. Submission of a writing sample, a letter of recommendation from a TU faculty member (preferably from Psychology) or employer who has observed the applicant's interpersonal skills, maturity and professionalism, and an interview with the program director to determine the student's suitability to complete the Clinical Psychology Area of Focus

HONORS THESIS IN PSYCHOLOGY

The Department of Psychology offers an undergraduate honors thesis program that provides students an opportunity to learn in-depth about the research process in psychology. Students complete an independent thesis in close collaboration with a faculty mentor, while taking a series of advanced courses on research methods, data analysis, thesis preparation and professional presentation. The three-term program (11 units) culminates in the student's senior year with the completion of the thesis and presentation of the findings in a symposium format.

The honors thesis program begins during the spring term of the student's junior year and continues throughout the student's senior year. The program is open to both native Towson students and transfer students entering the Psychology major in the beginning of their junior year.

Following are the specific courses that all honors thesis students must take:

Term 1 (spring of junior year)

PSYC 486 Advanced Experimental Design (3)

Term 2 (fall of senior year)

PSYC 497 Honors Seminar in Psychology (3)

Term 3 (spring of senior year)

PSYC 499 Honors Thesis (4)

PSYC 498 Honors Capstone in Psychology (1)

For a student to be admitted to the Honors Thesis in Psychology Program, the following criteria must be met by the spring term of the junior year:

1. Completion of Psychology 212/213 and 313/314 with a "B" grade or better
2. A minimum cumulative GPA of 3.40 and a Psychology GPA of 3.60
3. Identification of a Psychology faculty member who will supervise the thesis
4. Submission of a personal statement and writing sample and interview with the program director

Students who successfully complete the honors program will receive the designation Bachelor of Science or Bachelor of Arts with Honors in Psychology on their diploma. Departmental Honors will also appear on the student's transcript.

COMBINED MAJOR IN PSYCHOLOGY AND SOCIOLOGY-ANTHROPOLOGY

Normally, completion of two separate majors in Psychology and Sociology-Anthropology with a concentration in Sociology requires 80–81 units (41 in psychology and 39–40 in sociology). However, students who are interested in both majors can select the combined major option in Psychology and Sociology-Anthropology, which consists of courses offered by both departments.

The combined major option requires a total of 68 units. Core required courses in the combined major (29 units) include: ANTH 207 or ANTH 210, PSYC 101 or PSYC 102, PSYC 203 or PSYC 204, PSYC 212 or PSYC 213, PSYC 313 or PSYC 314, SOCI 101 or SOCI 102, SOCI 381, and SOCI 391. Students must also complete an additional 200-level course from the following courses offered in the Department of Sociology, Anthropology and Criminal Justice: SOCI 210, SOCI 241, SOCI 243, SOCI 249 or SOCI 265. The combined major requires seven additional courses in psychology (21 units) and six additional courses in sociology-anthropology (18 units) from a pre-set list of electives in a number of topical or content areas defined by each department.

In psychology, the combined major requires electives (21 units) selected in the following manner: one 3-unit course must be chosen from each of the six topical areas for the Psychology major: Human Development; Clinical; Social; Biopsychology; Learning-Cognition; and Diversity. The remaining 3 elective units may include other courses not already selected from the topical areas or any other psychology course listed in this catalog with the exception of PSYC 211 (Child Psychology) and PSYC 230 (Adjustment and Growth).

In sociology-anthropology, the electives must include five courses from the Upper-Level Sociology Electives section of the curriculum, as described in that section, and one course from the Application, Engagement and Advanced Study area (18 units). Students interested in declaring the combined major should consult an adviser in both departments to review the specific requirements and the approved topical or content elective courses prior to taking any classes.

MINOR IN PSYCHOLOGY

Minors are required to complete 26 units in psychology with a grade equivalent of 2.00 or higher in each course. Of these 26 units, 14 units, consisting of the following courses, are required: PSYC 101 or PSYC 102, PSYC 203 or PSYC 204, PSYC 212 or PSYC 213, PSYC 313 or PSYC 314. The remaining 12 units must be used to satisfy four of the six topic areas listed in the major. Minors must satisfy the relevant prerequisites for individual psychology courses taken.

TRANSFER CREDIT POLICY

All Psychology majors must complete a minimum of 23 units in psychology courses at Towson University, and all Psychology minors must complete a minimum of 16 units in psychology courses at Towson University, toward the major or minor.

MASTER OF ARTS IN PSYCHOLOGY

The Master of Arts in Psychology is designed for students who are primarily interested in an advanced degree in Clinical, Counseling, Experimental or School Psychology. For detailed information, see the *Graduate Catalog*.

DEPARTMENT ANIMAL POLICY

In accordance with federal laws and regulation, Towson University, through its Institutional Animal Care and Use Committee, reviews the use of animals in teaching to assure compliance with the standards established by the USDA and NIH for the humane treatment of animals. The university makes every effort to minimize the use of animals and seeks alternatives wherever possible. Although Towson University recognizes that some students may believe the use of animals as teaching tools is inhumane, certain curricula require the use of animals as a necessary part of instruction. Accordingly, where the use of animals in class demonstrations or experiments is a requirement for successful completion of any course, as determined by the department, students will be obliged to comply with those requirements as set forth by the instructor in the course syllabus. The university will not provide optional procedures for students who do not comply with course requirements.

If a course requires the use of animals in class demonstrations or experiments, however, the syllabus must specifically state that animals will be used in class demonstration or experiments and that such use is a requirement for successful completion of the course. Notice of this requirement will be made a part of the course description and shall be placed in the catalog.



Social Sciences Program

Director: Miriam Sealock (*Sociology, Anthropology and Criminal Justice*)

Advisory Committee: Finn Christenson (*Economics*), Michael Korzi (*Political Science*), Robert Rook (*History*), James M. Smith (*Geography*)

OFFICE

LA 3353, 410-704-5165
www.towson.edu/idis/sosc

THE PROGRAM

The Social Sciences program is an interdisciplinary major comprising courses from the departments of Economics; Geography and Environmental Planning; History; Political Science; and Sociology, Anthropology and Criminal Justice.

The program is designed for those students who do not wish to major in a single discipline, but are interested in a broad education that transcends traditional department boundaries. It is useful for students who plan to enter graduate school for an advanced degree in one of the disciplines of the program; for students who plan to enter professional schools for a degree in law, social service or a phase of law enforcement; or for students who seek a broad background in preparation for employment in business, industry or a government agency. One track is particularly designed for students planning to teach social studies at the secondary school level.

A director administers the program, and faculty from the departments of Economics; Geography and Environmental Planning; History; Political Science; and Sociology, Anthropology and Criminal Justice advise students majoring in the program. Policies and requirements for the majors in Social Sciences are established by an advisory committee composed of representatives from the various disciplines included in the program.

The major offers students the choice of two Social Sciences programs: a Social Sciences major in Liberal Arts or a Social Sciences major with a track in Secondary Education. The Bachelor of Arts degree may be earned in either Social Sciences major by adding a foreign language to the course requirements. The language requirement can be met by completing the intermediate courses of a modern foreign language or its equivalent.

SOCIAL SCIENCES MAJOR IN LIBERAL ARTS

Completion of the major consists of 60 units. All courses in the major must be completed with a grade equivalent of "C" or better. Additionally, students must complete a Social Sciences portfolio and fulfill all Core Curriculum requirements.

Required Courses (30 units)

Two of the following:

HIST 102	History of European Civilization through the 17th Century (3)
HIST 103	History of European Civilization from the 17th Century (3)
HIST 145	History of the United States to the Mid-19th Century (3)
HIST 146	History of the United States since the Mid-19th Century (3)
HIST 160	World History to 1500 (3)
HIST 161	World History Since 1500 (3)

Two of the following:

GEOG 102	World Regional Geography (3)
GEOG 105	Geography of International Affairs (3)
GEOG 109	Introduction to Human Geography (3)
GEOG 221	Interpretation of Maps (3)
GEOG 230	Understanding and Communicating through Maps (3)

Two of the following:

POSC 101	Introduction to Political Science (3)
POSC 103	American National Government (3)
POSC 105	Governments of the World (3)
POSC 107	Introduction to International Relations (3)
POSC 207	State Government (3)

Both of the following:

ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)

Two of the following:

ANTH 207	Cultural Anthropology (3)
CRMJ 254	Introduction to Criminal Justice (3)
SOCI 101	Introduction to Sociology (3)

Upper-Division Requirements (24 units)

Students must complete two courses in each of four disciplines out of the seven disciplines (ANTH, CRMJ, ECON, GEOG, HIST, POSC and SOCI) in the program at the upper-division level (300 or 400 level). At least 12 units of upper-division courses must be taken at TU.

Electives (6 units)

Students must complete two upper- or lower-division courses in any of the seven disciplines (ANTH, CRMJ, ECON, GEOG, HIST, POSC and SOCI) in the program.

TRANSFER CREDIT POLICY

Transfer students in the Social Sciences program are required to earn a minimum of one-half the total number of units required for the major at Towson University.

Department of Sociology, Anthropology and Criminal Justice

Professors: Samuel Collins (*Chair*), Howard Nixon, Douglas Pryor

Associate Professors: Carol Caronna, Elizabeth Clifford, Matthew Durington, Victor Fisher, Paul Munroe, Miriam Sealock

Assistant Professors: Marion Cockey, Michael Elliott, Nicole Fabricant, Jonathan Gaines, Brian Gorman, Marion Hughes, Dana Kollmann, Jennifer Langdon, Michelle Manasse, Christopher Salvatore, William Tsitsos

Part-time Faculty: Edith Bretman, Scott Buresh, Phil Canter, Shawn Craig, Steven Dashiell, Elaine Feder-Alford, Katharine Fernstrom, Charles Hall, Joseph W. Hopkins, Walter Jackson, Shameeka Jelenewicz, Gerard Johnson, Roland Knapp, Jana Kopelentova-Rehak, William Long, Brad Lyman, Richard Mitchell, Xochitl Mota-Back, Ingrid Pfoertsch, Fred Roussey, John Skinner

Senior Lecturer: Whitney García

Lecturers: Laura Hahn, Stephen Erik Hartmark, Robert Wall

OFFICE

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PROGRAMS OF THE DEPARTMENT

The Department of Sociology, Anthropology and Criminal Justice offers the following programs: the major in Sociology-Anthropology (SOAN) with a concentration in Anthropology, Sociology or Criminal Justice; the combined major in Sociology-Anthropology and Psychology; the combined major in Sociology-Anthropology and Geography and Environmental Planning; the minor in Anthropology; and the minor in Sociology.

Sociology-Anthropology majors are exposed to social science methods and perspectives needed to understand culture and society. All three concentrations emphasize theory, research methods and the linkages between individual experiences and social worlds. Students in the major learn valuable content knowledge and also develop important problem-solving, critical thinking, writing and analytical skills. The major's three concentrations offer different perspectives on these general areas of knowledge and expertise. Students in the Anthropology Concentration examine the social and cultural patterns and the biological and cultural development of humans through time. Students in the Criminal Justice Concentration pursue the theoretical and empirical study of crime and criminality, other forms of social deviance and the official response to crime. Students in the Sociology Concentration study the scientific explanation and analysis of social processes and interaction, social structures and institutions, and social issues and problems.

The major prepares students for entry into a variety of occupations and for further study in many types of professional and graduate education programs. Examples of career areas (some requiring a graduate degree) routinely pursued by Sociology-Anthropology graduates include nonprofit and community organizations, research institutes and contract archaeology, museums, government agencies and politics, social services and social work, law and law enforcement, juvenile justice, victim assistance, conflict resolution and mediation, journalism and the mass media, and the corporate workplace. Our students are prepared to live and work in an increasingly complex and changing world. In addition, study in the department encourages and empowers students to be informed, engaged and responsible citizens.

The department actively encourages Sociology-Anthropology majors to pursue external learning experiences, including course-based service learning projects, study abroad and internships. Internships provide students with opportunities to apply what they have learned in the classroom to workplace settings, allowing them to explore possible career avenues while adding valuable practical experience to their resumes. Students in the department have completed internships for course credit (ANTH 491/492, CRMJ 491/492, SOCI 491/492) in a variety of organizations and settings, including the American Red Cross; Baltimore Center for Urban Archaeology; the House of Ruth; local/regional circuit courts; local, regional and federal police and sheriff departments; the Neighborhood Design Center; Prisoner's Aid; Sheppard Pratt; the Smithsonian Institution (Museum Support Center); and a variety of city, county, state and federal agencies. Interested students should contact the department for more information and to be directed to the appropriate internship coordinator.

The Departmental Honors Program (distinct from the Honors College and its requirements) provides students an opportunity to conduct an in-depth independent research study, under faculty guidance, culminating in an honors thesis. Students who complete the program graduate with honors in the department. Interested students should contact the department for more information. The department has active chapters of Alpha Kappa Delta, the national honor society in sociology (Theta chapter of Maryland, founded 1987), and Alpha Phi Sigma, the national honor society in criminal justice (Theta Delta chapter, established 2006). The department annually recognizes the outstanding achievements of students, with: the Lieberman Awards for the most distinguished student scholars in the major and for the most outstanding student intern; the Irwin Goldberg Award for Outstanding Achievement in Sociological Research; the Social Responsibility/Social Praxis (Action) Award; and the Award for Special Contribution to the Environment of Learning.

MAJOR IN SOCIOLOGY-ANTHROPOLOGY

A minimum of 39 units with a grade equivalent of 2.00 or higher in each course is required for the major in Sociology-Anthropology. No "pass" grades are accepted for the major. Courses in each concentration may be listed in more than one required section. Each course taken for the major will count toward one required section of the concentration only. Students may enroll in a maximum of 6 units of ANTH/CRMJ/SOCI 495 Independent Research.

The major degree students normally receive is the Bachelor of Science, but the Bachelor of Arts degree may be earned by adding a foreign language to the major requirements. The language requirements for the Bachelor of Arts can be met by completing the intermediate courses of a modern language or the equivalent. The Bachelor of Science degree is earned by completing department major and university degree requirements without meeting the foreign language requirements.

ANTHROPOLOGY CONCENTRATION

The Anthropology Concentration of the Sociology-Anthropology major requires a minimum of 39 units, of which 27 must be upper-level. A minimum of 27 of the required total units in the Anthropology Concentration must be earned at Towson University. Up to 12 units can be completed elsewhere and applied toward the concentration with the approval of a department adviser.

A. Basic Required Courses (9 Units)

All of the following must be completed:

ANTH 207	Cultural Anthropology (3)
	or
ANTH 210	Honors Cultural Anthropology (3)
ANTH 208	Human Evolution and Prehistory (3)
SOCI 101	Introduction to Sociology (3)
	or
SOCI 102	Honors Introduction to Sociology (3)

B. Theory and Methods Component (9 units)

The following course:

ANTH 401	Anthropological Theory (3)
<i>Two of the following courses (cannot be courses counted elsewhere in the curriculum):</i>	
ANTH 380	Ethnographic Field Methods (3)
ANTH 381	Archaeological Methods and Theory (3)
ANTH 382	Visual Anthropology (3)
ANTH 391	Archaeological Lab Methods (3)
ANTH 393	Archaeological Field School (3)

C. Globalization (3 units)

One of the following courses (cannot be a course counted elsewhere in the curriculum):

ANTH 351	Drugs in Global Perspective (3)
ANTH 353	Latinas in the Americas (3)
ANTH 360	Globalization in Cross-Cultural Perspective (3)
ANTH 367	Peoples of the Middle East (3)
ANTH 370	Topics in Anthropology (3)*
ANTH 370	Korea and Globalization (3)*
ANTH 370	Anthropology of African Media (3)*
ANTH 470	Special Topics in Anthropology (3)

D. Archaeology (3 units)

One of the following courses (cannot be a course counted elsewhere in the curriculum):

ANTH 311	Archaeology of Maryland (3)
ANTH 385	Environmental Archaeology (3)
ANTH 370	Topics in Anthropology (3)*
ANTH 381	Archaeological Methods and Theory (3)
ANTH 383	North American Archaeology (3)
ANTH 387	Native American Archaeoastronomy (3)
ANTH 391	Archaeological Lab Methods (3)
ANTH 393	Archaeological Field School (3)
ANTH 470	Special Topics in Anthropology (3)

E. Sociocultural Anthropology (6 units)

Two of the following courses (cannot be courses counted elsewhere in the curriculum):

ANTH 321	Gender in Cross-Cultural Perspective (3)
ANTH 325	Moral Panics (3)
ANTH 331	Eskimo Ethnography (3)
ANTH 341	Information Age Cultures (3)
ANTH 346	Wealth, Power, and Politics in Cross-Cultural Perspective (3)
ANTH 351	Drugs in Global Perspective (3)
ANTH 353	Latinas in the Americas (3)
ANTH 364	Religion, Magic and Witchcraft (3)
ANTH 365	North American Indians (3)
ANTH 367	Peoples of the Middle East (3)
ANTH 369	Tradition and Revolution in Latin America (3)
ANTH 370	Topics in Anthropology (3)*
ANTH 370	Korea and Globalization (3)*
ANTH 370	Anthropology of African Media (3)*
ANTH 382	Visual Anthropology (3)
ANTH 470	Special Topics in Anthropology (3)
ANTH 470	Life in the City (3)

F. Area Course (3 units)

One of the following courses (cannot be a course counted elsewhere in the curriculum):

ANTH 209	American Culture (3)
ANTH 211	Honors Anthropology of American Culture (3)
ANTH 311	Archaeology of Maryland (3)
ANTH 331	Eskimo Ethnography (3)
ANTH 353	Latinas in the Americas (3)
ANTH 365	North American Indians (3)
ANTH 367	Peoples of the Middle East (3)
ANTH 369	Tradition and Revolution in Latin America (3)
ANTH 370	Topics in Anthropology (3)*
ANTH 370	Korea and Globalization (3)*
ANTH 370	Anthropology of South Africa (3)*
ANTH 370	Anthropology of African Media (3)*
ANTH 383	North American Archaeology (3)
ANTH 387	Native American Archaeoastronomy (3)
ANTH 470	Special Topics in Anthropology (3)
ANTH 470	Life in the City (3)

G. Anthropology/Sociology Electives (6-8 units)

Two general elective courses in anthropology or sociology selected from the list below or from among all courses listed previously in this curriculum (only one course can be a SOCI course and both courses cannot be courses counted elsewhere in the curriculum):

ANTH 357	Introduction to Forensic Crime Analysis (3)
ANTH 361	Controversies in Anthropology (3)
ANTH 370	Topics in Anthropology (3)*
ANTH 457	Advanced Forensic Crime Investigation (3)
ANTH 470	Special Topics in Anthropology (3)

ANTH 470	Life in the City (3)
ANTH 470	South Africa Then and Now (3)
ANTH 491	Internship in Anthropology I (3)
ANTH 492	Internship in Anthropology II (3)
ANTH 495	Independent Research (3)
ANTH 498	Readings in Anthropology (Honors) (4)**
ANTH 499	Honors Thesis (4)**
SOCI 312	Sociology of Gender (3)
SOCI 323	Social Movements (3)
SOCI 329	Demography (3)
SOCI 343	Sociology of Race and Ethnicity (3)
SOCI 351	Deviant Behavior (3)
SOCI 370	Topics in Sociology (3)*
SOCI 440	Sociology of Immigration (3)
SOCI 470	Special Topics in Sociology (3)

*No more than two 370-level "Topics" courses can be completed for credit in the ANTH concentration. Adviser consent required for approval in designated area. Topic of course must be related to designated area in order for course to count.

**Students who wish to graduate with Departmental Honors must complete both ANTH 498 and ANTH 499 and follow honors procedures. Contact the department for more information.

CRIMINAL JUSTICE CONCENTRATION

The Criminal Justice Concentration of the Sociology-Anthropology major requires a minimum of 45 units, of which 24 must be upper-level. A minimum of 27 of the required total units in the Criminal Justice Concentration must be earned at Towson University. Up to 18 units can be completed elsewhere and applied toward the concentration with the approval of a department adviser.

A. Basic Required Courses (12-13 units)

One of the following courses:

SOCI 101	Introduction to Sociology (3)
SOCI 102	Honors Introduction to Sociology (3)
ANTH 207	Cultural Anthropology (3)
ANTH 210	Honors Cultural Anthropology (3)

The following course:

CRMJ 201	Introduction to Criminology (3)

One of the following courses:

CRMJ 254	Introduction to Criminal Justice (3)
CRMJ 354	Writing for Criminal Justice (3)

One of the following courses:

ECON 205	Statistics for Business and Economics (3)
MATH 231	Basic Statistics (3)
PSYC 212	Behavioral Statistics (4)

B. Theory and Methods Component (6-7 units)

The following course (must be taken at Towson University):

CRMJ 353	Theories of Crime (3)

One the following courses:

ANTH 380	Ethnographic Field Methods (3)
ANTH 382	Visual Anthropology (3)
CRMJ 368	Research Methods in Criminal Justice (3)
CRMJ 370	Introduction to Crime Analysis (3)*
PSYC 314	Research Methods in Psychology (4)
SOCI 300	Sociological Analysis (3)
SOCI 391	Research Methods (3)

C. Upper-Level Required Areas (18-19 units)

Select and complete three courses from one area, two courses from a second area, and one course from a third area (1., 2., 3.) depending on interest and learning goals (6 courses total):

1. Social Control: Reactions to Crime

CRMJ 307	Issues in Domestic Violence (3)
CRMJ 337	Controversies in Criminal Justice (3)
CRMJ 331	Criminal Justice and Film (3)
CRMJ 352	Community Corrections (3)
CRMJ 356	Prisons in America (3)
CRMJ 375	Topics in Criminal Justice (3)*
SOCI 383	Sociology of Law (3)
CRMJ 385	Police Administration (3)
CRMJ 387	Issues in Policing (3)
CRMJ 498	Readings in Criminal Justice (Honors) (4)**

2. Criminology: Nature of Crime

ANTH 351	Drugs in Global Perspective (3)
CRMJ 309	Issues in Campus Violence (3)
SOCI 331	Deviance and Organizations (3)
SOCI 336	Sociology of Mental Illness (3)
CRMJ 345	Race and Crime (3)
CRMJ 348	Women and Crime (3)
SOCI 351	Deviant Behavior (3)
CRMJ 355	Delinquency and Juvenile Justice (3)
CRMJ 358	Interpersonal Violence (3)
CRMJ 370	Topics in Criminology (3)*
CRMJ 498	Readings in Criminal Justice (Honors) (3)**

3. Criminal Justice Practice

CRMJ 332	Conflict Resolution and Criminal Justice (3)
CRMJ 357	Introduction to Forensic Crime Analysis (3)
CRMJ 370	Topics in Criminology (3)*
CRMJ 375	Topics in Criminal Justice (3)*
CRMJ 375	Principals of Criminal Investigation (3)*
CRMJ 384	Criminal Law (3)
CRMJ 393	Ethics in Criminal Justice (3)
CRMJ 491	Internship in Criminal Justice I (3)
CRMJ 498	Readings in Criminal Justice (Honors) (4)**

D. Sociology/Anthropology/Outside Electives (9 units)

Select and complete any three courses listed below; at least two courses must be from SOCI and/or ANTH:

SOCI 241	Blacks in America (3)
SOCI 243	Sociology of Race, Class and Gender (3)
SOCI 249	Social Problems (3)
SOCI 301	The Family (3)
SOCI 311	Individual and Society (3)
SOCI 312	Sociology of Gender (3)
SOCI 313	Introduction to Social Psychology (3)
SOCI 327	Urban Sociology (3)
SOCI 329	Demography (3)
SOCI 333	Political Sociology (3)
SOCI 341	Class, Status and Power (3)
SOCI 343	Sociology of Race and Ethnicity (3)
SOCI 362	Work and Occupations (3)
SOCI 365	Organizations and Society (3)
SOCI 440	Sociology of Immigration (3)
ANTH 209	Anthropology of American Culture (3)
ANTH 211	Honors Anthropology of American Culture (3)
ANTH 325	Moral Panics (3)
ANTH 327	Gender in Cross-Cultural Perspective (3)
ANTH 351	Drugs in Global Perspective (3)
ANTH 368	Globalization in Cross-Cultural Perspective (3)
GEOG 356	Geography of Crime (3)
HIST 368	The Bill of Rights and the Constitution (3)
HLTH 405	Drugs in Our Culture (3)
PHIL 253	Contemporary Ethical Problems (3)
PHIL 321	Philosophy of Law (3)
POSC 375	Public Administration (3)

POSC 384	The Judicial System (3)
POSC 420	Constitution Protections (3)
PSYC 361	Abnormal Psychology (3)
PSYC 404	Adolescent Psychology (3)

E. Optional Advanced Learning Experience (3-4 units)

Students may substitute one course only from among the following as a replacement for a SOCI or ANTH Elective in the previous section above:

ANTH 457	Advanced Forensic Crime Investigation (3)
ANTH 470	Life in the City (3)
SOCI 381	Sociological Theory (3)
CRMJ 431	Criminal Justice Outside the Classroom (3)
CRMJ 470	Special Topics in Criminology (3)*
CRMJ 475	Special Topics in Criminal Justice (3)*
CRMJ 485	Seminar in Criminal Justice (3)
CRMJ 492	Internship in Criminal Justice II (3)
CRMJ 495	Independent Research (3)
CRMJ 499	Honors Thesis in Criminal Justice (4)**

*No more than three "Topics" courses (370/375) can be completed for credit in the CRMJ concentration. Adviser consent required for approval in designated area. Topic of course must be related to designated area in order for course to count.

**Students who wish to graduate with Departmental Honors must complete both CRMJ 498 and CRMJ 499 and follow honors procedures. Contact the department for more information. Adviser consent required for approval of CRMJ 498 Readings in Criminal Justice in designated area. Topic of course must be related to designated area in order for course to count.

SOCIOLOGY CONCENTRATION

The Sociology Concentration requires a minimum of 39 units, of which 24 must be upper-level. A minimum of 21 of the required total units in the Sociology Concentration must be earned at Towson University. Up to 18 units can be completed elsewhere and applied toward the concentration with the approval of a department adviser.

A. Basic Required Courses (9-10 units)

One of the following courses:

ANTH 207	Cultural Anthropology (3)
ANTH 208	Human Evolution and Prehistory (3)
ANTH 210	Honors Cultural Anthropology (3)

One of the following courses:

SOCI 101	Introduction to Sociology (3)
SOCI 102	Honors Introduction to Sociology (3)

One of the following courses:

ECON 205	Statistics for Business and Economics I (3)
MATH 231	Basic Statistics (3)
PSYC 212	Behavioral Statistics (4)

B. Lower-Level Sociology Electives (6 units)

Two of the following courses:

SOCI 210	Sociology of Sport (3)
SOCI 241	Blacks in America (3)
SOCI 243	Sociology of Race, Class and Gender (3)
SOCI 249	Social Problems (3)
SOCI 265	Status, Friendship, Intimacy (3)*

C. Theory and Methods Component (6 units)

(Recommended order: 381 before 391)

Both of the following courses:

SOCI 381	Sociological Theory (3)
SOCI 391	Research Methods (3)

D. Application, Engagement and Advanced Study (3–4 units)

One of the following courses:

ANTH 380	Ethnographic Field Methods (3)
SOCI 300	Sociological Analysis (3)**
SOCI 329	Demography (3)
SOCI 353	Theories of Crime (3)
SOCI 485	Seminar in Sociology (3)**
SOCI 491	Internship in Sociology I (3)
SOCI 495	Independent Research (3)
SOCI 498	Readings in Sociology (honors) (4)***

E. Upper-Level Sociology Electives (15–16 units)

Five courses from the following three thematic categories; at least one course must be completed from each group, and at least four courses must be SOCI code courses:

Social Inequalities

ANTH 321	Gender in Cross-Cultural Perspective (3)
ANTH 353	Latinas in the Americas (3)
ANTH 365	North American Indians (3)
CRMJ 307	Issues in Domestic Violence (3)
CRMJ 345	Race and Crime (3)
CRMJ 348	Women and Crime (3)
SOCI 312	Sociology of Gender (3)
SOCI 341	Class, Status and Power (3)
SOCI 343	Sociology of Race and Ethnicity (3)
SOCI 370	Topics in Sociology (3)****
SOCI 440	Sociology of Immigration (3)
SOCI 492	Internship in Sociology II***** (3)
SOCI 499	Honors Thesis*** (4)

Social Processes/Interaction

ANTH 325	Moral Panics (3)*
CRMJ 358	Interpersonal Violence (3)
SOCI 311	Individual and Society (3)
SOCI 313	Introduction to Social Psychology (3)
SOCI 323	Social Movements (3)
SOCI 336	Sociology of Mental Illness (3)
SOCI 351	Deviant Behavior (3)
SOCI 359	Social Gerontology (3)
SOCI 370	Topics in Sociology (3)****
SOCI 492	Internship in Sociology II***** (3)
SOCI 499	Honors Thesis*** (4)

Social Institutions/Contexts

SOCI 301	The Family (3)
SOCI 326	Religion and Society (3)
SOCI 327	Urban Sociology (3)
SOCI 333	Political Sociology (3)
SOCI 335	Medical Sociology (3)
SOCI 355	Delinquency and Juvenile Justice (3)
SOCI 362	Work and Occupations (3)
SOCI 365	Organizations and Society (3)
SOCI 370	Sociology Outside the Classroom (3)****
SOCI 370	Topics in Sociology (3)****
SOCI 383	Sociology of Law (3)

SOCI 492	Internship in Sociology II***** (3)
SOCI 499	Honors Thesis*** (4)

*Not open to students who have already completed course carrying the same title but previously offered under a different number.

**Recommended for students considering graduate school in sociology.

***Students who wish to graduate with Departmental Honors must complete both SOCI 498 and SOCI 499 and follow honors procedures. Contact the department for more information. Adviser consent required for approval of SOCI 499 Honors Thesis in designated area. Topic of thesis must be related to designated area in order for course to count. Course cannot be counted in more than one place.

****No more than two 370-level "Topics" courses can be completed for credit in the SOCI concentration. Adviser consent required for approval in designated area. Topic of course must be related to designated area in order for course to count. Course cannot be counted in more than one place.

*****Adviser consent required for approval of SOCI 492 Internship in Sociology II in designated area. Topic of internships must be related to designated area in order for course to count. Course cannot be counted in more than one place.

COMBINED MAJOR IN SOCIOLOGY-ANTHROPOLOGY AND PSYCHOLOGY

Normally, completion of two separate majors in Psychology and Sociology-Anthropology with a concentration in Sociology requires 80–81 units (41 in psychology and 39–40 in sociology). However, students who are interested in both majors can select the combined major option in Psychology and Sociology-Anthropology, which consists of courses offered by both departments. The combined major option requires a total of 68 units. Required courses in the combined major (29 units) include ANTH 207, ANTH 208 or ANTH 210; PSYC 101 or PSYC 102; PSYC 203 or PSYC 204; PSYC 212 or PSYC 213; PSYC 313 or PSYC 314; SOCI 101 or SOCI 102; SOCI 381; and SOCI 391. Students must also complete an additional 200-level course from the following courses offered in the Department of Sociology, Anthropology and Criminal Justice: SOCI 210, SOCI 241, SOCI 243, SOCI 249 or SOCI 265. The combined major requires seven additional courses in psychology (21 units) and six additional courses in sociology-anthropology (18 units) from a pre-set list of electives in a number of topical or content areas defined by each department.

In psychology, the combined major requires electives (21 units) selected in the following manner: one 3-unit course must be chosen from each of the six topical areas for the Psychology major: Human Development; Clinical; Social; Biopsychology; Learning-Cognition; and Diversity. The remaining 3 elective units may include other courses not already selected from the topical areas or any other psychology course listed in this catalog with the exception of PSYC 211 and PSYC 230.

In sociology-anthropology, the electives must include five courses from the Upper-Level Sociology Electives section of the curriculum as described in

that section, and one course from the Application, Engagement and Advanced Study area (18 units). Students interested in declaring the combined major should consult an adviser in both departments to review the specific requirements and the approved topical or content elective courses prior to taking any classes.

COMBINED MAJOR IN SOCIOLOGY-ANTHROPOLOGY AND GEOGRAPHY

See Department of Geography and Environmental Planning for details.

MINOR IN SOCIOLOGY

The minor in Sociology consists of 24–25 units of sociology courses (including Statistics), at least 12 of which must be upper level and at least 15 of which must be taken at Towson University.

A. Required Courses (12-13 units)

One of the following courses:

SOCI 101	Introduction to Sociology (3)
SOCI 102	Honors Introduction to Sociology (3)

One of the following courses:

ECON 205	Statistics for Business and Economics I (3)
MATH 231	Basic Statistics (3)
PSYC 212	Behavioral Statistics (4)

Both of the following courses:

SOCI 381	Sociological Theory (3)
SOCI 391	Research Methods (3)

B. Electives (12 units)

Any four additional courses in sociology, at least two of which must be upper level; one of the upper level courses may be an ANTH or a CRMJ course listed under the Sociology Concentration electives for the Sociology-Anthropology major.

MINOR IN ANTHROPOLOGY

The minor in Anthropology consists of 24 units of anthropology courses, at least 12 of which must be upper level and at least 15 of which must be taken at Towson University.

A. Required Courses (9 units)

The following three courses:

ANTH 207	Cultural Anthropology (3)
	or
ANTH 210	Honors Cultural Anthropology (3)
ANTH 208	Human Evolution and Prehistory (3)
ANTH 401	Anthropological Theory (3)

B. Electives (15 units)

Any five additional elective courses in anthropology, at least three of which must be upper level; one of the upper-level courses may be a SOCI course listed under the Anthropology Concentration electives for the Sociology-Anthropology major.

Department of Women's and Gender Studies

Professors: Karen Dugger (*Chair*), Rita Marinho
Associate Professors: Cecilia Rio, Esther Wangari
Assistant Professors: Celia Bardwell-Jones,

Ayse Dayi, Kate Wilkinson

Affiliated Faculty: Lena Ampadu (*English*),
 Frances Botkin (*English*), Rose Ann Christian
 (*Philosophy and Religious Studies*), Marion
 Cockey (*Sociology, Anthropology and*
Criminal Justice), Paz Galupo (*Psychology*),
 Gail Gasparich (*Biological Sciences*), Cindy
 Gissendanner (*History*), Nancy Larson (*Music*),
 Louise Laurence (*Economics*), Toni Marzotto
 (*Political Science*), Florence Newman (*English*),
 Carol Pippen (*English*), Darcy Plymire (*Kine-*
siology), Lea Ramsdell (*Foreign Languages*),
 Lev Ryzhkov (*Chemistry*), Allaire Stallsmith
 (*History*), Sabrina Willis (*Political Science*)

Part-time Faculty: Terra Hiltner, Christine Potts,
 Paula Rangel, Beverly Shuman, Angelique
 Taylor, Jill Weaverling

OFFICE

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www.towson.edu/womensstudies

THE PROGRAM

The Women's and Gender Studies major is interdisciplinary; it offers students the opportunity to study the status and roles of women as individuals and as members of society and how these statuses and roles are shaped by social, political and cultural forces. Courses emphasize both commonalities among women and differences according to race, ethnicity, class and sexuality.

The major consists of 39 total units:

- 6 units of required courses
- 3 units of a culminating experience.
- 12 units in a selected focus area, 6 units of which must be departmental WMST courses
- 18 units wherein majors take 6 units in each of the three focus areas other than the one selected.

The Women's and Gender Studies major is structured to provide students with both breadth (through the distribution requirement) and depth (through the selection of a focus area). The focus areas are curricular/career paths that allow students to develop expertise in a particular area. The culminating experience provides students the opportunity to integrate the knowledge acquired in their courses, and to apply this knowledge to real world problems.

The following Women's and Gender Studies (WMST) courses and affiliate courses offered by other departments are currently in the curriculum. Any course can only count toward one focus area. Some courses fulfill Core Curriculum requirements.

MAJOR IN WOMEN'S AND GENDER STUDIES

Women's and Gender Studies majors are required to complete 39 units with a grade equivalent of 2.00 or higher from among the following courses.

Required Courses (6 units)

WMST 337	Feminist Theory (3)
WMST 231	Women in Perspective (3) or
WMST 232	Honors: Women in Perspective (3) or
WMST 233	International Perspectives on Women (3)

Required Culminating Experience (3 units)

WMST 485	Seminar in Women's Studies (3)

Focus Area (12 units): Students must select a focus area among the four listed below. Of the 12 units necessary for the focus area, 6 units must be WMST courses.

Distribution Requirement (18 units): Students must take 6 units in each of the remaining three focus areas other than the one selected.

FOCUS AREAS

Women, Gender, Culture and Creativity (12 units)

WMST 235	American Women and Popular Culture (3)
WMST 332	Women, Culture and Creativity (3)
WMST 333	Women's Words, Women's Lives (3)
WMST 370	Women's Spiritual Practices (3)
WMST 381	Topics: The Erotic Imagination in Christianity and Hinduism (3)
ARTH 341	Women in Art (3)
CLST 303	Identity and Culture: Gender and Media in Global Perspective (3)
EMF 205	Women and Gender in Film (3)
ENGL 290	Honors Seminar in Literature: Emily Dickinson (3)
ENGL 290	Honors Seminar in Literature: Austen and the Brontes (3)
ENGL 347	World Literature: African Women Writers (3)
ENGL 363	Film and Literature: Austen/Shelley/Hollywood (3)
ENGL 370	Special Topics: Literature of Women (3)
ENGL 372	Women Writers (3)
ENGL 380	Voices of Medieval Women (3)
ENGL 469	Topics in British Literature: Virginia Woolf (3)
ENGL 471	Topics in World Literature: Black Women Writers (3)
ENGL 472	Topics in British Literature: Unfortunate Women (3)
ENGL 477	Topics in Black American Literature: African American Women Writers (3)
HIST 306	Women in 20th-Century U.S. History (3)
MUSC 205	Women in Western Music (3)
PHIL 332	Feminist Philosophy (3)
SPAN 455	Hispanic Popular Culture: Mexican Cultural Symbols: La Malinche, LaVirgen de Guadalupe and La Llorona (3)
SPAN 474	Special Topics in Spanish: Latin American Women Writers (3)

Women, Gender, Diversity and Global Contexts (12 units)

WMST 233	International Perspectives on Women (3)
WMST 234	Honors Seminar: International Perspectives on Women (3)
WMST 350	B-More: Baltimore and Urban Communities (3)
WMST 370	Women's Spiritual Practices (3)
WMST 370	Topics: Women of Color (3)
WMST 345	Women, the Environment and Health (3)
WMST 381	The Erotic Imagination in Christianity and Hinduism (3)
CLST 303	Identity and Culture: Gender and Media in Global Perspective (3)
ANTH 321	Gender in Cross-Cultural Perspective (3)
ANTH 353	Latinas in the Americas (3)
ENGL 347	World Literature: African Women Writers (3)
ENGL 471	Topics in World Literature: African American Writers (3)
ENGL 471	Topics in World Literature: Black Women Writers (3)
ENGL 477	Topics in Black American Literature: African American Women Writers (3)
HIST 361	Gays and Lesbians in U.S. History (3)
HIST 384	Life Histories of African Women (3)
HIST 484	Historical Themes: African American Women in History (3)
LGBT 101	An Introduction to Lesbian and Gay Studies (3)
RLST 205	Women in World Religions (3)
PHIL 204	Race, Class and Gender (3)
PSYC 449	Psychology of Lesbian Culture (3)
PSYC 457	Gender Identity in Transition (3)
SOCI 243	Sociology of Race, Class and Gender (3)
SPAN 455	Hispanic Popular Culture: Mexican Cultural Symbols: La Malinche, LaVirgen de Guadalupe and La Llorona (3)
SPAN 474	Special Topics in Spanish: Latin American Women Writers (3)

Women, Gender, Health and Sexuality (12 units)

WMST 235	American Women and Popular Culture (3)
WMST 336	Women and Medicine (3)
WMST 338	Women and Sexuality (3)
WMST 339	Reproductive Technologies and the Future of Motherhood (3)
WMST 345	Women, the Environment and Health (3)
HLTH 210	International Health (3)
HLTH 219	Women's Health (3)
HLTH 220	Sexuality in a Diverse Society (3)
HLTH 440	Perspectives on Rape and Sexual Assault (3)
LGBT 101	An Introduction to Lesbian and Gay Studies (3)
PHIL 204	Race, Class and Gender (3)
PSYC 447	Sex Differences: Psychological Perspectives (3)
PSYC 449	Psychology of Lesbian Culture (3)
PSYC 457	Gender Identity in Transition (3)
SOCI 307	Issues in Domestic Violence (3)
SOCI 335	Medical Sociology (3)

Women, Gender, Leadership and Community (12 units)

WMST 335	Women, Work and Family (3)
WMST 336	Women and Medicine (3)
WMST 340	Women, Environment and Health (3)
WMST 350	B-More: Baltimore and Urban Communities (3)
WMST 370	Topics: Women's Spiritual Practices (3)
WMST 370	Topics: Masculinity in Perspective
WMST 381	Topics: The Erotic Imagination in Christianity and Hinduism
ECON 374	Economic Issues of Gender (3)
FMST 350	Fundamentals of Leadership in the Nonprofit Sector (3)
IDNM 307	Women, Gender and Science (3)
PHIL 204	Race, Class and Gender (3)
POSC 340	Comparative Public Policy (3)
POSC 47X	Women, Public Policy and Social Change (3)
POSC 481	Public Policy Analysis (3)
SOCI 243	Sociology of Race, Class and Gender (3)
SOCI 307	Issues in Domestic Violence (3)
SOCI 312	Sociology of Gender (3)
SOCI 348	Women and Crime (3)
SOCI 362	Work and Occupations (3)
SOCI 365	Organizations and Society (3)

**These courses are offered very infrequently. For information on these or any other courses, contact the chair of Women's Studies or the department offering the course.*

MINOR IN WOMEN'S AND GENDER STUDIES

Students may wish to major in a traditional subject (History, English, Sociology) but minor in Women's and Gender Studies. Some students plan to do graduate work in a traditional discipline, with emphasis on women within it.

Requirements for the Minor (21 units)**Required Courses (9 units)**

WMST 231	Women in Perspective (3)
	or
WMST 232	Honors Seminar: Women in Perspective (3)
	or
WMST 233	International Perspectives on Women (3)
	and
WMST 337	Feminist Theory (3)
WMST 485	Seminar in Women's Studies (3)

Electives (12 units, 6 of which must be upper level, 300–400)

Please choose 12 units of electives from any of the four focus areas. Electives may be distributed across the four focus areas, within one focus area, or across a combination of two or three focus areas.

Women, Gender, Culture and Creativity
 Women, Gender, Health and Sexuality
 Women, Gender, Diversity and Global Contexts
 Women, Gender, Leadership and Community

TRANSFER CREDIT POLICY

All Women's and Gender Studies majors must complete a minimum of 18 units toward the major at Towson University, with at least 12 units at the upper (300–400) level.

All Women's and Gender Studies minors must complete a minimum of 12 units toward the minor at Towson University, with at least 9 units at the upper (300–400) level.

HONORS PROGRAM IN WOMEN'S AND GENDER STUDIES

Honors work is available to students with a Women's and Gender Studies major. Interested students may consult the chair of Women's and Gender Studies for information, preferably during their sophomore year. See information on the Honors College elsewhere in this catalog.

OTHER OPPORTUNITIES FOR STUDENTS

The Department of Women's and Gender Studies provides speakers from the university or off campus, from time to time.

In alternate years, the Department of Women's and Gender Studies awards the Guess Scholarship for achievement in writing. Women's and Gender Studies students are also encouraged to take advantage of the Women's Center (University Union 311) and the Women in Science Center (Smith Hall).





The Jess and Mildred Fisher College of Science and Mathematics

Inspiring Student Exploration in Science and Mathematics for the 21st Century

The Jess and Mildred Fisher College of Science and Mathematics at Towson University offers a wide variety of undergraduate and graduate majors, as well as interdisciplinary programs. We take pride in our ability to provide an educational environment in which students work closely with faculty and receive quality instruction in small classes.

Science and mathematics are becoming increasingly important as our world evolves and confronts the challenge of rapid technological transformations. Science and mathematics will determine the road into the future, and the Fisher College of Science and Mathematics is helping to build that road through its educational programs and its commitment to teaching, research and scholarship. Our college has a fourfold mission: to prepare students for careers and advanced professional training in the biological or physical sciences, mathematics, computer information systems or computer science; to participate fully in the liberal education mission of the campus; to foster significant scholarly research; and to serve the well-being of the community, state and region. To accomplish this mission, our college maintains high standards and expectations of performance for its faculty and students. Each student is provided the opportunity to develop competence in a special field of knowledge by learning its principles and perspectives, mastering its methods and acquiring much of its accumulated knowledge.

In addition to offering formal course work, the college is committed to providing students with opportunities to learn through their participation in mentored research, independent study, internships and honors programs. Students gain experience in laboratories, interact with the environment through field studies, conduct student research and receive training in technologically advanced instrumentation. We believe that there is no stronger means of learning than by active participation at the frontiers of scientific knowledge, and we encourage our entire faculty to provide research opportunities for students so that they may embrace the discovery of the secrets in the world around us. A combination of student participation and rigorous classroom instruction gives majors in the college a competitive advantage in career advancement or in the selection of professional or graduate schools. Students majoring outside the college are assured the opportunity to acquire ample scientific knowledge in order to make informed decisions essential to citizens in a science-oriented, technological world.

As a metropolitan university, we recognize our obligation to contribute to the cultural, scientific, educational and economic well-being of our geographic region. Part of this commitment is to improve K-12 science and mathematics education in the Baltimore Metropolitan area. We have established programs to attract more students to STEM (Science, Technology, Engineering and Mathematics) majors and to prepare STEM teachers who will be energized to teach in area schools in these much needed discipline areas. These include the Hackerman Academy of Mathematics and Science, the Noyce Scholarship Program, and cooperative programs with other metropolitan two- and four-year colleges and universities.

Although we offer degrees in the sciences and mathematics, we recognize that the Towson University experience encompasses more than an academic diploma. We strive to create enriching extracurricular and educational experiences for all in the greater Towson University community. We recognize the importance of science and mathematics, not merely as an aid to understanding the natural world, but also as an aid to understanding ourselves. Each person can benefit greatly from the scientific experience, and it is this sort of experience that we provide our students.

David A. Vanko, Dean
Gail E. Gasparich, Associate Dean

Biology
Chemistry
Computer Science
Earth-Space Science
Environmental Science and Studies (with CLA)
Forensic Chemistry
Geology
Information Systems
Information Technology
Mathematics
Molecular Biology, Biochemistry and
Bioinformatics
Physics
"4+1" B.S. Physics/M.S. Computer Science
"3+2" B.S. Biological Sciences/M.S. Aquaculture
"3+2" B.S. Biological Sciences/M.S. Antarctic and
Southern Ocean Studies
Dual-Degree Engineering Program
Dual-Degree Medicinal Chemistry Program
PreMedical/PreDental
Prepharmacy
Preveterinary Medicine

COLLEGE OFFICE
Smith Hall 312, 410-704-2121
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E-mail: fcsm@towson.edu
www.towson.edu/fcsm

Center for Science and Mathematics Education (CSME)

Director: Sarah Haines
Associate Director: Robert Blake

OFFICE

Administration Building 214-215, 410-704-2532
Fax: 410-704-3959
E-mail: shaines@towson.edu

The Center for Science and Mathematics Education (CSME) is a focal point for research efforts, curriculum development, teacher education and pedagogical reform designed to enhance the teaching and learning of mathematics, science and technology at all levels from pre-K through 16. Representatives of each of the departments of the College of Science and Mathematics and the College of Education serve as affiliate faculty.

CSME is the center of operations for the Master of Science in Science Education program, which is designed to enhance the content knowledge and teaching skills of Maryland high school teachers. The M.S. program has three tracks: Biological Sciences, Chemistry and Earth Environmental Studies. CSME is also the Maryland State sponsor of Project Learning Tree, a K-12 environmental education curriculum. Preservice and inservice teachers can receive professional development training in this curriculum by contacting CSME.

The primary goal of CSME is to promote excellent and effective science and mathematics teaching at all levels from pre-K through 16. To that end, the center is engaged in the following activities:

1. fostering initiatives for improvement of teacher education
2. disseminating ideas on curriculum and instruction in science, mathematics and technology at all grade levels
3. assisting area schools, community agencies and university departments in selection, implementation and assessment of innovative approaches to the teaching and learning of science, mathematics and technology
4. coordinating communication and collaboration among universities, community colleges and schools

Interdisciplinary Studies

ANIMAL BEHAVIOR TRACK/ INTERDISCIPLINARY STUDIES MAJOR

Advisory Committee: Harald Beck (*Biological Sciences*), Bryan Devan (*Psychology, Co-Coordinator*), Paz Galupo (*Psychology*), Craig Johnson (*Psychology*), Scott Johnson (*Biological Sciences*), John LaPolla (*Biological Sciences*), Jay Nelson (*Biological Sciences*), Herbert Petri (*Psychology*), Joan Rabin (*Psychology*), Gerald Robinson (*Biological Sciences*), Erik Scully (*Biological Sciences, Co-Director*), Richard Siegel (*Biological Sciences*), Joel Snodgrass (*Biological Sciences*)

OFFICE

Smith Hall 261, 410-704-3012

THE PROGRAM

Animal Behavior is offered as a track within the Interdisciplinary Studies major. For a complete description of course requirements, see the *College of Liberal Arts*.

The study of animal behavior has received an increasing amount of attention from the public because of the emphasis placed by zoological parks on behavioral biology and the large number of presentations in the media regarding animal behavior and sociobiology.

The Animal Behavior Track is designed to offer a solid foundation in the diverse approaches used to study behavioral biology. The program uses a carefully selected combination of courses in biology and psychology to achieve this goal. In addition, students are required to complete either an independent research project or an internship in order to apply their knowledge in an intensive research experience.

Students who complete the program may be qualified for positions at zoological parks, aquariums and nature centers. In addition, they will have the necessary technical knowledge to pursue a career in freelance writing about animal behavior. However, students who are considering attending graduate school will need to complete additional courses in either biology or psychology. Most of the students currently enrolled in the program also are majoring in either Biology or Psychology.

Students who are considering the Animal Behavior Track must meet with one of the program coordinators before declaring Interdisciplinary Studies as a major.

Department of Biological Sciences

Professors: Virginia Anderson, Gail Gasparich, L. Scott Johnson, Brian Masters, Jay Nelson, Gerald Robinson, James Saunders, Erik Scully, Richard Siegel (*Chair*), Erik Silldorff, Joel Snodgrass, Jane Wolfson

Associate Professors: Brian Fath, Susan Gresens, Sarah Haines, Barry Margulies, Vonnie Shields, Larry Wimmers

Assistant Professors: Vanessa Beauchamp, Harald Beck, Mark Bulmer, Cynthia Ghent, David Hearn, Matthew Hemm, John LaPolla, Meghan May, William Mechling, Roland Roberts, Jack Shepard, Colleen Sinclair, Michelle Snyder, Elizabeth Vaidya, Laurie Williams-Hogarth

Visiting Assistant Professors: Anne Estes, Lauren Spearman

Adjunct Research Professors: Steven Baskin, Alan Brimfield, David Lenz, John McDonough, John Petrali, James Romano Jr., John Schlager, Alfred Sciuto, Tsung-Ming Shih, William Smith, Jay Valdes

Lecturers: Sarah Bruce, Susannah Feldman, Pamela Healey, Laura Martin, Lynn Middleton, Charlotte Saylor,

Part-time Faculty: Cathrine Bay, Linda Behrens, Brian Morrison, Joann Pilachowski, Bernadette Stundick

Undergraduate Biology Student Coordinator: Mara Lauterbach

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Fax: 410-704-2405
www.towson.edu/biology

PROGRAMS OF THE DEPARTMENT

The Department of Biological Sciences offers the following programs of study: the major in Biology, the minor in Biology and the Master of Science in Biology. For more information about the master's program, consult the *Graduate Catalog*.

A major in Biology is recommended for students interested in pursuing general careers in botany, zoology, ecology, microbiology or molecular biology. It is also recommended for individuals preparing for graduate studies in biology, medicine, dentistry or medically oriented fields, including optometry, pharmacy, podiatry or veterinary science; teacher education in secondary schools, i.e., teaching of biological or natural sciences; basic or applied research in the biological sciences; or environmental biology, including conservation, wildlife biology, forestry, fisheries, pollution control and marine biology.

Students selecting this major should contact the department to be assigned an adviser to assist them in designing a program to meet their special needs. Students will meet with their adviser each term to discuss their progress and to facilitate necessary changes in their programs of study.

MAJOR IN BIOLOGY

The Biology major requires a minimum of 11 courses within the biological sciences with a range of 36 to 50 units, depending upon the concentration and configuration of electives selected. A typical student will complete a minimum of 38 to 40 units in biology. Four courses are required and seven elective courses are selected from within the department to complete a concentration. In addition, six to seven ancillary courses (24–30 units) must be completed in the disciplines of chemistry, mathematics and physics. The program must be completed with a grade equivalent of 2.00 or higher in all course work.

Selection of appropriate electives allows students to fulfill the requirements of any of four areas of concentration: Cell and Molecular Biology, Functional Biology of Animals, Organismal Biology and Ecology, or Secondary School Biology. Completion of one of these concentrations is required for a major in Biology. Students are strongly encouraged to plan their programs in consultation with an adviser who is a member of the biology faculty.

Required Courses (13 units)

BIOL 201	Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Introduction to Ecology and Evolution (4)
BIOL 204	Educational and Career Planning for the Biologist (1)
BIOL 309	Principles of Genetics (4)

Breadth Courses (10–20 units)

The following are required for all Biology majors unless indicated differently within the concentration.

Choose one of the following:

BIOL 208	Biodiversity (3) or
BIOL 205	General Botany (4) and
BIOL 207	General Zoology (4)
Choose one of the following:	
BIOL 405	Molecular Ecology (4) or
BIOL 408	Cell Biology (4) or
BIOL 409	Molecular Biology (4)

Choose one of the following:

BIOL 213-214	Human Anatomy and Physiology I, II (4,4) or
BIOL 325	Animal Physiology (4) or
BIOL 436	Plant Physiology (3)

Ancillary Courses (24–30 units)

The following courses are required for all Biology majors unless indicated differently within the concentration.

Chemistry (13–18 units)

CHEM 110-111	General Chemistry I, II (4,4)
CHEM 330	Essentials of Organic Chemistry (5) or
CHEM 331-332	Organic Chemistry I, II (5,5)

Physics (8 units)

One of the following:

PHYS 211-212	General Physics I, II (4,4) or
PHYS 241-242	General Physics I, II Calculus-Based (4,4)

Mathematics (3–4 units)*

One of the following:

MATH 211	Calculus for Applications (3)
MATH 237	Elementary Biostatistics (4)
MATH 273	Calculus I (4)
PSYC 212	Behavioral Statistics (4)

*Because material covered in Basic Mathematics for the Sciences (MATH 115) is a prerequisite for chemistry and physics, students who have not completed high school trigonometry and two years of high school algebra in good standing should take MATH 115 in addition to one of the options listed above.

Chemistry I and II should be taken during the freshman year, Organic Chemistry I and II during the sophomore year and Physics as soon as possible.

Concentrations

Biology majors are required to complete one of four concentrations in biology by selecting a minimum of seven courses from among groups of electives within each concentration. One of these electives may be from outside the concentration. Within each concentration, options exist for fulfilling each of three areas of breadth and for fulfilling concentration electives. Each student is strongly encouraged to consult with a biology faculty adviser in selecting electives to satisfy his/her program of study in the concentration and to match the program of study with career objectives.

No more than 3 units combined from BIOL 491 Independent Research in Biology, BIOL 498 Honors Research and BIOL 499 Senior Thesis in Biology may count toward the Biology major. None of these courses may count toward the minor in Biology.

The following courses may not be used to fulfill Biology elective requirements: BIOL 100 Humanistic Botany, BIOL 103 Human Biology, BIOL 105 Environmental Biology, BIOL 115 Biology: the Science of Life, BIOL 211 Anatomy and Physiology I: Kinesiology Majors, BIOL 212 Anatomy and Physiology II: Kinesiology Majors, BIOL 215 Foundations of Microbiology, BIOL 301 Field Natural Science, BIOL 303 Life Science for the Elementary Teacher, BIOL 313 Biology of Aging, BIOL 321 Biology of Women, BIOL 322 Biotechnology and Society, BIOL 323 Genes, Evolution and Morality, BIOL 327: Dangerous Diseases, BIOL 333 Humans, Science and the Chesapeake Bay, BIOL 381 Biological Literature, BIOL 481 Directed Readings in Biology, BIOL 493 Internship in Biology, BIOL 494 Travel Study, and BIOL 495 Course Research.

Before enrolling in any 300- or 400-level elective course, Biology majors are required to complete a minimum of 8 units in lower-level biology courses with a grade equivalent of 2.00 or higher and to have an overall GPA of 2.00 or higher. Students who do not meet the above requirements may not be allowed to enroll in upper-level electives. Also, note that for those Biology electives listing BIOL 205 and/or BIOL 207 as prerequisites that BIOL 208 is an acceptable substitute.

The Department of Biological Sciences makes every effort to offer elective courses in a systematic fashion. However, it assumes no responsibility for cases in which unforeseen scheduling conflicts, course cancellations or staffing changes prevent students from taking a particular elective course during their residence at Towson University.

CELL AND MOLECULAR BIOLOGY CONCENTRATION

Completion of this concentration provides background for advanced studies in cell biology, molecular biology, genetics, microbiology, immunology and diverse fields that involve molecular tools in research. In addition, students may select this concentration as preparation for professional degree programs in medicine, dentistry or veterinary medicine or for a career in biology education, biomedical research or fields that integrate biology with other disciplines such as business or law. Students completing this concentration are encouraged to take at least two upper-level labs among the elective courses within this concentration. Students are encouraged to participate in a research experience or as an intern (e.g., BIOL 491 Independent Research in Biology, BIOL 493 Internship in Biology, BIOL 498 Honors Research or BIOL 499 Senior Thesis in Biology). They should consult with their adviser regarding these opportunities.

Required Courses (13 units)**Breadth Courses (14–23 units)**

Same as required for Biology major with following provision:

Take two of the following:

BIOL 405	Molecular Ecology (4)
BIOL 408	Cell Biology (4)
BIOL 409	Molecular Biology (4)

Elective Courses (11–14 units)

Choose one of the following:

BIOL 410	Molecular Biology Lab (2) or

CHEM 356	Biochemistry Laboratory (2)

Choose two of the following:

BIOL 315	Medical Microbiology (4)
BIOL 318	Microbiology
BIOL 360	Histology (4)
BIOL 421	Immunology (4)
BIOL 428	Virology (3)
BIOL 463	Developmental Biology
CHEM 351	Biochemistry I (3)
MBBB 301	Introduction to Bioinformatics (3)

Free Elective (3–4 units)

Select one biology elective from lists of electives in any Biology concentration or successfully complete BIOL 491 Independent Research in Biology or both BIOL 498 Honors Research and BIOL 499 Senior Thesis in Biology. If Human Anatomy and Physiology I (BIOL 213) was selected for the physiology breadth, that may satisfy the Free Elective requirement after successfully completing BIOL 214.

Ancillary Courses (24–30 units)

As required for Biology major.

Recommended Courses

MATH 273	Calculus I (4) or
MATH 211	Calculus for Applications (3)

FUNCTIONAL BIOLOGY OF ANIMALS CONCENTRATION

This course of study is designed to provide students with an understanding of animal physiology consistent with the expectations of medical and dental education programs, veterinary medicine programs,

anatomy and physiology graduate programs, or a career in research (as a clinical or basic science research technician). The Cell and Molecular Concentration is also an option for students interested in medically related fields. Students preparing for careers in medically related fields are strongly recommended to take both BIOL 213 and 214. Students planning on careers in research or a research application field are encouraged to participate in a research experience (e.g., BIOL 491 Independent Research in Biology, BIOL 498 Honors Research or BIOL 499 Senior Thesis in Biology). Pre-clinical students are encouraged to participate in volunteer work or internships within a clinical setting. Consult with your adviser about these opportunities.

Required Courses (13 units)

Breadth Courses (10–20 units)

As required for Biology major with the exception that the following is required:

Choose one of the following:

BIOL 213-214 Human Anatomy and Physiology I, II (4,4)+
or

BIOL 325 Animal Physiology (4)*

*If Animal Physiology (BIOL 325) is selected, two electives must be selected from among the list of Focused Electives.

+Recommended for students interested in clinical field

Elective Courses (10–16 units)

Physiology Elective:

BIOL 470 Advanced Physiology (4)

Focused Electives: Choose one of the following:

BIOL 305 Electron Microscopy (4)
BIOL 315 Medical Microbiology (4)
BIOL 360 Histology (4)
BIOL 367 Endocrinology (3)
BIOL 421 Immunology (4)
BIOL 427 Neuromuscular Mechanisms of the Upper Body (2)
BIOL 428 Virology (3)
BIOL 463 Developmental Biology (3)

Free Electives (3–4 units)

Select one biology elective from lists of electives in any Biology concentration or successfully complete BIOL 491 Independent Research in Biology (3 units) or both BIOL 498 Honors Research (2 units) and BIOL 499 Senior Thesis in Biology (2 units).

Ancillary Courses (29–30 units)

Chemistry and physics as required for Biology major including:

CHEM 331-332 Organic Chemistry I, II (5,5)

Recommended Courses

CHEM 351 Introductory Biochemistry (3)+
CHEM 356 Biochemistry Laboratory (2)
MATH 237 Elementary Biostatistics (4)
MATH 273 Calculus I (4)
or

MATH 211 Calculus for Applications (4)

+Recommended for students interested in clinical field

ORGANISMAL BIOLOGY AND ECOLOGY CONCENTRATION

Completion of this concentration provides background for advanced studies in botany, zoology, conservation biology or ecology, and/or career opportunities in environmental education, in government environmental regulatory agencies

and in the private sector. Students completing this concentration are encouraged to take both General Botany (BIOL 205) and General Zoology (BIOL 207). Those students taking Biodiversity (BIOL 208) are required to complete an additional elective. Students taking this concentration have the option of choosing to complete a track in either Botany or Zoology, but selection of a track is not required. Students in this concentration are strongly encouraged to participate in a research experience or as an intern (e.g., BIOL 491 Independent Research in Biology, BIOL 493 Internship in Biology, BIOL 498 Honors Research or BIOL 499 Senior Thesis in Biology). They should consult with their advisers regarding these opportunities.

Required Courses (13 units)

Breadth Courses (10–20 units)

Same as required for Biology major.

If Biodiversity (BIOL 208) was selected to satisfy the Organismal Biology and Ecology Concentration, an additional elective must be selected from among the list of Principles of Ecology or Diversity.

Elective Courses (10–16 units)

Principles of Ecology Elective: Choose one of the following:

BIOL 310 Conservation Biology (4)
BIOL 402 General Ecology (4)
BIOL 406 Limnology (4)
BIOL 435 Plant Ecology (4)

Diversity Elective: Choose one of the following:

BIOL 347 Marine Biology (3)
BIOL 353 Invertebrate Zoology (4)
BIOL 371 Animal Behavior (4)
BIOL 413 Evolution (3)
BIOL 432 Vascular Plant Taxonomy (4)
BIOL 446 Tropical Ecology and Conservation (3)
BIOL 447 Tropical Field Ecology (4)
BIOL 452 Wetland Ecology (4)
BIOL 455 Fish Biology (4)
BIOL 456 Ornithology (4)
BIOL 458 Mammalogy (4)
BIOL 461 Entomology (4)
BIOL 467 Herpetology (4)

Organismal Elective (3–4 units)

Choose one elective from the list of Principles of Ecology Electives or Diversity Electives above, or successfully complete BIOL 491 Independent Research in Biology (3 units) or both BIOL 498 Honors Research (2 units) and BIOL 499 Senior Thesis in Biology (2 units). Students taking BIOL 208 Biodiversity are required to choose two biology electives from the above, or one biology elective from the list above and successfully complete BIOL 491 Independent Research in Biology (3 units) or both BIOL 498 Honors Research (2 units) and BIOL 499 Senior Thesis in Biology (2 units).

Ancillary Courses (25–30 units)

Chemistry and physics as required for Biology major, including one of the following:

MATH 237 Elementary Biostatistics (4)
or
PSYC 212 Behavioral Statistics (4)

Recommended Courses

MATH 273 Calculus I (4)
or
MATH 211 Calculus for Applications (3)
BIOL 484 Seminar in Ecology, Evolution and Behavior (1)

SECONDARY SCHOOL BIOLOGY

Students who complete this concentration and the required courses in the Department of Secondary Education will meet certification requirements to teach secondary school biology in at least 33 states, including Maryland. Students, upon completion of 45 units, must apply to the Department of Secondary Education and accepted students are assigned an adviser in that department in addition to their adviser in the Department of Biological Sciences. Applicants to the Department of Secondary Education must either submit Praxis I scores or have earned a minimum SAT score of 1100. Students should consult the Department of Secondary Education regarding certification requirements. Students with bachelor's degrees who desire to become certified to teach biology in Maryland or other states should contact the Department of Secondary Education for advising in a Professional Education Program and also contact the Department of Biological Sciences for an adviser. **NOTE: Students must complete all of the requirements for Certification including Student Teaching in order to complete this Concentration. Otherwise, they must complete the requirements for another Concentration in order to complete the Major in Biology.**

Required Courses (13 units)

Breadth Courses (15–20 units)

BIOL 205 General Botany (4)
BIOL 207 General Zoology (4)

Choose one of the following:

BIOL 408 Cell Biology (4)
or
BIOL 409 Molecular Biology (4)

Choose one of the following:

BIOL 213-214 Human Anatomy and Physiology I, II (4,4)
or
BIOL 325 Animal Physiology (4)

Elective Courses (8–12 units)

Biology electives selected from the other concentrations and approved by adviser to bring the total to 40 biology units.

Ancillary Courses (32–34 units)

Chemistry (18 units)

CHEM 110-111 General Chemistry I, II (4,4)
CHEM 330 Essentials of Organic Chemistry (5)
or
CHEM 331-332 Organic Chemistry I, II (5,5)

Physics (4 units)

PHYS 211 General Physics I
or
PHYS 241 General Physics I, Calculus-based

Mathematics (3–4 units)

Choose one of the following:

MATH 211 Calculus for Applications (3)
or
MATH 273 Calculus (4)
or
MATH 237 Elementary Biostatistics
or
PSYC 212 Behavioral Statistics

Physical Science Electives (3–4 units)

Choose one of the following:

GEOL 121 Physical Geology (4)
ASTR 161 General Astronomy I (4)
GEOL 357 Physical Oceanography (3)
GEOG 377 Descriptive Meteorology (4)

MINOR IN BIOLOGY

To fulfill the requirements for a Biology minor, students must complete the following courses with a GPA of 2.00 or higher. A minimum of 12 units of the biology units applied toward the minor must be earned at Towson University, with at least 6 of those units at the upper level.

Biology Requirements (24 units)

BIOL 201	Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Introduction to Ecology, Evolution and Behavior (4)

Choose one of the following:

BIOL 208	Biodiversity (3)
	or
BIOL 205	General Botany (4)
	or
BIOL 207	General Zoology (4)

Electives

Biology electives approved for the Biology major to bring the total to 24 units

Ancillary Courses

CHEM 110-111 General Chemistry I, II (4,4)

TRANSFER CREDIT POLICY

All Biology majors must complete a minimum of 19 biology units toward the major at Towson University, with at least 10 of these units at the upper (300–400) level.

All Biology minors must complete a minimum of 12 biology units toward the minor at Towson University, with at least 6 of these units at the upper level.

HONORS PROGRAM

To graduate with departmental honors in Biology, students must complete BIOL 498 and BIOL 499 in consecutive terms of their senior year. The research thesis must be presented in an oral defense before the Honors Research Committee. An oral presentation open to the public is also required. In addition, a minimum of 3 units must be selected from BIOL 491 and/or BIOL 481 in the junior year. For eligibility and general information, consult the departmental honors program handbook.

INTERNSHIP/COOPERATIVE EDUCATION

The department participates in the university's cooperative education program, which provides junior- and senior-level students of high academic standing practical work experience while earning college credit. Students have served as interns at such facilities as the National Aquarium and the Smithsonian Institution. For further information, contact the Career Center.

STUDENT ORGANIZATIONS

The Biology Club, the Premed/Predent Club, the Animal Behavior Club and the local chapter of Beta Beta Beta, the national honor society in biology, are active organizations composed of and led by students. Among the events organized by members of the Biology Club are field trips, which are designed to enhance participants' knowledge of the biological sciences, and athletic and social events, which provide opportunities for student and faculty interaction in an informal atmosphere.

Tri Beta, whose members have achieved high scholarship, functions primarily to encourage and provide for the academic growth of its members.

GRADUATE PROGRAM

The course of study leading to the Master of Science in Biology is designed to provide greater knowledge and understanding of biology and to help students develop a proficiency in independent thought, inquiry and research. Students may pursue either the thesis program (30 units and a thesis) or the non-thesis program (36 units). Detailed information regarding both programs is given in the *Graduate Catalog*.

DEPARTMENT ANIMAL POLICY

In accordance with federal laws and regulations, Towson University, through its Institutional Animal Care and Use Committee, reviews the use of animals in teaching to assure compliance with the standards established by the U.S. Department of Agriculture and the National Institutes of Health for the humane treatment of animals. The university makes every effort to minimize the use of animals and seeks alternatives wherever possible. Although Towson University recognizes that some students may believe the use of animals as teaching tools is inhumane, certain curricula require the use of animals as a necessary part of instruction. Accordingly, where the use of animals in class demonstrations or experiments is a requirement for successful completion of any course, as determined by the department, students will be obliged to comply with those requirements as set forth by the instructor in the course syllabus. The university will not provide optional procedures for students who do not comply with course requirements.

If a course requires the use of animals in class demonstrations or experiments, however, the syllabus will specifically state that animals will be used in class demonstrations or experiments and that such use is a requirement for successful completion of the course. Notice of this requirement will be made a part of the course description and will be published in this catalog.

Department of Chemistry

Professors: Boon Loo, J. David Rawn, Lev Ryzhkov, James A. Saunders

Associate Professors: Ryan Casey, Clare Muhoro, Richard Preisler (*Chair*), Alan Pribula

Assistant Professors: Timothy Bruncker, Ellen Hondrogiannis, Shuhua Ma, David Ownby, Sonali Rajee, Ana Maria Soto, Ryan Sours, Shannon Stitzel, Cynthia Zeller

Director of Forensic Programs: Mark Profili

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PROGRAMS OF THE DEPARTMENT

The Department of Chemistry offers the following curricular options:

- Major in Chemistry
- American Chemical Society accredited major in Chemistry
- Major in Forensic Chemistry
- Chemistry Secondary Education Program for students planning to teach chemistry at the secondary level
- Dual Degree Program with the University of Maryland School of Pharmacy
- Minor in Chemistry
- Biochemistry Concentration through Molecular Biology, Biochemistry and Bioinformatics Program
- Environmental Chemistry Track in Environmental Science and Studies Program
- Master of Science in Forensic Science

The Chemistry major provides a strong background in all major areas of chemistry: physical chemistry, inorganic chemistry, organic chemistry, biochemistry, analytical chemistry and instrumental analysis. Students may concentrate in one or more of the above areas by taking advanced courses in areas of specific interest. Students are required to learn to use instruments commonly encountered in chemistry laboratories. Small classes are prevalent in all chemistry courses, and students are taught by faculty in both lecture and laboratory. Special topics courses are offered periodically to provide students the opportunity to broaden their background in chemistry.

Chemistry majors are prepared to pursue many different careers after graduation, including graduate study in chemistry and related areas, employment in government or industry, professional school (e.g., medicine, dentistry, pharmacy, law, library science), or secondary school teaching. Other employment opportunities are available to Chemistry majors, including those in water pollution, forensic chemistry, environmental chemistry, molecular biology, research and development, quality assurance and genetic engineering.

The Master of Science in Forensic Science program is a molecular biochemistry-based program focusing on forensic DNA analysis, rich with laboratory experience and capped with a research program, an internship in a forensic laboratory or a thesis. The program is intended for students who are interested in working as forensic scientists in the discipline of forensic body fluid analysis and, as such, undergraduate students should consider the General Forensic Science or DNA undergraduate tracks. Detailed information regarding the program is given in the *Graduate Catalog*.

DEPARTMENTAL HONORS PROGRAM

The Department of Chemistry, under the direction of the Towson University Honors College, offers a Departmental Honors program for students who demonstrate exemplary abilities in their discipline. Students in this program will work closely with faculty mentors in an individual program of research, directed readings, independent study and seminar. The student who completes an approved program will receive a diploma with the designation of Bachelor of Arts or Bachelor of Science with Honors, and Departmental Honors will appear on his or her transcript.

Criteria for Admission into the Departmental Honors Program

1. Major in Chemistry, Forensic Chemistry or Medicinal Chemistry.
2. Completion of at least 60 units of courses.
3. Overall cumulative GPA of 3.25 or above and a 3.50 or above cumulative average in major course requirements. Students below this threshold may appeal to the Departmental Honors Committee. Interested students should contact the department to find out the procedure for applying to this program.

MAJOR IN CHEMISTRY

The major in Chemistry requires completion of the required and elective courses for one of the two tracks described below. A grade of C or higher must be earned in each required course.

Chemistry Major General Track

This track is recommended for students who intend to teach in secondary schools, or to work in hospital laboratories, technical libraries, chemical or instrument sales, or related professions. Students who plan to pursue chemically oriented careers in medicine, dentistry, pharmacy, veterinary medicine, environmental science, agriculture or other allied fields should also consider this track. Students who wish to pursue graduate studies in chemistry, or to enter a career in the chemical industry should consider the Professional Track (described below). The Chemistry major General Track makes a good double major for students in the Molecular Biology, Biochemistry and Bioinformatics, or Environmental Science and Studies (Environmental Chemistry Track) programs, as well as majors in Biology, Geology and Physics. Students electing this track should contact the Department of Chemistry and be assigned an adviser to assist them in designing programs to meet their career needs.

Required Chemistry Courses (31–32 units)

CHEM 110-111	General Chemistry I and II (4,4)
CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 323	Inorganic Chemistry (4) or
CHEM 351	Biochemistry I (3)
CHEM 331-332	Organic Chemistry I and II (5,5)
CHEM 345	Principles of Physical Chemistry (3)
CHEM 372	Intermediate Laboratory I (2)

Additional Required Courses (11–12 units)

MATH 211	Calculus for Applications (3) or
MATH 273	Calculus I (4)
PHYS 211-212	General Physics I and II (non-calculus-based) (4,4)*

*PHYS 241-242 may be taken in place of PHYS 211-212.

In addition to the required courses listed above, students electing this track must take a minimum of three additional courses (minimum of 9 additional units) from the following list of electives. These 9 units must include at least 2 units of chemistry or FRSC courses.

Elective Courses (9 units minimum)

CHEM 310	Instrumentation in Analytical Chemistry (5)
CHEM 323	Inorganic Chemistry (4)*
CHEM 346	Theoretical Foundations of Physical Chemistry (3)+
CHEM 351	Biochemistry I (3)*
CHEM 356	Biochemistry Laboratory (2)
CHEM 357	Biochemistry II (3)
CHEM 391-4	Special Problems in Chemistry (1–3)**
CHEM 395-6	Internship in Chemistry (1–3)**
CHEM 491-4	Introduction to Research in Chemistry (1–3)**
CHEM 401	Seminar in Chemistry (1)#
CHEM 450	Ecological Biochemistry (3)
CHEM 461	Advanced Lecture Topics (1–3)
CHEM 462	Advanced Laboratory Techniques (1–2)
CHEM 480	Chemical Toxicology (3)
BIOL 309	Principles of Genetics (4)+
BIOL 408	Cell Biology (4)+
BIOL 409	Molecular Biology (3)+
BIOL 410	Molecular Biology Laboratory (2)+
BIOL 421	Immunology (4)+
BIOL 428	Virology (3)+
BIOL 450	Ecological Biochemistry
BIOL 486	Biology Majors Seminar (1)#+
COSC 336	Data Structures and Algorithm Analysis (4)+
COSC 378	Scientific Modeling and Simulation (3)+
CIS 458	Organizational Database Analysis (3)+
FRSC 363	Chemistry of Dangerous Drugs (3)
FRSC 367	Forensic Chemistry (3)
GEOL 305	Environmental Geology (4)+
GEOL 331	Mineralogy (4)+
GEOL 415	Hydrogeology (4)
MATH 330	Introduction to Statistical Methods (4) +
MATH 374	Differential Equations (3)+
MATH 378	Scientific Modeling and Simulation (3)+
MBBB 301	Introduction to Bioinformatics (4)
MBBB 401	Advanced Bioinformatics (3)+
MBBB 493	Seminar in Bioethics (1)#+
PHYS 307	Introductory Mathematical Physics (3)+
PHYS 311	Modern Physics (3)+

*Course cannot be counted as both part of the required courses and part of the electives.

**A maximum total of 4 units from among these courses may be applied to the elective requirements.

#Only one of CHEM 401, BIOL 486, and MBBB 493 (Seminar in Bioethics) may be counted for elective credit.

+Course has prerequisite(s) not listed among the elective courses above.

CHEM 301 is suggested as a course to fulfill Core 9 of the Core Curriculum requirements. Students may also wish to consider taking courses such as COSC 165 or 236, two terms of a foreign language, or courses in business or economics, depending on their interests and career goals.

Chemistry Major Professional Track

This track is recommended for those students who wish to obtain a more in-depth view of chemistry. This program is strongly recommended for those who intend to pursue graduate studies in chemistry or a closely related field, or who intend to work in basic or applied research in chemistry or as a chemist in industry. Students electing this track should contact the Department of Chemistry and be assigned an adviser to assist them in designing programs to meet their career needs.

Required Chemistry Courses (34 units)

The chemistry courses for this track are the same as described above for the General Track, except that CHEM 323 and CHEM 351 must *both* be taken.

Additional Required Courses (26 units)

CHEM 310	Instrumentation in Analytical Chemistry (5)
CHEM 346	Theoretical Foundations of Physical Chemistry (3)
CHEM 491-2	Introduction to Research in Chemistry (2)
CHEM 401	Seminar in Chemistry (1)
MATH 273-274	Calculus I and II (4, 4)
PHYS 241-242	General Physics I and II (calculus-based) (4,4)*

*PHYS 211-212 may be taken in place of PHYS 241–242, but this is not recommended.

In addition to the required courses listed above, students electing this track must take a minimum of three additional courses (minimum of 6 additional units) from the list of electives given below. These 6 units must include at least one chemistry or FRSC course.

Elective Courses (6 units minimum)

CHEM 356	Biochemistry Laboratory (2)
CHEM 357	Biochemistry II (3)
CHEM 391	Special Problems in Chemistry (1)*
CHEM 450	Ecological Biochemistry (3)
CHEM 461	Advanced Lecture Topics (1–3)
CHEM 462	Advanced Laboratory Techniques (1–2)
CHEM 480	Chemical Toxicology (3)
CHEM 491-4	Introduction to Research in Chemistry (1–2)*
BIOL 309	Principles of Genetics (4)+
BIOL 408	Cell Biology (4)+
BIOL 409	Molecular Biology (3)+
BIOL 410	Molecular Biology Laboratory (2)+
BIOL 421	Immunology (4)+
BIOL 428	Virology (3)+
BIOL 450	Ecological Biochemistry (3)
COSC 336	Data Structures and Algorithm Analysis (4)+
COSC 378	Scientific Modeling and Simulation (3)+
CIS 458	Organizational Database Analysis (3)+
FRSC 363	Chemistry of Dangerous Drugs (3)
FRSC 367	Forensic Chemistry (3)
GEOL 305	Environmental Geology (4)+
GEOL 331	Mineralogy (4)+
GEOL 415	Hydrogeology (4)
MATH 330	Introduction to Statistical Methods (4)
MATH 374	Differential Equations (3)
MATH 378	Scientific Modeling and Simulation (3)+
MBBB 301	Introduction to Bioinformatics (3)
MBBB 401	Advanced Bioinformatics (3)+
PHYS 307	Introductory Mathematical Physics (3)
PHYS 311	Modern Physics (3)
PHYS 354	Electricity and Magnetism (4)+

*A maximum of 1 unit of CHEM 391 and a maximum of 2 units of CHEM 391 and CHEM 491-4 may be used for elective credit.
+Course has prerequisite(s) not listed among the electives above.

CHEM 301 is suggested as a course to fulfill the Core 9 requirements. Students may also wish to consider taking courses such as COSC 165 or 236, two terms of a foreign language, or courses in business or economics, depending on their interests and career goals.

Students selecting this track should plan their college careers carefully because not all the advanced chemistry courses are offered every term. A long-term schedule for these courses may be obtained from the Department of Chemistry. Advanced chemistry electives are offered periodically, subject to adequate enrollment.

ACS CERTIFICATION

Certification of a student's chemistry degree from the American Chemical Society (ACS) is widely recognized throughout industry, government and education as a standard of excellence. Students with a good academic record are encouraged to pursue this option. Students electing the Professional Track may obtain ACS certification of their degrees provided they submit a comprehensive written report on their research (CHEM 491). Students who have taken PHYS 211-212 may count these courses for ACS certification provided that an additional advanced physics lecture course is taken, subject to prior approval by the Department of Chemistry.

MAJOR IN FORENSIC CHEMISTRY

Forensic Chemistry is a field in which many opportunities exist within law enforcement agencies and private companies. There is a critical shortage of qualified professionals in the field. Graduates of this program will be well prepared for employment in the forensic field with minimal on-the-job training or to pursue a graduate degree.

The major in Forensic Chemistry requires the completion of all the required and ancillary courses that are listed below, as well as satisfying the university's Core Curriculum requirements. A grade of C or better must be earned in all courses. Students who wish to earn internship credit (CHEM 395) for work in a crime lab must have a GPA of 3.00 or higher must have attained Jr. class rank and must pass a background investigation.

The Forensic Chemistry major is offered in three separate tracks as described below. These tracks provide the student with options to prepare for the specialized areas of forensic science in the professional work force or for graduate programs. Students are expected to declare their track of study by the end of their sophomore year.

For further information, please contact: Mark Profili (Smith Hall 514A, 410-704-2668, mprofili@towson.edu), Ellen Hondrogiannis (Smith Hall 528C, 410-704-5043, ehondrogiannis@towson.edu), or Cynthia Zeller (Smith Hall 573, 410-704-2170, czeller@towson.edu).

Courses Required of all Forensic Chemistry tracks

CHEM 110/111	General Chemistry I, II (4,4)
CHEM 210	Introduction to Analytical Chemistry (4)
CHEM 301	Professional Ethics for Scientists (3)
CHEM 331/332	Organic Chemistry I, II (5,5)

CHEM 351	Biochemistry I (3)
FRSC 367	Forensic Chemistry (3)
FRSC 368	Professional Practices in Forensic Science (3)
FRSC 440	Forensic Biochemistry, Emergency Medicine and Death Analysis (3)

Ancillary Courses (Required of all Forensic Chemistry tracks)

ANTH 357	Introduction to Forensic Crime Analysis (3)
ANTH 457	Advanced Forensic Crime Investigation (3)
BIOL 201	General Biology (4)
COSC 175	General Computer Science (4)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
PHYS 211/212	General Physics I, II (non-calculus based) (4,4)
	or
PHYS 241/242	General Physics I, II (calculus based) (4,4)
SOCI 254	Introduction to Criminal Justice (3)
SOCI 370	Criminal Law (3)

General Forensic Science Track

This track is intended for students who are considering employment in a drug analysis, trace evidence analysis or DNA analysis laboratory, or to pursue a graduate degree in a non-specialized forensic master's program.

In addition to the university's Core Curriculum courses and the required and ancillary courses for all Forensic Chemistry tracks, the following courses are required for the General Forensic Science track:

BIOL 309	Principles of Genetics (4)
BIOL 409	Molecular Biology (3)
BIOL 410	Molecular Biology Lab (2)
CHEM 310	Instrumentation in Analytical Chemistry (5)
CHEM 323	Inorganic Chemistry (4)
CHEM 345	Principles of Physical Chemistry (3)
FRSC 363	Chemistry of Dangerous Drugs (3)
CHEM 480	Chemical Toxicology (3)
MATH 231	Basic Statistics (3)
	or
MATH 237	Biostatistics (4)

Trace Evidence/Drug Analysis Track

This track is intended for students who desire a strong chemistry and instrumental analysis education and are considering a profession in a forensic chemistry laboratory or graduate program specializing in the analysis of trace evidence (fibers, paint, soil, flammables, explosives, etc.) or in the analysis of illegal drugs and toxicology.

In addition to the university's core and the required and ancillary courses of all Forensic Chemistry tracks, the following courses are required of the Trace Evidence/Drug Analysis track:

CHEM 310	Instrumentation in Analytical Chemistry (5)
CHEM 323	Inorganic Chemistry (3)
CHEM 345	Principles of Physical Chemistry (3)
FRSC 363	Chemistry of Dangerous Drugs (3)
CHEM 372	Intermediate Lab (1)
CHEM 480	Chemical Toxicology (3)
MATH 231	Basic Statistics (3)
	or
MATH 237	Biostatistics (4)

DNA Track

This track is intended for students who desire a strong biochemistry and molecular biology education and are considering a profession in a forensic laboratory or graduate program specializing in

body fluid and tissue analysis, and human identification using serology and DNA technology.

In addition to the university's core courses and the required and ancillary courses of all Forensic Chemistry tracks, the following courses are required of the DNA track:

BIOL 309	Principles of Genetics (4)
BIOL 409	Molecular Biology (3)
BIOL 410	Molecular Biology Lab (2)
CHEM 356	Biochemistry Lab (2)
CHEM 357	Biochemistry II (3)
CHEM 4xx	Forensic Body Fluid Analysis (4)
MATH 237	Biostatistics (4)

Environmental Chemistry Track in Environmental Science and Studies Program

Students may pursue the Environmental Chemistry Track of the Environmental Science and Studies Program that is described in a later section in the College of Science and Mathematics.

CHEMISTRY SECONDARY EDUCATION PROGRAM

Students in the Secondary Education Program should choose the Chemistry Major General Track as described in this section of the catalog. In addition to the required courses, students should choose from the following courses from the list of electives: CHEM 401 Seminar in Chemistry, and either CHEM 351 Biochemistry I or CHEM 323 Inorganic Chemistry (whichever one was not taken to satisfy required courses). The department recommends that students also choose from the list of electives an advanced chemistry laboratory course, CHEM 391 Special Problems in Chemistry or CHEM 491 Introduction to Research in Chemistry.

Students in the Secondary Education Program receive certification to teach in Maryland upon graduation. Chemistry majors seeking certification must complete BIOL 115 or 190 or BIOL 201 and GEOL 121 or ASTR 161 and SCIE 421. These students must also complete a total of 16 units in biology, physics, and earth/space science. The physics requirement for the Chemistry major [PHYS 211-212 (recommended) or PHYS 241-242] fulfills 8 units of this requirement. Students must also meet the university Core Curriculum requirements and other courses required by the Department of Secondary Education as listed in this catalog under the College of Education.

Upon the completion of 45 units, students are eligible to apply for admittance into the Secondary Education (SCED) Track. Once admitted to the SCED program, students will be assigned a SCED adviser in addition to their Chemistry faculty adviser. For further information, contact Sonali Rajee (Smith Hall 528D, 410-704-4622, sraje@towson.edu).

PREREQUISITE COURSE GRADES

The Department of Chemistry recommends that students achieve a grade of C or higher in all prerequisite courses listed for chemistry courses. A grade of C or higher *must* be obtained in each course required for the Chemistry major.

DUAL DEGREE MEDICINAL CHEMISTRY PROGRAM WITH UNIVERSITY OF MARYLAND SCHOOL OF PHARMACY

Refer to the Jess and Mildred Fisher College of Science and Mathematics Dual Degree Programs section in this catalog.

MINOR IN CHEMISTRY

Students whose major interest is in cell or molecular biology, physiology, physiological psychology, environmental studies, natural science or molecular physics, will find a good chemistry background to be a useful supplement to their major. The Chemistry minor provides this background and offers some flexibility in catering to the specific interest of students. Students should consult the Chemistry minor adviser as soon as possible after entering Towson to design programs to meet their needs.

The minor in Chemistry requires a minimum of 24 units in chemistry, 12 of which must be upper-division. At least 8 upper-division units must be taken at Towson. A grade of C or higher must be earned in each course. Courses taken elsewhere and accepted for transfer to Towson University may be used for the Chemistry minor.

Required Courses (18 units)

CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 330*	Essentials of Organic Chemistry (5)

*CHEM 331 and CHEM 332 can be taken in place of CHEM 330

Upper-Division Chemistry Electives

In addition to the required courses, one or more upper-division chemistry courses may have to be taken for a *total* of 12 upper-division units. CHEM301 may not be used to fulfill this requirement.

TRANSFER CREDIT POLICY

Students who transfer to Towson University from a regionally accredited two-year college with an A.A. degree should have completed two terms of general chemistry, two terms of organic chemistry, one term of calculus and two terms of general physics. Students who transfer from a two-year college *without* an A.A. degree should complete as many of the above-mentioned chemistry, physics and mathematics courses as possible. Transfer students should consult the Department of Chemistry concerning the transferability of chemistry courses and this catalog for university transfer policies.

Transfer students must complete at least 12 upper-division units in chemistry at Towson to graduate with a degree in Chemistry.

ADVANCED PLACEMENT AND CREDIT FOR PRIOR LEARNING

The Department of Chemistry awards credit for General Chemistry through the Advanced Placement Examinations given by the Educational Testing Service.

Students may also receive credit for General Chemistry by taking the Credit for Prior Learning Examination, which is administered through the Office for Non-Traditional Undergraduate Programs. Students may also receive credit for other chem-

istry courses by passing the appropriate examinations. Further information may be obtained from the department.

ADVANCED COMPOSITION COURSE

The Department of Chemistry offers CHEM 301 Professional Ethics for Scientists, which is a course that deals with professional ethics in the physical sciences and fulfills the requirements for the advanced writing course.

CORE CURRICULUM COURSES

Core 9	Advance Writing Seminar
CHEM 301	Professional Ethics for Scientists (3)
Core 8	Physical Sciences
CHEM 100	Chemistry and Current Problems (3)
CHEM 104	Introduction to Environmental Chemistry (4)
CHEM 110-111*	General Chemistry I, II (4,4)
CHEM 105-106*	Chemistry for Allied Health Professions I, II (4,4)
CHEM 115	Honors Chemistry for Allied Health Professions I (4)
IDNM 305	Ethics, Science and Society (3)
IDNM 309	Women, Society and Radiation Science (3)

*These two-term lecture-laboratory sequences meet the Core 8 requirement.

RESEARCH IN CHEMISTRY

Students interested in participating in research may enroll in CHEM 491 and should consult the undergraduate research coordinator, who will assist them in finding a research project of interest. Students must complete CHEM 491 before their final term at Towson University. In addition, undergraduate research participation grants are awarded by the university on a competitive basis to provide support for student research. The department offers competitive summer research stipends.

INTERNSHIPS

Chemistry majors are encouraged to participate in the internship program and receive academic credit for practical work experience in areas of special student interest. Academic credit can be acquired by taking CHEM 395 Internship in Chemistry. For further information, contact the Career Center, 410-704-2233, or the Department of Chemistry internship coordinator.

GRADUATE PROGRAMS

The Master of Science in Forensic Science program is a molecular biochemistry based program focusing on forensic DNA analysis rich with laboratory experience, capped with a research program, internship in a forensic laboratory or thesis. The program is intended for students who are interested in working as forensic scientists in the discipline of forensic body fluid analysis and as such undergraduate students should consider the General Forensic Science or DNA undergraduate tracks. Detailed information regarding the program is given in the *Graduate Catalog*.

The Department of Chemistry participates in the Master of Science (M.S.) program in Environmental Science. Detailed information regarding these programs is also found in the *Graduate Catalog*.

DEPARTMENTAL ACTIVITIES AND AWARDS

Many Chemistry majors actively participate in the Student Affiliates of the American Chemical Society (ACS), a student group supported by the department under the auspices of the ACS. This organization permits students to join the national organization and to obtain certain chemistry publications and services at reduced rates.

Student awards are given annually for outstanding work in chemistry courses. These include the CRC Press Freshman Chemistry Achievement Award, Merck Index Achievement Award in Organic Chemistry, ACS Achievement in Organic Chemistry Award (joint Polymer-Education Committee), Analytical Division (ACS) Award in Analytical Chemistry, Coblentz Society Award in Spectroscopy, Floyd A. Blankenship Award in Physical Chemistry, American Institute of Chemists Outstanding Senior Award, ACS Outstanding Student Award, Dr. Frank R. Milio Book Endowment, Linda Sweeting Endowment for Undergraduate Research in Science, and Alan and Eileen Wingrove Endowment for Chemistry Scholars.



Department of Computer and Information Sciences

Professors: Shiva Azadegan, Darush Davani, Ramesh Karne, Yanggon Kim Jonathan Lazar, Chao Lu (*Chair*), Michael O'Leary, Harry Zhou, Marius Zimand

Associate Professors: Charles Dierbach, Heidi Feng, Robert Hammell II, Sungchul Hong, Yeong-Tae Song, Alexander Wijesinha

Assistant Professors: Subrata Acharya, Nadim Alkharouf, Suranjan Chakraborty, Josh Dehlinger, Siddharth Kaza, Gabriele Meiselwitz, Charles Schmitt, Yuanqiong Wang, Wei Yu

Clinical Assistant Professors: Alfreda Dudley, J. Scott Hilberg, Blair Taylor

Lecturers: Patrick Appiah-Kubi, James Braman, Cheryl Brown, Adam Conover, Dennis Hamilton, Giovanni Vincenti, Roman Yasinovskyy, Iliana Zimand

OFFICE

7800 York Road, Room 406, 410-704-2633
www.towson.edu/cosc

PROGRAMS OF THE DEPARTMENT

Computer Science

The Department of Computer and Information Sciences offers several programs of study leading to baccalaureate, Master of Science and Doctor of Science degrees. The undergraduate programs in computer science include a major in Computer Science, a major in Computer Science with a track in Computer Security, a combined major in Computer Science and Mathematics, a combined major in Computer Science and Mathematics with a track in computer security, and a minor in Computer Science.

The major in Computer Science and the combined major in Computer Science and Mathematics are accredited by the Computing Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, 410-347-7700.

Information Systems

The undergraduate programs in information systems include: a major in Information Systems, a combined major in Information Systems and Business Administration, a combined major in Information Systems and e-Business, a major in Technical/Professional Studies in Information Technology in conjunction with the Community College of Baltimore County, and a minor in Information Systems.

Information Technology

Information technology (IT) involves the selection, installation, configuration, integration and administration of computing and communication technologies to meet individual, organizational and societal needs. It is complementary to other computing disciplines such as Computer Science and Information Systems, but is unique in that rather than focusing on creating new technology, it focuses on the application of current technology in various real world domains. The undergraduate information technology program prepares students to enter the workplace as IT professionals or pursue research and graduate studies in the IT field.

OVERVIEW

Students in any of the department's undergraduate programs are prepared with a broad foundation in the principles and concepts of computing, both theoretical and applied. Elective courses may be selected from a variety of topic areas including artificial intelligence, bioinformatics, computer graphics, decision support systems, e-commerce, human-computer interaction, robotics, scientific modeling, software engineering, software project management, systems analysis and design, and web-based programming. In addition, the department offers numerous courses in the area of information security including operating systems security, network security, and application software security. (Since 2001, Towson University has been designated as one of the National Centers of Academic Excellence in Information Assurance Education (CAEIAE) by the National Security Agency and the Department of Homeland Security.)

Matriculated students attending classes either full- or part-time may fulfill degree requirements. Students attending part-time in the evening are advised that not all required courses are available in the evening every term.

The department has 37 full-time faculty members and a number of part-time faculty. Research specialties include assistive technology, automated reasoning, cryptography, data mining, decision support systems, distance learning, distributed computing, genomics, geographical information systems, human-computer interaction, information assurance, information visualization, neural networks, universal usability, virtual collaboration, voice-over IP, and wireless networks. The department has 15 computing laboratories including smart classrooms, undergraduate majors open labs, graduate research lab, NSF-funded Security Lab, Linux Lab, Software Engineering Lab, a Universal Usability Lab and a Robotics Lab. The computing needs of department majors are also met by the facilities and services provided by the university's Office of Technology Services.

Students electing one of the majors should contact the Department of Computer and Information Sciences and be assigned faculty advisers to assist them in planning their academic schedules, identifying educational goals and maintaining good academic progress.

MAJOR IN COMPUTER SCIENCE

CAC/ABET Accredited

The Computer Science major requires 74–77 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University. Students cannot double-major in Computer Science and Computer Information Systems or in Computer Science and Information Technology.

Required COSC Courses (29 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 290	Principles of Computer Organization (4)
COSC 336	Data Structures and Algorithm Analysis (4)
COSC 350	Data Communications and Networking (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
COSC 480	Senior Seminar (1)
	(COSC 418 may be selected as a substitute for COSC 480.)

Required MATH Courses (18–19 units)

MATH 263	Discrete Mathematics (3)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 330	Introduction to Statistical Methods (4)
<i>And at least one of the following:</i>	
MATH 265	Elementary Linear Algebra (4)
MATH 275	Calculus III (4)
MATH 314	Introduction to Cryptography (3)
MATH 374	Differential Equations (3)
MATH 377	Mathematical Models (3)
MATH 378	Scientific Modeling and Simulation (3)
MATH 435	Numerical Analysis I (3)
MATH 436	Numerical Analysis II (3)
MATH 437	Operations Research (3)
MATH 451	Graph Theory (3)
MATH 467	Algebraic Structures (4)

Elective COSC Courses (12 units)

At least two courses from the following:

COSC 417	Introduction to the Theory of Computing (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 461	Artificial Intelligence (3)
COSC 483	Design and Analysis of Algorithms (3)
<i>At least two courses from the following:</i>	
COSC 412	Software Engineering (3)
COSC 431	Selected Topics in Computer Science (3)
COSC 465	Robotics (3)
COSC 471	Computer Graphics (3)
COSC 484	Web-Based Programming (3)

Science Requirement (12–14 units)

A sequence of two lab science courses taken from physics, biology or chemistry, which must be accepted in that major. One additional (4-unit) course or two additional (3-unit) courses from physics, biology or chemistry, also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met. A list of approved courses can be found on the department's website.

Core Curriculum Requirement (3 units)

COMM 131 (completed with a grade equivalent of 2.00 or higher).

MAJOR IN COMPUTER SCIENCE WITH A TRACK IN COMPUTER SECURITY

The Computer Science major with a track in Computer Security requires 82–84 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University.

Required COSC Courses (28 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 290	Principles of Computer Organization (4)
COSC 336	Data Structures and Algorithm Analysis (4)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)

Required MATH Courses (18 units)

MATH 263	Discrete Mathematics (3)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 314	Introduction to Cryptography (3)
MATH 330	Introduction to Statistical Methods (4)

Required Computer Security Track Courses (18 units)

COSC 350	Data Communications and Networking (3)
CIS 377	Information Systems Security (3)
COSC 440	Operating Systems Security (3)
COSC 450	Network Security (3)
COSC 458	Application Software Security (3)
COSC 481	Case Studies (3)

Science Requirement (12–14 units)

A sequence of two lab science courses taken from physics, biology or chemistry, which must be accepted in that major. One additional (4-unit) course or two additional (3-unit) courses from physics, biology or chemistry, also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met.

Core Curriculum Requirements (6 units)

COMM 131	completed with a grade equivalent of 2.00 or higher.
COSC 418	completed with a grade equivalent of 2.00 or higher.

COMBINED MAJOR IN COMPUTER SCIENCE AND MATHEMATICS

CAC/ABET Accredited

The Computer Science major with a second major in Mathematics requires 89–93 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University.

Required Courses (62 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 290	Principles of Computer Organization (4)
COSC 336	Data Structures and Algorithm Analysis (4)
COSC 350	Data Communications and Networking (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
COSC 480	Senior Seminar (1)
(COSC 418 may be selected as a substitute for COSC 480.)	
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Math (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 330	Introduction to Statistical Methods (4)
MATH 369	Introduction to Algebra (3)
MATH 435	Numerical Analysis I (3)
MATH 490	Senior Seminar in Mathematics (3)

Elective Courses (15–17 units)**Computer Science (9 units)**

Two courses from the following:

COSC 417	Introduction to the Theory of Computing (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 483	Design and Analysis of Algorithms (3)

And one course from the following:

COSC 412	Software Engineering (3)
COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 484	Web-Based Programming (3)
<i>or</i>	

Two courses from the following:

COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 484	Web-Based Programming (3)

And one course from the following:

COSC 417	Introduction to the Theory of Computing (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
COSC 483	Design and Analysis of Algorithms (3)

Mathematics (6–8 units)

Two courses from the following:

MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 377	Mathematical Models (3)
<i>or</i>	
MATH 439	Computational Probability Models (3)
MATH 378	Scientific Modeling and Simulations (3)
MATH 437	Operations Research (3)
MATH 451	Graph Theory (3)
MATH 457	Differential Geometry (3)
MATH 465	Theory of Numbers (3)
MATH 467	Algebraic Structures (3)
MATH 473	Introductory Real Analysis (4)
MATH 475	Complex Analysis (3)
MATH 477	Topology (3)

Science Requirement (12–14 units)

A sequence of two lab science courses taken from physics, biology or chemistry, which must be accepted in that major. One additional (4-unit) course or two additional (3-unit) courses from physics, biology or chemistry, also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met.

Core Curriculum Requirement

COMM 131 completed with a grade equivalent of 2.00 or higher..

COMBINED MAJOR IN COMPUTER SCIENCE AND MATHEMATICS WITH A TRACK IN COMPUTER SECURITY

The combined major in Computer Science and Mathematics with a track in Computer Security requires 103–106 units completed with a grade equivalent of 2.00 or higher.

Required Courses (67 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 290	Principles of Computer Organization (4)
COSC 336	Data and File Structures (4)
COSC 350	Data Communications and Networking (3)
COSC 418	Ethical and Societal Concerns of Computer Scientists (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 314	Cryptography (3)
MATH 330	Introduction to Statistical Methods (4)
MATH 369	Introduction to Abstract Algebra (3)
MATH 465	Number Theory (3)
MATH 490	Senior Seminar (3)

Security Track (15 units)

CIS 377	Introduction to Information Assurance (3)
COSC 440	Operating Systems Security (3)
COSC 450	Network Security (3)
COSC 458	Application Software Security (3)
COSC 481	Case Studies in Computer Security (3)

Elective Math Course (3–4 units)

Choose one of the following:

MATH 331	Probability (4)
MATH 378	Scientific Modeling and Simulation (3)
MATH 451	Graph Theory (3)
MATH 467	Algebraic Structures (3)

Science Requirements (12–14 units)

A sequence of two lab science courses taken from physics, biology or chemistry, which must be accepted in that major. One additional (4-unit) course or two additional (3-unit) courses from physics, biology or chemistry, also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met.

Core Curriculum Requirement

COMM 131 (3) completed with a grade equivalent of 2.00 or higher.

MAJOR IN INFORMATION SYSTEMS

The Information Systems major requires 63–65 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University.

Required IS Courses* (30 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
CIS 239	Computer Systems Architecture (3)
CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)
CIS 479	Software Project Management (3)
COSC 480	Senior Seminar (1)
(COSC 418 may be selected as a substitute for COSC 480.)	

Required IS Project Course (3 units)

Students must select one of the following:

CIS 435	Human-Computer Interaction (3)
<i>or</i>	
CIS 440	Systems Development for E-commerce (3)
<i>or</i>	
CIS 475	Analysis/Design for Web Sites (3)

Required MATH Courses (9–11 units)

MATH 211	Calculus for Applications (3)
<i>or</i>	
MATH 273	Calculus I (4)
MATH 231	Basic Statistics I (3)
<i>or</i>	
MATH 330	Introduction to Statistical Methods (4)
MATH 263	Discrete Mathematics (3)

Additional CIS/COSC Courses (9 units)

Two courses must be upper-level; cannot count IS Project course as both Project Course and a COSC/CIS elective

CIS 212	Introduction to Business Programming (3)
CIS 265	Visual Basic (3)
CIS 377	Information Systems Security (3)
CIS 397	Internship in CIS (3)
COSC 412	Software Engineering (3)
CIS 425	Decision Support Systems (3)
CIS 433	Selected Topics in Information Systems (3)

CIS 435	Human-Computer Interaction (3)
CIS 440	Systems Development for E-Commerce (3)
CIS 445	Universal Usability
COSC 459	Computer Simulation and Modeling (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
CIS 475	Analysis/Design for Web Sites (3)*
COSC 484	Web-Based Programming (3)*
CIS 495	Independent Study in IS (3)

*cannot apply both CIS 475 and COSC 484 toward major

Additional Course Sequence (12–15 units)

To build successful information systems requires a basic understanding of the environment in which the information system will be used. Therefore, all majors in information systems (IS) must take a 12–15-unit course sequence in an Information Systems environment. A list of pre-approved course sequences is available from the Department of Computer and Information Sciences. Pre-approved course sequences include Bioinformatics, Business Administration, Computer Art and Graphics, Geographic Information Systems, Health Care Management, and Instructional Technology. Students may also choose to create their own custom 12-unit course sequence in a different discipline. Custom-designed sequences require the prior approval of the IS undergraduate program committee.

NOTE: A minimum of 6 units must be upper-level and must be taken at Towson University.

COMBINED MAJOR IN INFORMATION SYSTEMS AND BUSINESS ADMINISTRATION

The combined major in Information Systems and Business Administration requires at least 89 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University.

Degree candidates intending to major in Business Administration are designated as “pre-Business” (PBUA) until admitted into the BUAD major. See admission requirements in the Business Administration major section of this catalog.

Lower-Level Prerequisite Courses (18 units)

ACCT 201/211	Accounting Principles I (3)
ACCT 202/212	Accounting Principles II (3)
ECON 201/203	Microeconomic Principles (3)
ECON 202/204	Macroeconomic Principles (3)
LEGL 225	Legal Environment of Business (3)
MATH 231	Basic Statistics (3)
	or
ECON 205	Statistics for Business and Economics I (3)

Required MATH Courses (6–7 units)

MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
MATH 263	Discrete Mathematics (3)

Information System Requirements (26 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
CIS 239	Computer Systems Architecture (3)
CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)

Required IS Project Course (3 units)

Students must select one of the following:

CIS 435	Human-Computer Interaction (3)
CIS 440	Systems Development for E-Commerce (3)
CIS 475	Analysis/Design for Web Sites (3)

Upper-Level CBE Requirements (27 units)

BUSX 301	Business Cornerstone (3)
BUSX 460	Professional Experience (3)
EBTM 311	Principles of e-Business (3)
FIN 331	Principles of Financial Management (3)
MKTG 341/342	Principles of Marketing (3)
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 375	International Business: Theory and Practice (3)
MNGT 481	Business Strategy and Policy (3)

Ethics Requirement (3 units)

COSC 418	Ethical and Societal Concerns for Computer Scientists (3)
	or
MNGT 482	Business Ethics and Society (3)

Required Elective Course (3 units)

ECON 306	Statistics for Business and Economics II (3)
	or
CIS 479	Software Project Management (3)

COMBINED MAJOR IN INFORMATION SYSTEMS AND E-BUSINESS

The combined major in Information Systems and e-Business requires a minimum of 136 units to be earned with a grade equivalent of 2.00 or higher. The program consists of 18 units of lower-level required courses, 6–7 units of required mathematics courses, 24 units of upper-level BUAD required courses, 15 units of e-Business courses, 32 units of information systems requirements as well as the core requirements.

Admission to the Combined Major in e-Business and Information Systems

Students are admitted to the combined major in e-Business and Information Systems on a competitive basis after first being admitted to the university. Admission to the university does not guarantee admission to this combined major. Each term, the Department of e-Business and Technology Management considers applications for admission to the major in the following term. In order to be admitted to the major, students must satisfy specific screening requirements (listed under the e-Business major) and complete an application form for admission. Degree candidates intending to pursue the combined major in e-Business and Information Systems are designated as “pre-e-Business” (PEBU) until admitted into the major. Students are required to meet each term with their assigned faculty adviser to evaluate their progress in completing the requirements for admission to the EBUS major and the degree.

Admission Requirements

Candidates for the combined major in e-Business and Information Systems must satisfy the requirements for the e-Business major.

Application Procedure

Refer to the Application Procedure section in this catalog under the e-Business major.

Lower-Level BUAD Courses (18 units)

ACCT 201/211	Accounting Principles I (3)
ACCT 202/212	Accounting Principles II (3)
ECON 201/203*	Microeconomic Principles (3)
ECON 202/204	Macroeconomic Principles (3)
LEGL 225	Legal Environment of Business (3)
MATH 231*	Basic Statistics (3)
	or
ECON 205	Statistics for Business and Economics I (3)

Required MATH Courses (6–7 units)

MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
MATH 263	Discrete Mathematics (3)

Information Systems Requirements (32 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
CIS 239	Computer Systems Architecture (3)
CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)
CIS 479	Software Project Management (3)
	or
EBTM 443	Introduction to Project Management (3)
EBTM 311	Principles of e-Business (3)

Upper-Level BUAD Requirements (24 units)

BUSX 301	Business Cornerstone (3)*
BUSX 460	Professional Experience (3)
FIN 331	Principles of Financial Management (3)
EBTM 337	Information Technology (3)**
MKTG 341	Principles of Marketing (3)
MNGT 361	Principles of Management (3)
EBTM 365	Principles of Operations Management (3)
MNGT 481	Business Strategy and Policy (3)

*Note: Advanced Writing course is taken prior to or concurrently with BUSX 301

**Note: EBTM 337 course is taken prior to or concurrently with EBTM 311

Required e-Business (12 units)

EBTM 367	e-Business Infrastructure (3)
EBTM 411	e-Business Marketing (3)
EBTM 419	Supply Chain Management (3)
EBTM 454	Business Process Management (3)
EBTM 431	Advanced e-Business (3)

MAJOR IN INFORMATION TECHNOLOGY

The Information Technology major requires 55–56 units to be earned with a grade equivalent of 2.00 or higher. A minimum of 30 major units must be taken at Towson University.

Required Core Courses (34 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
ITEC 231	Fundamentals of Web Technologies (3)
COSC 236	Introduction to Computer Science I (4)
ITEC 315	Data and Information Management (3)
ITEC 325	System Administration and Maintenance (3)
CIS 350	Telecommunications (3)
CIS 377	Information Systems Security (3)
ITEC 411	System Architecture and Integration (3)
COSC 418	Ethics and Societal Concerns of Computer Scientists (3)
CIS 435	Human Computer Interaction (3)
ITEC 485	Information Technology Capstone (3)

Elective Courses (15-16 units)

At least four courses must be upper level.

CIS 212	Introduction to Business Programming or
CIS 265	Visual Basic Programming or
COSC 237	Introduction to Computer Science II
ITEC 397	Internship in Information Technology
CIS 425	Decision Support Systems
CIS 440	Systems Development for E-Commerce
CIS 445	Universal Usability
CIS 475	Analysis/Design for Websites*
COSC 484	Web-Based Programming*
ITEC 470	Special Topics in Information Technology
ITEC 495	Independent Study in Information Technology

*cannot apply both CIS 475 and COSC 484 toward major

Other Requirements (6 units)

The following courses must be completed with a grade equivalent of 2.00 or higher.

COSC 111	Information and Technology for Business or
COSC 112	Honors: Information and Technology for Business or
COSC 119	Using Information Effectively in the Computing Sciences
ENGL 317	Writing for Business and Industry

2+2 PROGRAMS FOR TRANSFER STUDENTS FROM HARFORD COMMUNITY COLLEGE

Students transferring from Harford Community College with an A.S. in Computer Science can major in either Computer Science, Computer Science with Security Track, or Information Systems by completing the following major requirements. (Refer to the Harford Community College catalog for the specific science and math courses that are required to be taken at HCC as part of the A.S. program for transfer to these majors.)

Computer Science (2+2)**Required Courses (20 units)**

COSC 336	Data Structures and Algorithm Analysis (4)
COSC 350	Data Communications and Networking (3)
COSC 418	Ethical and Societal Concerns for Computer Scientists (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)

Group A Electives (6 units)

COSC 367	Discrete Structures (3)
COSC 415	Compiler Design (3)
COSC 417	Introduction to Theory of Computing (3)
COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 461	Artificial Intelligence (3)
COSC 483	Design and Analysis of Algorithms (3)

Group B Electives (6 units)

COSC 412	Software Engineering (3)
COSC 431	Selected Topics in Computer Science (3)
COSC 438	Parallel/Vector Computer Architecture (3)
COSC 471	Computer Graphics (3)
COSC 484	Web-Based Programming (3)

General Requirement

COMM 131	Fundamentals of Speech (3)

Required Science Course (4 units)

ASTR 161	General Astronomy I (4)
BIOL 201	Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Intro to Ecology, Evolution and Behavior (4)
BIOL 205	General Botany (4)
BIOL 207	General Zoology (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
CHEM 210	Introduction to Analytical Chemistry (4)
CHEM 331	Organic Chemistry I (4)
GEOL 121	Physical Geology (4)
PHYS 241	General Physics I (4)
PHYS 242	General Physics II (4)
PHYS 243	General Physics III (4)

Computer Science With Security Track (2+2)**Required Courses (20 units)**

COSC 336	Data Structures and Algorithm Analysis (4)
COSC 350	Data Communications and Networking (3)
COSC 418	Ethical and Societal Concerns for Computer Scientists (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)

Required Security Track Courses (15 units)

COSC 450	Network Security (3)
COSC 440	Operating Systems Security (3)
COSC 458	Application Software Security (3)
COSC 481	Case Studies (3)

Required Math Course (3 units)

MATH 314	Cryptography (3)

General Requirement

COMM 131	Fundamentals of Speech (3)

Required Science Course (4 units)

ASTR 161	General Astronomy I (4)
BIOL 201	Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Intro to Ecology, Evolution and Behavior (4)
BIOL 205	General Botany (4)
BIOL 207	General Zoology (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
CHEM 210	Introduction to Analytical Chemistry (4)
CHEM 331	Organic Chemistry I (4)
GEOL 121	Physical Geology (4)
PHYS 241	General Physics I (4)
PHYS 242	General Physics II (4)
PHYS 243	General Physics III (4)

Information Systems (2+2)**Required Courses (24 units)**

CIS 211	Fundamentals of Information Systems and Technology (3)
CIS 334	Data Organization (3)
CIS 379	Systems Analysis and Design (3)
CIS 458	Organizational Database Management (3)
CIS 479	Software Project Management (3)
COSC 111	Information and Technology for Business (3)
CIS 350	Telecommunications (3)
COSC 418	Ethical and Societal Concerns for Computer Scientists (3)

Required Project Course (3 units)

CIS 435	Human Computer Interaction (3)
CIS 440	Systems Development for E-Commerce (3)
CIS 475	Analysis and Design for Web Sites (3)

CIS / COSC Electives (6 units)

CIS 377	Information Systems Security (3)
CIS 397	Internship in IS (3)
CIS 425	Decision Support Systems (3)
CIS 433	Selected Topics in Information Systems (3)
CIS 435	Human Computer Interaction (3)
CIS 440	Systems Development for E-Commerce (3)
CIS 475	Analysis and Design for Web Sites (3)
CIS 495	Independent Study in IS (3)
COSC 412	Software Engineering (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
COSC 484	Web-Based Programming (3)

Courses from the College of Business and Economics (9 units)

ECON 202	Macroeconomics (3)

Two additional upper-level courses (ECON 323, ECON 325, ECON 333, and EBMT 337 cannot be used in this category.)

MINOR IN COMPUTER SCIENCE

This minor is available to students who have a major other than Computer Science, Information Systems or Information Technology. All Computer Science minors are required to take 21 units in Computer Science to be completed with a grade equivalent of 2.00 or higher. At least half must be taken at Towson University. Students cannot major in Computer Information Systems and minor in Computer Science.

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 336	Data Structures and Algorithm Analysis (4)

Elective COSC Courses (9 units)

At least three courses from the following:

COSC 310	Advanced Programming (3)
COSC 350	Data Communications and Networking* (3)
COSC 412	Software Engineering (3)
COSC 431	Selected Topics in Computer Science (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 439	Operating Systems (3)
COSC 440	Operating Systems Security* (3)
COSC 441	Computer Performance Evaluation (3)
COSC 450	Network Security* (3)
COSC 455	Program Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
COSC 458	Application Software Security* (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
COSC 483	Design and Analysis of Algorithms (3)
COSC 484	Web-Based Programming (3)
COSC 495	Independent Study in Computer Science (3)

The 9 units of elective courses must be upper-division courses and may include one approved computer-related course from outside the department.

*Has additional prerequisites other than COSC 336.

MINOR IN INFORMATION SYSTEMS

All Information Systems minors are required to take 20 units in computer science and information systems to be completed with a grade equivalent of 2.00 or higher. At least half must be taken at Towson University. Students cannot major in Computer Science or Information Technology and minor in Information Systems.

Required CIS/COSC Courses (11 units)

CIS 211	Fundamentals of Information Systems and Technology (3)
COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)

Elective CIS/COSC Courses (9 units)

At least three courses from the following:

CIS 334	Data Organization (3)
CIS 350	Telecommunications (3)
CIS 377	Information Systems Security (3)
CIS 379	Systems Analysis and Design (3)
CIS 397	Internship (3)
COSC 412	Software Engineering (3)
CIS 425	Decision Support Systems (3)
CIS 433	Special Topics in Information Systems (1–3)
CIS 435	Human-Computer Interaction (3)
CIS 440	Systems Development for E-Commerce (3)
CIS 458	Organizational Database Management (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
CIS 475	Analysis/Design for Web Sites (3)**
CIS 479	Software Project Management (3)
COSC 484	Web-Based Programming (3)**
CIS 495	Independent Study in IS (3)

One course from outside CIS/COSC may be used if it is first approved by the Department of Computer and Information Sciences.

** Cannot apply both CIS 475 and COSC 484 toward minor.

TRANSFER CREDIT POLICY

Students intending to transfer into the Computer Science or Information Systems program should provide course descriptions and supportive materials from their institution for review by a departmental adviser. Community college students from local public institutions should be aware that agreements on equivalency of courses are maintained; they should inquire about the current agreement either at their institution or at Towson University. They should also be aware that community college courses can only be counted as lower-division work. Transfer students are urged to gain a good background in mathematics.

SECOND BACHELOR'S PROGRAM

Baccalaureate degree holders may apply for enrollment in the Second Bachelor's Program through the Office for Non-Traditional Undergraduate Programs. Because of the high demand for computer personnel, the Computer Science, Infor-

mation Systems or Information Technology major is often of interest to persons who wish to change careers. Students in this program must satisfy the requirements for the major and earn at least the last 30 units in the IS/COSC major at Towson University. Although there are computer science or information systems courses offered in the evening, students may find that some required courses must be taken during the day. Because of the sequence of prerequisites, a minimum of five terms is normally needed to complete the program.

DEPARTMENTAL ACTIVITIES

A student chapter of the Association for Computing Machinery (ACM) is the basis for the Students for the Advancement of IT. Meetings are held during the term, with field trips and speakers featured. To recognize outstanding talent in the field of computer science, Towson University has a charter chapter of Upsilon Pi Epsilon (UPE), the first and only international honor society for the computing and information disciplines. Members of UPE are outstanding undergraduate and graduate students in Computer Science or Information Systems.

SCHOLARSHIPS

The department offers a number of scholarships, including the James W. Smith Scholarship (for computer science majors demonstrating academic excellence and enthusiasm for the field); the Doris K. Lidtke Excellence in Service Award (a monetary award for graduating seniors majoring in computer science or information systems with a minimum 3.50 GPA and significant service in their discipline); the Applied Information Sciences Scholarship (for information systems majors demonstrating academic excellence); and the Mid-Atlantic CIO Forum Scholarship (for computer science and information systems majors with a minimum GPA of 3.50).

AWARDS

The department also offers several academic awards, including the Mary Hudson Scarborough Award for outstanding academic achievement by graduating seniors majoring in computer science or information systems, and the Upsilon Pi Epsilon (UPE) Award for students majoring in computer science or information systems with a minimum overall GPA of 3.00 and a minimum GPA in the major of 3.14.

Environmental Science and Studies Program

Director: Jane L. Wolfson

Affiliated Faculty, Environmental Science:

Vanessa Beauchamp (*Biological Sciences*), Harald Beck (*Biological Sciences*), Mark Bulmer (*Biological Sciences*), Rachel Burks (*Physics, Astronomy and Geosciences*), Ryan Casey (*Chemistry*), Brian Fath (*Biological Sciences*), Jonathan Filer (*Physics, Astronomy and Geosciences*), Susan Gresens (*Biological Sciences*), Sarah Haines (*Biological Sciences*), David Hearn (*Biological Sciences*), Matthew Hemm, (*Biological Sciences*), Scott Johnson (*Biological Sciences*), David Larkin (*Chemistry*), Steven Lev (*Physics, Astronomy and Geosciences*), John LaPolla (*Biological Sciences*), Clare Muhoro (*Chemistry*), Jay Nelson (*Biological Sciences*), David Ownby (*Chemistry*), Roland Roberts (*Biological Sciences*), Gerald Robinson (*Biological Sciences*), Lev Ryzhkov (*Chemistry*), Erik Scully (*Biological Sciences*), Richard Seigel (*Biological Sciences*), Colleen Sinclair (*Biological Sciences*), Joel Snodgrass (*Biological Sciences*), Shannon Stitzel (*Chemistry*), David Vanko (*Physics, Astronomy and Geosciences*), Jane Wolfson (*Biological Sciences*)

Affiliated Faculty, Environmental Studies:

Daniel Agley (*Health Science*), Celia Bardwell-Jones (*Philosophy and Religious Studies*), Kent Barnes (*Geography and Environmental Planning*), Robert Blake (*Elementary Education*), John Bullock (*Political Science*), Lillian Carter (*Health Science*), Beth Hall (*Geography and Environmental Planning*), Kang Shou Lu (*Geography and Environmental Planning*), James Manley (*Economics*), Toni Marzotto (*Political Science*), John Morgan (*Geography and Environmental Planning*), Dennis Muniak (*Political Science*), Karen Oslund (*History*), Paul Pojman (*Philosophy and Religious Studies*), Thomas Rhoads (*Economics*), Martin Roberge (*Geography and Environmental Planning*), Robert Rook (*History*), Stephen Scales (*Philosophy and Religious Studies*), Timothy Sullivan (*Economics*), Jeremy Tasch (*Geography and Environmental Planning*), Paporn Thebpanya (*Geography and Environmental Planning*), Donn Worgs (*Political Science*)

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THE PROGRAM

The Environmental Science and Studies Program has two primary educational objectives. One is to provide the fundamental scientific, technical and social knowledge that program graduates will need to assess, plan and evaluate environmental concerns, particularly those confronting metropolitan regions. The second is to instill the wide range of cognitive



skills and content mastery that students will need to effectively analyze environmental issues and propose realistic plans for solving environmental problems at local, regional and national levels.

The requirements of the program are structured to meet these two objectives and include mathematical and scientific foundations as well as extensive interdisciplinary study related to environmental issues. The upper-level courses integrate the student's program of study and provide hands-on practice in an environmental field. The environmental problems addressed in many classes and seminars will focus on the adjacent urban/suburban region and its impact on the surrounding environment.

Most environmental problems resist solutions from any single discipline. To counter this dilemma, the program utilizes a rigorous interdisciplinary approach. The curriculum draws upon the expertise of faculty in the areas of biology, chemistry, geology, mathematics, environmental ethics and values, public policy, economics, geography, public health and social change.

MAJOR IN ENVIRONMENTAL SCIENCE AND STUDIES

Students majoring in Environmental Science and Studies have a choice of two concentrations: Environmental Studies or Environmental Science. There is considerable overlap in the courses between the two concentrations. As students progress through the program, they begin to specialize in their area of greatest interest. During the senior year, students in both concentrations are involved in course work that emphasizes application of concepts to real-world problems. The Environmental Science Concentration is described below. For information on the Environmental Studies Concentration, see the College of Liberal Arts.

ENVIRONMENTAL SCIENCE CONCENTRATION

The Environmental Science Concentration requires 43–45 units. Students then choose a track that provides advanced study in one of three different fields: biology, chemistry or geology, or for students who choose not to specialize, a more general Environmental Science Track is also available. Each track has its own required courses and electives. The Environmental Science Concentration requires a total of 72–85 units (depending upon the track selected).

Common Requirements (43–45 units)

Natural Sciences (16 units)

BIOL 202	Biology II: Introduction to Ecology and Evolution (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
GEOL 121	Physical Geology (4)

Mathematics and Statistics (6–8 units)

One of the following:

MATH 119	Pre-Calculus (4)
MATH 211	Calculus for Applications (3)

One of the following:

MATH 231	Basic Statistics (3)
MATH 237	Elementary Biostatistics (4)
GEOG 375	Quantitative Methods in Geography (3)
ECON 205	Statistics for Business and Economics (3)

Social Sciences/Humanities (18 units)

ENVS 337	The Chesapeake Bay and Its Watershed or Advanced Informational Writing (3)
ENGL 318	One of the following:
PHIL 255	Environmental Ethics (3)
HLTH 451	Introduction to Environmental Health (3)
Two two-course sequences: (6 units from two disciplines including an upper-level and a lower-level course in the same discipline)	
GEOG 101	Physical Geography (3)
GEOG 410	Environmental Geography (3)
ECON 201	Microeconomic Principles (3)
ECON 375	Environmental Economics (3)
or	
ECON 376	Natural Resource Economics (3)
POSC 103	American National Government (3)
or	
POSC 207	State Government (3)
POSC 421	Politics and Environmental Policy (3)

Applications (3 units)

One of the following:

ENVS 482	Environmental Research (3)
ENVS 485	Environmental Internship (3)
ENVS 491	Senior Seminar (3)

Environmental Biology Track (29–38 units)

Required Courses

BIOL 201	Biology I: Cellular Biology and Genetics (4)
One of the following:	
BIOL 205	General Botany (4)
BIOL 207	General Zoology (4)
One of the following:	
BIOL 402	General Ecology (4)
BIOL 310	Conservation Biology (4)
BIOL 435	Plant Ecology (4)
One of the following:	
CHEM 330	Essentials of Organic Chemistry (5)
CHEM 331-332	Organic Chemistry (10)

Electives

Three courses from among the following **AND** one additional course selected from among any of the Environmental Science and Studies tracks:

BIOL 309	Genetics (4)
BIOL 310*	Conservation Biology (4)
BIOL 315	Medical Microbiology (4)
BIOL 325	Animal Physiology (4)
BIOL 347	Marine Biology (3)
BIOL 353	Invertebrate Zoology (4)
BIOL 402*	General Ecology (4)
BIOL 406	Limnology (4)
BIOL 432	Vascular Plant Taxonomy (4)
BIOL 435*	Plant Ecology (4)
BIOL 436	Plant Physiology (4)
BIOL 446	Tropical Ecology and Conservation (3)
or	
BIOL 447	Tropical Field Ecology (4)
BIOL 452	Wetlands Ecology (4)
BIOL 455	Fish Biology (4)
BIOL 456	Ornithology (4)
BIOL 458	Mammology (4)
BIOL 461	Entomology (4)
BIOL 467	Herpetology (4)
CHEM 480	Chemical Toxicology (3)

*One of the two ecology courses, not taken as "required," can be used as an elective.

Environmental Chemistry Track (35–41 units)

Required Courses

CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 330	Essentials of Organic Chemistry (5)
or	
CHEM 331-332	Organic Chemistry I and II (10)
PHYS 211-212	Physics I and II (8)
BIOL 402	General Ecology (4)
or	
BIOL 406	Limnology (4)
GEOL 415	Hydrogeology (4)
or	
GEOL 305	Environmental Geology (4)

Electives

Six units from among the following **AND** one additional course selected from among any of the Environmental Science and Studies tracks:

CHEM 310	Instrumentation in Analytical Chemistry (3)
CHEM 323	Inorganic Chemistry (4)
CHEM 345	Principles of Physical Chemistry (3)
CHEM 351	Introductory Biochemistry (3)
CHEM 356	Biochemistry Laboratory (2)
CHEM 361	Chemical and Bacterial Studies of Water Pollution (3)
CHEM 372	Intermediate Laboratory I (1)
CHEM 461	Advanced Lecture Topics (1–3)
CHEM 462	Advanced Laboratory Techniques (1–2)
CHEM 480	Chemical Toxicology (3)

Environmental Geology Track (30–33 units)

Required Courses

CHEM 210	Introduction to Analytical Chemistry (5)
PHYS 211	Physics I (4)
GEOL 305	Environmental Geology (4)
GEOL 331	Mineralogy (4)
GEOL 415	Hydrogeology (4)
GEOL 321	Structural Geology (4)
or	
GEOL 443	Sedimentology and Stratigraphy (4)

Electives

One of the following **AND** one additional course selected from among any of the Environmental Science and Studies tracks:

GEOG 305	Geomorphology (4)
GEOL 333	Petrology of Igneous and Metamorphic Rocks (4)
GEOL 357	Physical Oceanography (3)
GEOL 451	Petrology of Sedimentary Rocks (3)

Environmental Science Track (29–33 units)

Required Courses

BIOL 201	Biology I: Cellular Biology and Genetics (4)
PHYS 211-212	Physics I and II (8)
One of the following:	
CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 330	Essentials of Organic Chemistry (5)

Electives

One of the following:

BIOL 402	General Ecology (4)
BIOL 310	Conservation Biology (4)
BIOL 406	Limnology (4)
GEOL 415	Hydrogeology (4)
GEOL 305	Environmental Geology (4)

Two additional environmental electives in the same discipline from biology, chemistry, geology or geography **AND** one additional course selected from among any of the Environmental Science and Studies tracks (9–12).

MINOR IN ENVIRONMENTAL SCIENCE AND STUDIES

Students may minor in Environmental Science and Studies by taking five required courses and fulfilling an additional 6- to 8-unit requirement for the minor (21 to 23 units total).

All students minoring in Environmental Science and Studies take the following five required courses for a total of 15 units. Some of these courses have prerequisites.

ECON 375	Environmental Economics (3)
	or
ECON 376	Natural Resource Economics (3)
GEOG 410	Environmental Geography (3)
HLTH 451	Introduction to Environmental Health (3)
PHIL 255	Environmental Ethics (3)
POSC 421	Politics and Environmental Policy (3)

Science majors who minor in Environmental Science and Studies take two additional 3-unit elective courses listed in the Environmental Studies description under the College of Liberal Arts. Total unit requirement for the minor for science majors is 21 units.

Non-science majors who minor in Environmental Science and Studies take 8 units in the environmental sciences. A one-year sequence in a science with lab (8 units) selected from the environmental sciences (BIOL 201-202, CHEM 110-111, GEOL 121 and GEOL 305) satisfies this requirement. Total unit requirement for the minor for non-science majors is 23 units.



Department of Mathematics

Professors: Mostafa Aminzadeh, Honi Bamberger, Raouf Boules (*Chair*), John Chollet, Geoffrey Goodson, John Grant, Gail Kaplan, Ohoe Kim, R. Michael Krach, Coy May, Michael O'Leary, G. Reza Sarhangi, Lawrence Shirley, Martha Siegel, Houshang Sohrab, Leonid Stern, Wei Sun, Xiaoyin Wang, Jay Zimmerman

Associate Professors: Linda Cooper, T. Elizabeth Goode, Ge Han, Xuezhong Hou, Howard Kaplon, Angel Kumchev, Todd Moyer, Felice Shore, Maureen Yarnevich

Assistant Professors: Sergiy Borodachov, Alexei Kolesnikov, Moustapha Pemy, William Rose, Tatyana Sorokina, Sandy Spitzer, Ming Tomayko, Mircea Voisei

Lecturers: Jerome Cohen, Froma Lustman, Judith Macks, Erika Miller

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PROGRAMS OF THE DEPARTMENT

The mathematics curriculum provides opportunities for students to do abstract reasoning applicable to many scientific or academic areas, to survey the field of mathematics, to study the applications of the discipline, and to prepare for additional study or for a career.

The Department of Mathematics offers the following programs: the major in Mathematics, in which there are four concentrations; the minor in Mathematics, designed to enhance major programs to which mathematics is readily applied; the minor in Mathematics with the Elementary Education major, for prospective elementary teachers who may wish to teach mathematics at the middle school or junior high school level; and the second major programs offered in conjunction with the departments of Economics and Computer and Information Sciences.

The Mathematics major has four areas of concentration from which to choose. The Mathematics Secondary Education Concentration is designed for students who wish to become certified to teach mathematics in secondary schools. The Pure Mathematics Concentration emphasizes abstract mathematics. For students interested in the actuarial profession, there is an Actuarial Science and Risk Management Concentration that provides the necessary background required for entry-level positions in that field. The Applied Mathematics Concentration is designed for students who wish to apply mathematics to problems in business and industry.

The Bachelor of Arts degree may be earned by adding the intermediate level of a foreign language or its equivalent to the major course requirements.

MAJOR IN MATHEMATICS

Mathematics majors may choose from the following areas of concentration: Pure Mathematics, Applied Mathematics, Actuarial Science and Risk Management, and Mathematics Secondary Education.

Students must complete the Core Curriculum requirements in addition to the requirements for a concentration.

The following are common requirements for all concentrations:

MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 369	Introduction to Abstract Algebra (3)

PURE MATHEMATICS CONCENTRATION

The Pure Mathematics Concentration requires 62 units completed with a grade equivalent of 2.00 or higher.

Required Courses (47 units)

In addition to the common requirements, the following courses are required:

COSC 236	Introduction to Computer Science I (4)
MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 467	Algebraic Structures (3)
MATH 473	Introductory Real Analysis (4)
MATH 475	Complex Analysis (3)
MATH 490	Senior Seminar in Mathematics (3)

Upper-Division Mathematics Electives (15 units)

At least five courses, including at least two courses from the following:

MATH 315	Applied Combinatorics (3)
MATH 332	Mathematical Statistics (3)
MATH 353	Euclidean and Non-Euclidean Geometries (3)
MATH 377*	Mathematical Models (3)
	or
MATH 439*	Computational Probability Models (3)
MATH 379	Advanced Calculus (3)

* Note: One of MATH 377 or MATH 439, but not both.

And at least two courses from the following:

MATH 451	Graph Theory (3)
MATH 457	Differential Geometry (3)
MATH 463	Linear Algebra (3)
MATH 465	Theory of Numbers (3)
MATH 477	Topology (3)

Note: The Department of Mathematics recommends PHYS 241 be taken to satisfy the Core Curriculum requirement for Biological and Physical Sciences.

APPLIED MATHEMATICS CONCENTRATION

The Applied Mathematics Concentration requires 61-64 units completed with a grade equivalent of 2.00 or higher.

Required Courses (52 units)

In addition to the common requirements, the following courses are required:

COSC 236	Introduction to Computer Science I (4)
MATH 331	Probability (4)
MATH 332	Mathematical Statistics (3)
MATH 374	Differential Equations (3)

MATH 377*	Mathematical Models (3) or
MATH 439*	Computational Probability Models (3)
MATH 379	Advanced Calculus (3)
MATH 435	Numerical Analysis I (3)
MATH 475	Complex Analysis (3)
MATH 490	Senior Seminar in Mathematics (3)

* Note: One of MATH 377 or MATH 439, but not both.

Upper-Division Mathematics Electives (3–4 units)

One course from the following:

MATH 378	Scientific Modeling and Simulation (3)
MATH 437	Operations Research (3)
MATH 439*	Computational Probability Models (3)
MATH 451	Graph Theory (3)
MATH 457	Differential Geometry (3)
MATH 473	Introductory Real Analysis (4)

* Only open to students who didn't choose this course as the required course instead of MATH 377

Application Electives (6–8 units)

Two courses from the following:

BIOL 309	Principles of Genetics (4)
COSC 336	Data Structures and Algorithm Analysis (4)
COSC 417	Introduction to the Theory of Computing (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
MATH 485	Mathematical Finance (3)
MATH 486	Risk Management and Financial Engineering (3)
PHYS 241	General Physics I Calculus-Based (4)
PHYS 242	General Physics II Calculus-Based (4)
PHYS 307	Introductory Mathematical Physics (3)
POSC 459	Simulations and Games in Political Science (3)
PSYC 314	Research Methods in Psychology (4)

ACTUARIAL SCIENCE AND RISK MANAGEMENT CONCENTRATION

The Actuarial Science and Risk Management Concentration requires 81 units completed with a grade equivalent of 2.00 or higher.

Required Courses (78 units)

ACCT 201-202	Accounting Principles I and II (6)
COSC 236	Introduction to Computer Science I (4)
ECON 201-202	Microeconomic and Macroeconomic Principles (6)
FIN 331	Principles of Financial Management (3)
FIN 333	Investments and Securities Analysis I (3)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 312	Theory of Interest (3)
MATH 331	Probability (4)
MATH 332	Mathematical Statistics (3)
MATH 337	Applied Regression and Time Series Analysis (4)
MATH 369	Introduction to Abstract Algebra (3)
MATH 438	Actuarial Models (3)
MATH 439	Computational Probability Models (3)
MATH 485	Mathematical Finance (3)
MATH 486	Risk Management and Financial Engineering (3)
MATH 442	Actuarial Model Construction (4)
MATH 490	Senior Seminar in Mathematics (3)

Note: ENGL 317 Writing for Business and Industry (3) must be taken to fulfill the Core Curriculum requirement of English Composition.

MATHEMATICS SECONDARY EDUCATION CONCENTRATION

Mathematics majors in the Secondary Education Concentration are eligible, upon graduation, to apply for certification to teach mathematics at both the middle and high school levels in the state of Maryland. Students in this concentration should be prepared to do their student teaching in their senior year. Students who wish to deviate from this policy must obtain permission from the Department of Mathematics prior to the beginning of their junior year. Consult the Department of Secondary Education section in this catalog for additional course and professional requirements for the preservice Secondary Education Program.

In addition to the university's Core Curriculum requirements, students in this concentration must complete 63–64 units, earning a grade equivalent of 2.00 or higher. However, a minimum cumulative GPA of 2.75 is required for student teaching.

Requirement for Student Teaching/Internship

All preservice students in Teacher Education programs at Towson University whose program of study requires an intensive/extensive internship or student teaching experience in a public or private school setting (pre-K through 12) are required to undergo a criminal background check before entering this experience. The criminal background check must be filed with the director of the Center for Professional Practice.

All teacher candidates are required to submit qualifying scores on the Praxis I Academic Skills Assessment to the Center for Professional Practice for admission to programs and student teaching. Information on the Praxis tests is available in the Center for Professional Practice, Hawkins Hall 302.

Required Courses (57 units)

In addition to the common requirements, the following courses are required:

PHYS 241	General Physics I (4)
MATH 301	History of Mathematics (3)
MATH 330	Introduction to Statistical Methods (4)
MATH 353	Euclidean and Non-Euclidean Geometries (3)
MATH 420	Applications of Technology for Secondary School Teachers (3)
MATH 423	Teaching Mathematics in the Secondary Schools (3)
MATH 426	Student Teaching in Secondary Education Mathematics (12)
MATH 428	Senior Seminar in Mathematics Education (2)

Upper-Division Mathematics Elective (3 units)

One course from the following:

MATH 465	Theory of Numbers (3)
MATH 467	Algebraic Structures (3)

Additional Elective (3–4 units)

One course from the following:

PHYS 242	General Physics II (4)
MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 473	Introductory Real Analysis (4)
MATH 475	Complex Analysis (3)

SECOND MAJOR PROGRAMS

Students may declare a second major and obtain a degree certifying that both majors have been completed. The Department of Mathematics

encourages majors to pursue a second major or a minor in subjects in which mathematics is applied. In cooperation with the departments of Economics, and Computer and Information Sciences, the following courses of study have been developed to enable students to obtain a second major in Economics or Computer Science.

COMBINED MAJOR IN MATHEMATICS AND ECONOMICS

The combined major in Mathematics and Economics requires 76–77 units completed with a grade equivalent of 2.00 or higher.

Required Courses (58 units)

COSC 236	Introduction to Computer Science I (4)
ECON 201	Microeconomic Principles (3)
ECON 202	Macroeconomic Principles (3)
ECON 306	Statistics for Business and Economics II (3)
ECON 309	Intermediate Price Theory (3)
ECON 310	Macroeconomic Theory (3)
ECON 451	Introduction to Mathematical Economics (3)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 331	Probability (4)
MATH 332	Mathematical Statistics (3)
MATH 369	Introduction to Abstract Algebra (3)
MATH 377*	Mathematical Models (3) or
MATH 439*	Computational Probability Models (3)
MATH 490	Senior Seminar in Mathematics (3)

* Note: One of MATH 377 or MATH 439, but not both.

Upper-Division Mathematics Electives (12–13 units)

Three courses from the following:

MATH 337	Applied Regression and Time Series Analysis (3)
MATH 374	Differential Equations (3)
MATH 437	Operations Research (3)
MATH 485	Mathematical Finance (3)
MATH 486	Risk Management and Financial Engineering (3)

One course from the following:

MATH 435	Numerical Analysis I (3)
MATH 451	Graph Theory (3)
MATH 473	Introductory Real Analysis (4)
MATH 475	Complex Analysis (3)

Upper-Division Economics Electives (6 units)

Two additional courses to be chosen in economics. Courses recommended are:

ECON 313	Money and Banking (3)
ECON 337	Public Finance (3)
ECON 401	Introduction to Econometrics (3)
ECON 421	International Economics (3)
ECON 423	International Monetary Theory and Policy (3)

COMBINED MAJOR IN MATHEMATICS AND COMPUTER SCIENCE

CAC/ABET Accredited

The combined major in Mathematics and Computer Science requires 89–93 units completed with a grade equivalent of 2.00 or higher.

Required Courses (62 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 290	Principles of Computer Organization (4)

COSC 336	Data Structures and Algorithm Analysis (4)
COSC 350	Data Communications and Networking (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
COSC 480	Senior Seminar (1) (COSC 418 may be selected as a substitute for COSC 480)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 330	Introduction to Statistical Methods (4)
MATH 369	Introduction to Abstract Algebra (3)
MATH 435	Numerical Analysis I (3)
MATH 490	Senior Seminar in Mathematics (3)

Upper-Division Electives (15–17 units)**Computer Science (9 units)**

Two courses (6 units) from the following:

COSC 417	Introduction to the Theory of Computing (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 483	Design and Analysis of Algorithms (3)

and one course (3 units) from the following:

COSC 412	Software Engineering (3)
COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 484	Web-Based Programming (3)

OR

Two courses (6 units) from the following:

COSC 441	Computer Performance Evaluation (3)
COSC 459	Computer Simulation and Modeling (3)
COSC 484	Web-Based Programming (3)

and one course (3 units) from the following:

COSC 417	Introduction to the Theory of Computing (3)
COSC 436	Object-Oriented Design and Programming (3)
COSC 461	Artificial Intelligence (3)
COSC 471	Computer Graphics (3)
COSC 483	Design and Analysis of Algorithms (3)

Upper-Division Mathematics Electives (6–8 units)

Two courses from the following:

MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 377*	Mathematical Models (3)

or

MATH 439*	Computational Probability Models (3)
MATH 378	Scientific Modeling and Simulations (3)
MATH 437	Operations Research (3)
MATH 451	Graph Theory (3)
MATH 457	Differential Geometry (3)
MATH 465	Theory of Numbers (3)
MATH 467	Algebraic Structures (3)
MATH 473	Introductory Real Analysis (4)
MATH 475	Complex Analysis (3)
MATH 477	Topology (3)

* Note: One of MATH 377 or MATH 439, but not both.

Science Requirements (12–14 units)

A sequence of two lab science courses taken from physics, biology or chemistry, which must be accepted in that major. One additional (4-unit) course or two additional (3-unit) courses from physics, biology or chemistry, also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met.

Note: COMM 131 Fundamentals of Speech Communication (3 units) must be taken to fulfill the Core Curriculum requirement.

Core Curriculum Requirement

COMM 131 must be completed with a grade equivalent of 2.00 or higher.

COMBINED MAJOR IN MATHEMATICS AND COMPUTER SCIENCE WITH SECURITY TRACK

The combined major in mathematics and economics requires 100–103 units completed with a grade equivalent of 2.00 or higher.

Required Courses (67 units)

COSC 236	Introduction to Computer Science I (4)
COSC 237	Introduction to Computer Science II (4)
COSC 336	Data and File Structures (4)
COSC 350	Data Communications and Teleprocessing (3)
COSC 439	Operating Systems (3)
COSC 455	Programming Languages: Design and Implementation (3)
COSC 457	Database Management Systems (3)
COSC 418	Ethical and Societal Concerns of Computer Scientists (3)
MATH 265	Elementary Linear Algebra (4)
MATH 267	Introduction to Abstract Mathematics (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 275	Calculus III (4)
MATH 330	Introduction to Statistical Methods (4)
MATH 314*	Cryptography (3)
or	
COSC 314*	Cryptography (3)
MATH 369	Introduction to Abstract Algebra (3)
MATH 465	Number Theory (3)
MATH 490	Senior Seminar in Mathematics (3)

* Note: The MATH 314 and COSC 314 courses are double listed. Students should register for the course listed in their primary department.

Security Track (18 units)

CIS 377	Introduction to Information Security (3)
COSC 440	Operating Systems Security (3)
COSC 450	Network Security (3)
COSC 458	Application Software Security (3)
COSC 481	Case Studies in Computer Security (3)

Upper-Division Mathematics Electives (3–4 units)

One course from the following:

MATH 331	Probability (4)
MATH 378	Scientific Modeling and Simulations (3)
MATH 451	Graph Theory (3)
MATH 467	Algebraic Structures (3)

Science Requirements (12–14 units)

A sequence of two lab science courses taken from physics, biology, or chemistry, which must be accepted in that major. One additional 4-unit course or two additional 3-unit courses from physics, biology or chemistry also accepted in that major (except PHYS 244 and 337), with the requirement that 12 units of science courses be met.

Core Curriculum Requirement

COMM 131 (3) completed with a grade equivalent of 2.00 or higher.

MINOR IN MATHEMATICS

The minor in Mathematics requires 23–24 units completed with a grade equivalent of 2.00 or higher. The minor requires 11–12 units of specific courses plus at least 12 upper-division units in mathematics,

excluding MATH 305, MATH 321, MATH 323, MATH 324, MATH 326 and MATH 423.

Required Courses (11–12 units)

MATH 267*	Introduction to Abstract Mathematics (4)
or	
MATH 263*	Discrete Mathematics (3)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)

NOTE: One of MATH 263 or MATH 267, but not both.

Upper-Division Mathematics Electives (12 units)

Students must select at least 12 units of upper-division electives in mathematics, excluding MATH 305, MATH 321, MATH 323, MATH 324, MATH 326 and MATH 423.

ELEMENTARY EDUCATION MAJOR WITH A MATHEMATICS MINOR

Elementary Education majors who complete a Mathematics minor will possess the necessary concepts and skills to effectively teach both elementary and middle school mathematics. Special field-based courses are available so that students will experience teaching mathematics (specifically at the middle school level) in addition to the other elementary school subjects. Students in this program should be advised by faculty members in both the departments of Elementary Education and Mathematics. Early Childhood Education majors who wish to minor in Mathematics should consult with faculty members in both the departments of Early Childhood Education and Mathematics for appropriate course work and counseling.

The minor in Mathematics for the Elementary Education major requires 25–26 units, with each course completed with a grade equivalent of 2.00 or higher. Students must also complete requirements for their major as specified by the Department of Elementary Education. The minor requires the six courses listed below, plus at least 3 additional units of upper-division electives in mathematics.

Required Courses (22 units)

MATH 265	Elementary Linear Algebra (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
MATH 301	History of Mathematics (3)
MATH 330	Introduction to Statistical Methods (4)
MATH 353	Euclidean and Non-Euclidean Geometries (3)

Upper-Division Mathematics Elective (3–4 units)

Recommended:

MATH 331	Probability (4)
MATH 374	Differential Equations (3)
MATH 377	Mathematical Models (3)
MATH 420	Application of Technology for Secondary Teachers (3)

COURSE PREREQUISITES

The department strictly enforces prerequisites for all mathematics courses.

Policy On AP Mathematics

If a student majoring in Elementary or Early Childhood Education has earned a score of three (3) or higher on the High School Advanced Placement Calculus Examination (either the AB or the BC examination), or has earned official college credit

for calculus (with a grade of C or better), he/she will be exempted from enrolling in MATH 204.

If a student majoring in Elementary or Early Childhood Education has earned a score of three (3) or higher on the High School Advanced Placement Statistics Examination or has earned college credit for a college-level statistics course (with a grade of C or better), he or she will be exempted from enrolling in MATH 205.

The student must still account for the remaining units in mathematics courses as required by the College of Education.

For the general policy on Advanced Placement in Mathematics, see page 35.

TRANSFER CREDIT POLICIES

Only courses approved by the Department of Mathematics may be applied to a major or minor program offered by the department. If students submit mathematics units that are more than five years old at the time of admission or readmission, the chair, after reviewing these records, may require that some courses be repeated or that a new course be completed.

Secondary Education Mathematics majors are required to take MATH 423, MATH 426, MATH 428, and at least four additional upper-division courses in their Mathematics major program at Towson University.

All other Mathematics majors are required to take MATH 490 Senior Seminar in Mathematics and at least six additional upper-division courses of their Mathematics major program at Towson University.

Mathematics minors must take at least four courses of their Mathematics minor program at Towson University; at least two courses must be at the upper-division level.

NOTES FOR MAJORS AND MINORS

Mathematics majors with minors in Economics may satisfy their Applications requirement by completing ECON 451.

Mathematics majors or minors who receive a grade equivalent of 1.00 in a 100-level course prerequisite to calculus must repeat the course no later than concurrently with calculus. Mathematics majors or minors must attain a grade equivalent of 2.00 or higher in any 200-, 300-, or 400-level course used as a prerequisite or applied toward a major or minor. Unless otherwise noted, prerequisites must be satisfied prior to taking a course. The program of the minor should be approved by students' department advisers.

CORE CURRICULUM REQUIREMENTS IN MATHEMATICS

Students should consult those portions of this catalog describing their major and minor programs to see whether specific mathematics courses are required or recommended.

For a comprehensive list of courses that satisfy the Core Curriculum requirement for Mathematics, please visit www.towson.edu/core. Students should enroll in the mathematics course for which they have the necessary high school or collegiate backgrounds and which is most relevant to their programs of study. Placement tests may be used to help select the appropriate course. See the Academic Achievement Center section in Academic Resources.

MATHEMATICS COURSE NUMBERS

A note on the numbering system: the left digit of the course number indicates the level of the content. The middle digit of the course number indicates the area of the content: 0-general; 1-service; 2-mathematics education; 3-probability, statistics and numerical analysis; 5-geometry; 6-algebra; 7-analysis; 9-readings, special topics, and seminars in mathematics.

Molecular Biology, Biochemistry and Bioinformatics Program

Director: Larry E. Wimmers (*Biological Sciences*)

Affiliated Faculty: Nadim Alkharouf (*Computer and Information Sciences*), Timothy Brunker (*Chemistry*), Mark Bulmer (*Biological Sciences*), Gail Gasparich (*Biological Sciences*), Elizabeth Goode (*Mathematics*), David Hearn (*Biological Sciences*), Matt Hemm (*Biological Sciences*), Sunchul Hong (*Computer and Information Sciences*), Shuhua Ma (*Chemistry*), Barry Margulies (*Biological Sciences*), Brian Masters (*Biological Sciences*), Meghan May (*Biological Sciences*), Clare Muhoro (*Chemistry*), Richard Preisler (*Chemistry*), J. David Rawn (*Chemistry*), Roland Roberts (*Biological Sciences*), Lev Ryzhkov (*Chemistry*), James A. Saunders (*Biological Sciences/Chemistry*), Vonnice Shields (*Biological Sciences*), Colleen Sinclair (*Biological Sciences*), Michelle Snyder (*Biological Sciences*), Ana Maria Soto (*Chemistry*), Beth Vaidya (*Biological Sciences*), Cynthia Zeller (*Chemistry*)
Administrative Assistant: Angela Kromm

OFFICE

Smith Hall 360, 410-704-3491
www.towson.edu/mb3

THE PROGRAM

The goal of the Molecular Biology, Biochemistry and Bioinformatics (MB3) Program is to train students in the specific disciplines of molecular biology, biochemistry and bioinformatics, and to engage them in the process of scientific inquiry so that they will have the ability to grow with their chosen discipline throughout their scientific careers. The Molecular Biology, Biochemistry and Bioinformatics major provides undergraduate preparation for students interested in biochemistry, bioinformatics, pharmacy, biophysics, biotechnology, cell biology, genetics, immunology, microbiology or molecular biology. The curriculum is also excellent for students interested in medical, dental, pharmacy school, or related Allied health fields. One of the main advantages of this program is the breadth of training given to students in preparation for either post-graduate training or careers in the workforce. This versatility in training allows MB3 students to be very competitive in both job markets and post-graduate educational programs.

Students complete a flexible curriculum that includes lecture and state-of-the-art laboratory courses, as well as an independent undergraduate research project that emphasizes the practical application of discipline-based knowledge. Because of the emphasis placed on providing a practical understanding of the fundamental nature of the scientific discipline, the program challenges students to get involved in an undergraduate research project with a mentor who engages them in the process of



scientific research on a one-on-one basis. These research projects may be completed in a variety of different formats including laboratory experiences in academic, business, government or hospital environments. To facilitate information exchange, networking and to facilitate a community spirit in the MB3 program, students engaged in research give seminars describing their experiences at the Bimonthly MB3 seminar series.

The major consists of three tracks: Molecular Biology, Biochemistry and Bioinformatics. The Molecular Biology Track examines the basis of life, using molecular approaches to understand the processes of living systems, with applications in all areas of biology. The Biochemistry Track also examines the molecules of living systems, with emphasis on the chemical structure and reactivity that shape biological function. The Bioinformatics Track combines the study of the molecular basis of life with the study of computer science. This track focuses students on interacting with the genomic databases that are changing the face of science as we know it. All three tracks are interdisciplinary in their approach. Students choose a track in addition to completing courses common to all three tracks.

MAJOR IN MOLECULAR BIOLOGY, BIOCHEMISTRY AND BIOINFORMATICS

All students are required to complete 31 units of required courses offered by the MB3 Program or by the departments of Biological Sciences, Chemistry, and Computer and Information Sciences, and an additional 35-43 units within one of the three tracks.

Required Courses (31 units)

CHEM 110-111	General Chemistry I, II (8)
BIOL 201	Cellular Biology and Genetics (4)
MBBB 301	Introduction to Bioinformatics (4)
CHEM 351	Biochemistry I (3)
BIOL 309	Genetics (4)
BIOL 409	Molecular Biology (4)
MBBB 493	Seminar in Bioethics (1)

Choose one of the following: These courses may be repeated for a total of 6 units toward the major.

BIOL 491, or 492	Independent Research in Biology (3)
CHEM 491	Introduction to Research in Chemistry (3)
COSC 495	Independent Study in Computer Science (3)
or an approved elective in BIOL, CHEM, COSC, CIS, or MBBB 3xx, 4xx (3).	

Molecular Biology Track (36-40 units)

BIOL 202	Evolution and Ecology (4)
PHYS 211-212	General Physics I, II (8)
or	
PHYS 203	Topics in Physics for Biology Majors *(5)
CHEM 210	Principles and Methods of Chemical Analysis (5)
CHEM 331-332	Organic Chemistry I, II (10)
BIOL 408	Cell Biology (4)
BIOL 410	Molecular Biology Laboratory (2)
Plus 3 units of biology upper-level electives	
Choose one of the following:	
MATH 211	Calculus for Applications (3)
MATH 237	Elementary Biostatistics (4)
MATH 273	Calculus *(4)

Biochemistry Track (39-40 units)

PHYS 211-212	General Physics I, II (8)
or	
PHYS 241-242	General Physics I, II (8)
CHEM 210	Principles and Methods of Chemical Analysis (5)
CHEM 331-332	Organic Chemistry I, II (10)
CHEM 345	Principles of Physical Chemistry (3)
CHEM 356	Biochemistry Laboratory (2)
CHEM 357	Biochemistry II (3)
or	
BIOL/CHEM 450	Ecological Biochemistry (3)
CHEM 372	Intermediate Laboratory I (1)
MATH 273	Calculus I (4)
and	
MATH 274	Calculus II (4)
or	
MATH 237	Elementary Biostatistics (4)
or	
MATH 231	Basic Statistics (3)

Bioinformatics Track (38-43 units)

COSC 236-237	Introduction to Computer Science I, II (8)
MATH 263	Discrete Mathematics (3)
or	
MBBB 315	Genomics (3)
MATH 273-274	Calculus I, II (8)
MATH 330	Introduction to Statistical Methods (4)
CHEM 331-332	Organic Chemistry I, II (10)
or	
CHEM 330	Essentials of Organic Chemistry *(5)
COSC 336	Data Structures and Algorithm Analysis (4)
CIS 458	Organizational Database Management (3)
or	
COSC 457	Database Management Systems (3)
MBBB 401	Advanced Bioinformatics (3)

*Note: Many graduate and professional programs require two terms of physics and two terms of organic chemistry and/or calculus. Students who are contemplating education beyond the undergraduate level (graduate school, medical school, etc.) need to talk with an adviser.

MINOR IN MOLECULAR BIOLOGY, BIOCHEMISTRY AND BIOINFORMATICS

To fulfill the requirements for a Molecular Biology, Biochemistry and Bioinformatics minor students must complete the following course work with a 2.00 or higher. A minimum of 15 units applied toward the minor must be earned at Towson University.

Molecular Biology, Biochemistry and Bioinformatics Requirements (27-33 units)

CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
BIOL 201	Cellular Biology and Genetics (4)
CHEM 330*	Essentials of Organic Chemistry (5)
or	
CHEM 331-332	Organic Chemistry I, II (10)
BIOL 309	Genetics (4)

Choose two of the following:

BIOL 409	Molecular Biology (4)
CHEM 351	Introductory Biochemistry (3)
MBBB 301	Introduction to Bioinformatics (4)

*Note: Many graduate and professional programs require two terms of organic chemistry. Students who are contemplating education beyond the undergraduate level (graduate schools, medical school, etc.) should talk with an adviser.

Department of Physics, Astronomy and Geosciences

Professors: Rachel Burks, David Schaefer (Chair), David Vanko

Associate Professors: Jonathan Filer, Rajeswari M. Kolagani, Thomas Krause, Steven Lev, Cody Sandifer, Vera Smolyaninova, Alex Storrs

Assistant Professors: Reizelie Barreto-Espino, Phuoc Ha, Ronald Hermann, Pamela Lottero-Perdue, Rommel Miranda, James Overduin, Jennifer Scott, Jeffrey R. Simpson

Research Assistant Professor: Karen Schaefer

Research Associate Professor: Grace Young

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www.towson.edu/physics/

PROGRAMS OF THE DEPARTMENT

The Department of Physics, Astronomy and Geosciences offers undergraduate programs leading to a Bachelor of Science or Bachelor of Arts degree in Physics, Geology or Earth-Space Science; a Physics Secondary Education Program; a Dual Degree in Engineering Program leading to both a bachelor's degree in Physics from Towson University and a bachelor's degree in Engineering from either the University of Maryland, College Park, or a Professional Science Master's (PSM) degree in Applied Physics; and minors in Physics and in Astronomy. There is also a five-year program leading to a B.S. degree in Physics and an M.S. degree in Computer Science.

DEPARTMENTAL HONORS PROGRAM

The Department of Physics, Astronomy and Geosciences, under the direction of the University Honors Board, offers a departmental honors program for students who demonstrate exemplary abilities in their discipline. Such students will work closely with faculty mentors in an individual program of research, directed readings, independent study and seminar. The student who completes an approved program will receive a diploma with the designation of Bachelor of Arts with Honors or Bachelor of Science with Honors, and Departmental Honors will appear on the transcript.

Criteria for Admission into the Department Honors Program

1. Completion of at least 60 units of courses.
2. Overall cumulative average of 3.25 or above and a 3.50 or above cumulative average in their major course requirements. Students below this threshold may appeal to the Department Honors Committee.

Contact the department for a list of detailed procedures for applying to the departmental honors program.

MAJOR IN PHYSICS

The Physics major is divided into three main tracks designed to give the student the greatest possible flexibility in preparation for graduate study in physics, astrophysics, medicine, engineering or other allied fields, and for professional practice as a physicist in industrial, governmental or institutional laboratories.

In order to provide students a broad and solid base in physics and also to provide the flexibility which enables students to take courses in areas where physics can be applied, all Physics majors take a series of basic physics courses. The first courses are General Physics I, II and III (PHYS 241 [or PHYS 251], 242 [or PHYS 252] and 243). They provide an introduction to both classical and modern physics. The junior and senior physics courses treat classical and modern physics in greater depth.

It is recommended that those who intend to pursue graduate studies in physics or astrophysics, take the General Physics Track or the Astrophysics Track, as well as additional physics electives and mathematics courses. Those who intend to participate in fundamental or applied research and development in industrial or government laboratories are encouraged to take the Applied Physics Track and other physics electives.

Students may also wish to elect a foreign language as preparation for graduate study. Students may also supplement the program of study by participation in a guided independent study and/or ongoing research project. Up to 6 units of such courses (Independent Study, Directed Readings, Research Problems, etc.) may count toward required physics electives. A combination of well-grounded preparation in fundamentals plus the availability of an individually tailored program of study is designed to optimize students' preparation for graduate school or a professional career. In addition to physics courses, all majors are required to complete courses in mathematics and chemistry. Calculus III is highly recommended. Upper-level mathematics electives especially recommended are Differential Equations, Advanced Calculus and Numerical Analysis I, II.

Students who intend to major in Physics should contact the department in order to be assigned a faculty adviser. The faculty adviser will assist students in planning a program that will meet their special needs. Advisers are also available for advising on career opportunities and employment. Physics majors are required to complete 16, and minors 8, of the required upper-division units in physics at Towson. Students should be aware that most advanced physics courses (300- and 400-level) may be offered in either the first term or the second term, but not in both terms. Some physics electives are only offered every other year. Advisers will have information on the courses offered and on the schedules.

Most required upper-level physics courses are taught in the late afternoon or early evening on a rotating schedule. This should enable a non-traditional student who can only attend classes at these times to complete the major, although the time required will usually exceed the normal four years. Students should contact the department office or their advisers for information about the scheduling of these courses.

Students *must* see their advisers no later than the time of their matriculation for the third term in General Physics, which is normally the beginning of the spring term of their sophomore year. Students, after consultation with their advisers, will propose a tentative plan for completing all graduation requirements, including those for the major. This selection of electives for the various concentrations must be approved by an adviser. The plan may be modified from time to time, but the modification must be approved by the major adviser. Students may also organize an individualized course of studies. This gives students the option to select a plan that reflects their interest in a special area of physics. The array of courses must have internal coherence and be *approved* by the major adviser.

REQUIREMENTS FOR THE PHYSICS MAJOR

The major in Physics requires 30 units in addition to non-Physics and Physics electives. See below for the additional non-physics and physics elective requirements. These must be completed with a grade equivalent of 2.00 or higher. The Core Curriculum requirements must also be completed.

Required Physics Courses (30 units)

PHYS 185	Introductory Seminar in Physics (1)
PHYS 241, 242	General Physics I, II (4, 4)
	or
PHYS 251, 252	Honors General Physics I, II (4, 4)
PHYS 243	General Physics III (4)
PHYS 307	Introductory Mathematical Physics (3)
PHYS 311	Modern Physics I (3)
PHYS 341	Intermediate Physics Laboratory I (3)
PHYS 351	Mechanics I (4)
PHYS 354	Electricity and Magnetism I (4)

Non-physics Requirements (19–20 units)

CHEM 110-111	General Chemistry I, II (4, 4)
MATH 273-274	Calculus I, II (4, 4)
MATH xxx	Upper-Division Mathematics Course (3–4)
Recommended mathematics electives are MATH 374, 379, 435–436.	

General Physics Track

All required courses in this track must be completed with a grade equivalent of 2.00 or higher. The Core Curriculum requirements must also be completed. The physics courses and the non-physics requirements must be completed, as well as the following courses:

Advanced Physics Courses (27–28 units)

PHYS 270	Computers in Physics (4)
PHYS 312	Modern Physics II (3)
PHYS 342	Intermediate Physics Laboratory II (3)
PHYS 352	Thermodynamics and Kinetic Theory (3)
PHYS 385	Physics Seminar (1)
PHYS 455	Introductory Quantum Mechanics (3)
PHYS 495	Capstone Project in Physics (4)
At least one course from among the following:	
PHYS 457	Solid State Physics (3)
PHYS 459	Nuclear and Particle Physics (3)

In addition, one upper-level elective course:

Recommended Physics Electives	
PHYS 335	Basic Electronics (4)
PHYS 352	Thermodynamics and Kinetic Theory (3)
PHYS 361	Optics Fundamentals (4)
ASTR 479	Selected Topics in Contemporary Astrophysics (3)
PHYS 453	Physical Optics (3)
PHYS 457	Solid State Physics (3)

Applied Physics Track

All required courses in this track must be completed with a grade equivalent of 2.00 or higher. The Core Curriculum requirements must be completed. The physics courses and the non-physics requirements must be completed, as well as the following courses:

Advanced Physics Courses (29–31 units)

PHYS 270	Computers in Physics (4)
PHYS 312	Modern Physics II (3)
PHYS 335 or 337	Basic Electronics (4)
PHYS 342	Intermediate Physics Laboratory II (3)
PHYS 361	Optics Fundamentals (4)
PHYS 385	Physics Seminar (1)
PHYS 495	Capstone Project in Physics (4)

Two elective courses, one of which must be at the 400 level.

Recommended Physics Electives

PHYS 337	Digital Electronics (4)
PHYS 352	Thermodynamics and Kinetic Theory (3)
PHYS 435	Electronics (3)
PHYS 437	Introduction to Microprocessor-Based Digital Systems (3)
PHYS 445	Lasers and Holography (3)
PHYS 453	Physical Optics (3)
PHYS 455	Introductory Quantum Mechanics (3)
PHYS 457	Solid State Physics (3)
PHYS 459	Nuclear and Particle Physics (3)
PHYS 461	Electro-Optics (4)

Astrophysics Track

All required courses in this track must be completed with a grade equivalent of 2.00 or higher. The Core Curriculum requirements must also be completed. The physics and non-physics required courses must be completed, as well as the following courses:

Additional Physics and Astrophysics Courses (26 units)

ASTR 161	General Astronomy I (4)
ASTR 162	General Astronomy II (4)
ASTR 303	Astrophysical Techniques (3)
ASTR 331	Introduction to Stellar Astrophysics (3)
ASTR 432	Galaxies and Cosmology (3)
ASTR 470-479	Special Topics in Astrophysics (3)
ASTR 495	Capstone Project in Astrophysics (3)
PHYS 455	Introductory Quantum Mechanics (3)

PHYSICS SECONDARY EDUCATION PROGRAM

The Department of Physics, Astronomy and Geosciences offers a Physics Secondary Education Track that leads to a Bachelor of Science or Arts degree in Physics. This program is designed for those students who plan to teach physics at the secondary level.

In addition to the Core Curriculum requirements and the requirements specified by the Department of Secondary Education, students must complete 34 units in physics courses and 26–27 units in non-physics courses. For certification purposes (NSTA), this includes the course WRIT 312 History of Science. All courses required for the major must be completed with a grade equivalent of 2.00 or higher.

Physics Courses (30 units)

Additional Physics Courses (4 units)

PHYS 342	Intermediate Physics Laboratory II (3)
PHYS 385	Physics Seminar (1)

Non-physics Requirements (26–27 units)

BIOL 201	Biology I (4)
CHEM 110-111	General Chemistry I, II (4,4)
MATH 273-274	Calculus I, II (4,4)
WRIT 312	History of Science (3)

One of the following earth science courses:

ASTR 161	General Astronomy I (4)
GEOL 121	Physical Geology (4)
GEOL 357	Physical Oceanography (3)

Upon the completion of 45 units at Towson University, students are eligible to apply for admittance into the Secondary Education (SCED) Track. Once admitted to the SCED program, students will be assigned an SCED adviser in addition to their Physics faculty adviser.

SUGGESTED COURSE SCHEDULES FOR PHYSICS MAJORS

By its very nature, physics is more hierarchical in its course structure than typical humanities or social science disciplines. Therefore, many courses depend heavily on prerequisite courses (such as calculus and general physics). Any time that is required to prepare for calculus, such as taking MATH 119, must be added to the four-year minimum. Normally, progress in mathematics and general physics is the pacesetter.

Suggested Course Schedule—General Track in Physics

Freshman Year

First Term (15 units)

CHEM 110	General Chemistry I (4)
ENGL 102	Writing for a Liberal Education (3) Core or Electives (3)
MATH 273	Calculus I (4)
PHYS 185	Introductory Honors Seminar in Physics (1)

Second Term (15 units)

CHEM 111	General Chemistry II (4)
MATH 274	Calculus II (4)
PHYS 241	General Physics I (4)

or

PHYS 251	Honors General Physics I (4) Core or Electives (3)

Sophomore Year

First Term (14–16 units)

MATH xxx	Upper-Division Math Elective (3/4) Core or Electives (3–4)

PHYS 242 General Physics II (4)

or

PHYS 252	Honors General Physics II (4)
PHYS 270	Computers in Physics (4)

Second Term (17 units)

PHYS 243	General Physics III (4)
PHYS 307	Introductory Mathematical Physics (4)
PHYS xxx	Physics Elective (3) Core or Electives (6)

Junior Year

First Term (16 units)

PHYS 311	Modern Physics I (3)
PHYS 341	Intermediate Physics Laboratory I (3)
PHYS 351	Mechanics I (4) Electives (6)

Second Term (17 units)

PHYS 312	Modern Physics II (3)
PHYS 342	Intermediate Physics Laboratory II (3)
PHYS 354	Electricity and Magnetism I (4)
PHYS 385	Physics Seminar (1)
PHYS xxx	Physics Elective (3) Electives (3)

Senior Year

First Term (14 units)

PHYS 455	Introductory Quantum Mechanics (3)
PHYS 495	Capstone Project in Physics (2)

PHYS xxx	Physics Elective (3) Advanced Writing Course (3) Electives (3)

Second Term (15 units)

PHYS 495	Capstone Project in Physics (2)
PHYS xxx	Physics Elective (5) Physics and Other Electives (8)

Suggested Course Schedule—Applied Track in Physics

Freshman Year

First Term (15 units)

CHEM 110	General Chemistry I (4)
ENGL 102	Writing for a Liberal Education (3) Core or Electives (3)

MATH 273 Calculus I (4)

PHYS 185 Introductory Honors Seminar in Physics (1)

Second Term (15 units)

CHEM 111	General Chemistry II (4)
MATH 274	Calculus II (4)
PHYS 241	General Physics I (4)

or

PHYS 251	Honors General Physics I (4) Core or Electives (3)

Sophomore Year

First Term (14–15 units)

PHYS 242	General Physics II (4) or Honors General Physics II (4)
PHYS 270	Computers in Physics (4)
MATH xxx	Upper-Division Math Elective (3–4) Core or Electives (3)

Second Term (14 units)

PHYS 243	General Physics III (4)
PHYS 307	Introductory Mathematical Physics (3)
PHYS 355	Basic Electronics (4) Core or Electives (3)

Junior Year

First Term (16 units)

PHYS 311	Modern Physics I (3)
PHYS 341	Intermediate Physics Laboratory I (3)
PHYS 351	Mechanics I (4) Electives (6)

Second Term (17 units)

PHYS 312	Modern Physics II (3)
PHYS 342	Intermediate Physics Laboratory II (3)
PHYS 354	Electricity and Magnetism I (4)
PHYS 385	Physics Seminar (1) Electives (6)

Senior Year

First Term (15 units)

PHYS 361	Optical Fundamentals (4)
PHYS 495	Capstone Project in Physics (2)
PHYS xxx	Physics Electives (3) Advanced Writing Course (3) Physics/other elective (3)

Second Term (15 units)

PHYS 495	CapStone Project in Physics (2)
PHYS xxx	Physics Electives (5) Physics or other elective (8)

Suggested Course Schedule—Astrophysics Track

Freshman Year

First Term (15 units)

ASTR 161	General Astronomy I (4)
CHEM 110	General Chemistry I (4)
ENGL 102	Writing for a Liberal Education (3)
MATH 273	Calculus I (4)

Second Term (15 units)

ASTR 162	General Astronomy II (4)
MATH 274	Calculus II (4)
PHYS 241	General Physics I (4)
or	
PHYS 251	Honors General Physics I (4) Elective (3)

Sophomore Year

First Term (14–16 units)

MATH xxx	Upper-Division Math Elective (3–4)
PHYS 242	General Physics II (4)
or	
PHYS 252	Honors General Physics II (4) Core or Electives (7–8)

Second Term (14 units)

CHEM 111	General Chemistry II (4)
PHYS 243	General Physics III (4)
PHYS 307	Introduction to Mathematical Physics (3) Core or Electives (3)

Junior Year

First Term (16 units)

ASTR 331	Introduction to Stellar Astrophysics (3)
PHYS 311	Modern Physics I (3)
PHYS 341	Intermediate Physics Laboratory I (3)
PHYS 351	Mechanics I (4) Electives (3)

Second Term (16 units)

ASTR 303	Astrophysical Techniques (3)
PHYS 354	Electricity and Magnetism I (4) Electives (9)

Senior Year

First Term (16 units)

ASTR 495	Capstone Project in Astrophysics (3)
PHYS 455	Introductory Quantum Mechanics (3) Advanced Writing Course (3) Electives (7)

Second Term (15 units)

ASTR 432	Galaxies and Cosmology (3)
ASTR 470-479	Selected Topics in Contemporary Astrophysics (3) Electives (9)

Suggested Course Schedule for the Physics Secondary Education Major

Physics Secondary Education majors are not required to take any physics electives but are encouraged to take as many courses in physics and mathematics as possible. For a recommended course schedule, contact the Department of Physics, Astronomy and Geosciences.

MINOR IN PHYSICS

An important aspect of the overall contribution of physics is its impact on other disciplines. This program is designed to provide majors in any of the sciences, mathematics, business or humanities with a background in physics which will broaden their understanding and enhance their career opportunities. This program requires students to complete the following courses:

Required Courses (24 units)

PHYS 241, 242	General Physics I, II (4, 4) or
PHYS 251, 252	Honors General Physics I, II (4, 4)
PHYS 243	General Physics III (4)
PHYS 311	Modern Physics I (3)
PHYS xxx	Upper-Division Physics Courses (9)

Students interested in the Physics minor program should consult the Physics minor adviser as soon as possible in order to design a program to meet their special needs.

To provide greater flexibility in selecting electives, students may organize their course of studies to supplement their major programs and/or reflect their special interests. The array of courses should have internal coherence and must be approved by their Physics minor adviser. At least 8 upper-division units must be taken at Towson. A grade equivalent of 2.00 or higher must be earned in each course.

MINOR IN ASTRONOMY

The Astronomy minor program is directed toward students who are not physics majors but who could benefit from the scientific rigor and interdisciplinary nature of astronomy. Astronomy naturally cuts across several scientific disciplines including physics, biology, chemistry, computer science and planetary science. Students with an interdisciplinary background are increasingly in high demand. In addition to excellent preparation for a variety of technical fields, students seeking involvement in science in a public capacity, e.g., teachers, science public policy advisers, or science writers, will be well prepared by the program to relate and interpret new findings to the public.

Required Courses (25 units)

ASTR 161	General Astronomy I (4)
ASTR 162	General Astronomy II (4)
PHYS 211, 212	General Physics I, II Non-calculus-based (4,4)
	or
PHYS 241, 242	General Physics I, II Calculus-based (4,4)
	or
PHYS 251-252	Honors General Physics I, II (4,4)
ASTR 301	Cosmic Origins (3)
	or
ASTR 302	Honors Cosmic Origins (3)
ASTR 371	Planetary Astronomy (3)
ASTR 470-479	Special Topics in Contemporary Astrophysics (3)

Students interested in pursuing the Astronomy minor should consult the Astronomy minor adviser as soon as possible in order to design an appropriate schedule. Course substitutions may be requested and must be approved by the Astronomy faculty. At least 8 upper-division units must be taken at Towson. A grade equivalent of 2.00 or higher must be earned in each course.

DUAL DEGREE ENGINEERING PROGRAM

Refer to the College of Science and Mathematics Dual Degree Programs section immediately following this departmental listing in the catalog.

BACHELOR OF SCIENCE IN PHYSICS AND MASTER OF SCIENCE IN COMPUTER SCIENCE

Refer to the College of Science and Mathematics Dual Degree Programs section immediately following this departmental listing in the catalog.

EDWARD I. RUBENDALL PHYSICS ACHIEVEMENT AWARDS

The awards were established in honor of Professor Emeritus Rubendall by friends of the department. The awards are presented annually to outstanding juniors and seniors majoring in Physics.

WILLIAM F. PELHAM AWARD

This award was established in honor of Professor Emeritus William F. Pelham by his friends at Towson University and in the greater Baltimore arts

community. The award is presented to outstanding juniors in the department.

GEOSCIENCES PROGRAMS

Director: Jonathan Filer

Affiliated Faculty: Rachel Burks, Steven Lev, David Vanko

The Geosciences programs in the Department of Physics, Astronomy and Geosciences include the major in Geology and the major in Earth-Space Science.

MAJOR IN GEOLOGY

The Geology major contains a basis of the fundamental earth sciences supplemented by essential mathematics and physical sciences. The upper-level Geology classes are generally small, with both lecture and laboratory taught by faculty. The undergraduate educational experience is capped in the senior year by designing and completing a research project involving field and/or laboratory analyses. Depending on their course selections, Geology majors are prepared to enter successful geotechnical careers in environmental geology or hydrogeology, to teach at the secondary level, or to attend graduate school. Students interested in teaching certification in Earth and Space Sciences should investigate Towson's Earth-Space Sciences major.

The Geology major requires 47–49 units in geology and non-geology requirements completed with a grade equivalent of 2.00 or higher, plus 12–16 additional units of electives.

Required Geology Courses (32–33 units)

GEOL 121	Physical Geology (4)
	or
GEOL 122	Honors Physical Geology (4)
GEOL 123	Historical Geology (4)
GEOL 305	Environmental Geology (4)
GEOL 321	Structural Geology (4)
GEOL 331	Mineralogy (4)
GEOL 333	Petrology of Igneous and Metamorphic Rocks (4)
GEOL 443	Sedimentology and Stratigraphy (4)
GEOL 489	Introduction to Research (1)
GEOL 492	Introduction to Field Methods (2)
GEOL 495	Capstone Project in Geology (1–2)

Additional Required Courses (19–20 units)

CHEM 110-111	General Chemistry I and II (4, 4)
MATH 211	Calculus for Applications (3)
	or
MATH 273	Calculus I (4)
PHYS 211-212	General Physics I and II (4, 4)
	or
PHYS 241-242	General Physics I and II (4, 4)

In addition to the required courses listed above, students must take a minimum of four additional courses (minimum of 12 additional units) from the following list of electives. At least one of these must be a geology course. Note that some electives may require additional prerequisites. Other upper division courses in Biology, Chemistry, Physics or Geography may substitute as electives, but must be approved by a student's adviser prior to registration.

Elective Courses (12–16 units)

Choose from the following:

ASTR 357	Planetary Astronomy (3)
GEOL 323	Geomorphology (4)
	or

GEOL 315	Geomorphology (4)
GEOL 357	Physical Oceanography (3)
GEOL 415	Hydrogeology (4)
GEOL 451	Petrology of Sedimentary Rocks (3)
GEOL 470-479	Special Topics in Geology (1–4)
GEOL 317	Energy Resources (3) +
GEOL 319	Soils and Vegetation (3) +
GEOL 321	Interpretation of Aerial Photographs (3)
GEOL 412	Introduction to Geographical Information Systems (3) +
GEOL 416	Principles of Remote Sensing and Digital Image Processing (3) +
BIOL 205	General Botany (4) +
BIOL 305	Conservation Biology (4) +
BIOL 333	Humans, Science and the Chesapeake Bay (3) +
CHEM 331	Organic Chemistry (5)
CHEM 361	Chemical and Bacteriological Studies on Water Pollution (3) +
CHEM 345	Principles of Physical Chemistry (3)
CHEM 310	Instrumentation in Analytical Chemistry (3) +
MATH 335	Sampling Techniques (3)
MATH 378	Scientific Modeling and Simulation (3) +
PHYS 307	Introduction to Mathematical Physics (3) +
PHYS 352	Thermodynamics and Kinetic Theory (3) +
PHYS 351	Mechanics (4) +
PHYS 451	Mechanics II (3) +

+Course has prerequisite(s) not listed among the elective courses above.

MINOR IN GEOLOGY

Geological sciences provide an important perspective to fields like environmental science, environmental studies, and geography and environmental planning. This program is designed to furnish majors in sciences, humanities, business or the arts with a background that will enrich their education and deepen their understanding of the earth around them, particularly its materials, processes, history and environmental challenges. Students in the Geology minor are required to complete the following courses:

Required Courses (24 units)

GEOL 121	Physical Geology (4)
	or
GEOL 122	Honors Physical Geology (4)
GEOL 123	Historical Geology (4)
	Upper-Division Geology Units (16)

Students in the Geology minor should consult with a geology adviser as soon as possible to design a program to meet their particular needs and interests.

MAJOR IN EARTH-SPACE SCIENCE

The Department of Physics, Astronomy and Geosciences offers an undergraduate program leading to a Bachelor of Science in Earth-Space Science. This program is intended for students interested in secondary education, and is not appropriate for students interested in a professional career in geology. The program is designed to result in state certification to reach earth-space science at the secondary level, after the student completes the additional requirements of the Department of Secondary Education. Students must contact the Department of Secondary Education about admission to the Secondary Teacher Education Program after completing 45 units. A total of 57–58 units are required in this major, 12 of which also satisfy Core Curriculum requirements. Within the Earth-Space Science major, 34–35 required and elective units are within the earth, atmospheric, oceanographic and space sciences. The remaining units in the major are in the supporting physical and mathematical

sciences. All required courses in this track must be completed with a grade equivalent of 2.00 or higher. The additional Core Curriculum requirements must also be completed.

Required Courses (54 Units)

GEOL 121	Physical Geology (4)
GEOL 123	Historical Geology (4)
GEOL 357	Physical Oceanography (3)
ASTR 161	General Astronomy I (4)
ASTR 162	General Astronomy II (4)
BIOL 115	Biology: The Science of Life (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
MATH 115	Basic Mathematics for the Sciences (3)
PHYS 211	General Physics I (4)
PHYS 212	General Physics II (4)
GEOL 305	Environmental Geology (4)
GEOL 331	Mineralogy (4)
GEOG 377	Descriptive Meteorology (4)

Elective (3-4 Units)

Choose one of the following:

GEOL 321	Structural Geology (4)
GEOL 415	Hydrogeology (4)
GEOL 443	Sedimentology and Stratigraphy (4)
GEOG 315	Geomorphology (4)
GEOG 410	Environmental Geography (3)
GEOG 411	Studies in Natural Hazards (3)
GEOG 412	Introduction to Geographical Information Systems (3)

EARTH SCIENCE SECONDARY EDUCATION

Earth-Space Science Majors may obtain certification to teach earth science at the secondary level, pending approval of this certification program by the Maryland State Department of Education. Students must register for formal admission to the Secondary Education Program with the Department of Secondary Education, and they must meet the requirements described in that section of the catalog. Students in this program must have an adviser in the Department of Secondary Education in addition to their adviser in the Department of Physics, Astronomy and Geosciences. Earth-Space Science Majors in the Secondary Education program must complete the 55-56 units in the Earth Sciences program in addition to the Core Curriculum requirements and 41 units of professional secondary requirements in the Department of Secondary Education, 12 of which also satisfy Core Curriculum requirements. For certification purposes, students in this program should take WRIT 312 (History of Science) to fulfill their Advanced Writing Seminar requirement. Students are also required to take SCIE 421 (Applied Seminar in Secondary Science Teaching Methods) concurrently with SCED 499. For student teaching, a minimum 2.75 is required in the professional education courses, and a minimum overall of 2.50 is required.

Requirements for Admission to a Teacher Education Program

All students applying for admission to a Teacher Education Program at Towson University are required to complete a Criminal Background Disclosure form. This form is to be notarized and sent to the Center for Professional Practice.

Secondary Science Education Required Courses

Required Core Curriculum, Pre-Secondary Education and Secondary Education Courses

Core Curriculum Courses

Unless otherwise stated, one course is required from each category:

Towson Seminar	
English Composition:	ENGL 102
Mathematics	
Physics:	MATH 273 (4) and MATH 274 (4)
Earth Space:	MATH 115 (3)
Chemistry:	MATH 211 (3) or MATH 273 (4)
Biology:	MATH 211 (3) or MATH 273 (4) or MATH 237 (4) or PSYC 212 (4)

Creativity and Creative Development	
Arts and Humanities:	COMM 131
Social and Behavioral Sciences:	PSYC 101
Biological and Physical Sciences	
Advanced Writing Seminar:	WRIT 312 or EDUC 301 (3)
Metropolitan Perspectives:	SCED 200
The United States as a Nation:	HIST 145 or HIST 146
Global Perspectives	
Diversity and Difference:	EDUC 203 (prerequisite: SCED 200)
Ethical Issues and Perspectives:	SCED XXX (prerequisite: SCED 203)

Required Secondary Education and Science Education Courses

Preliminary courses

(May be taken prior to admittance to program and prior to remittance of PRAXIS 1 scores)

SCED 200	Foundations in Education (3)
SCED 305	Adolescent Development (3) (prerequisite: PSYC 101)
ISTC 301	Integrating Instructional Technology (3)
SPED 301	Introduction to Special Education (3)

Secondary courses

(to be taken after providing PRAXIS 1 or SAT scores and meeting with SCED adviser) (Junior Year)

SCED 341	Principles of Secondary Education (4) (Includes embedded field experience)
SCED 460	Using Reading/Writing in Secondary School (4) (Taken concurrently with SCED 341)

Professional Year

Internship Term (Fall)

To be taken concurrently:

SCED 499	Internship in Secondary Education (6)
SCED 461	Teaching Reading in Secondary Content Area (3)

SCIE 380 Methods of Teaching Biology (3)*

*Note: SCIE 380 is offered only during the fall term

Student Teaching Term (Spring)

To be taken concurrently:

SCIE 393	Student Teaching (12)
SCED 401	Analyzing Student Teaching (2)
SCED 462	Seminar in Teaching Reading in the SCED Content Area (1)

REQUIRED MAJOR COURSES

Biological Sciences

Required Biology Courses

BIOL 201	Biology I: Cellular Biology and Genetics (4) or
BIOL 203	Honors Biology I: Cellular Biology and Genetics (4)
BIOL 202	Biology II: Introduction to Ecology and Evolution (4)
BIOL 204	Educational and Career Planning for the Biologist (1)
BIOL 309	Principles of Genetics (4)

Required Breadth Courses

BIOL 205, 207	General Botany, General Zoology (4,4)
BIOL 408	Cell Biology (4) or
BIOL 409	Molecular Biology (3) or
BIOL 405	Molecular Ecology (4)
BIOL 325	Animal Physiology (4) or
BIOL 213, 214	Human Anatomy and Physiology I, II (4,4)

Required Ancillary Courses

CHEM 110, 111	General Chemistry I, II (4,4)
CHEM 330	Essentials of Organic Chemistry (5) or
CHEM 331, 332	Organic Chemistry I, II (5,5)
PHYS 211	General Physics I (4) or
PHYS 241	General Physics I Calculus-Based (4)
MATH 211	Calculus for Applications (3) or
MATH 273	Calculus I (4) or
MATH 237	Elementary Biostatistics (4) or
PSYC 212	Behavioral Statistics (4)

Geology Requirement

Choose one:

GEOL 121	Physical Geology (4)
GEOL 123	Historical Geology (4)
ASTR 161	General Astronomy (4)
GEOL 357	Physical Oceanography (3)
GEOG 373	Climatology (4)
GEOG 377	Meteorology (4)

Notes:

It is recommended that students take BIOL 325 rather than the other physiology options.

It is recommended that students take CHEM 330 (rather than 331 and 332); Science Education students need only one term of Physics (PHYS 211 or 241).

Elective courses: Science Education students are not required to take any additional BIOL coursework, but are free to do so, especially to increase their ability to teach in certain sub-disciplines.

Chemistry

Required Chemistry Courses

CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 323	Inorganic Chemistry (4) or
CHEM 351	Biochemistry I (3)
CHEM 331	Organic Chemistry I (4)
CHEM 332	Organic Chemistry II (4)
CHEM 345	Principles of Physical Chemistry (3)
CHEM 372	Intermediate Laboratory (2)

Additional Chemistry Electives*Choose 4 units from the following:*

CHEM 346	Theoretical Foundations of Physical Chemistry (3+)
CHEM 356	Biochemistry Laboratory (2)
CHEM 357	Biochemistry II (3)
CHEM 361	Chemical and Bacterial Studies on Water Pollution (3)
CHEM 363	Chemistry of Dangerous Drugs (3)
CHEM 367	Forensic Chemistry (3)
CHEM 373	Intermediate Laboratory II (1)
CHEM 391-4	Special Problems in Chemistry (1-3)
CHEM 395-6	Internship in Chemistry (1-3)
CHEM 491-4	Introduction to Research in Chemistry (1-3)
CHEM 450	Ecological Chemistry (3)
CHEM 461	Advanced Lecture Topics (1-3)
CHEM 462	Advanced Laboratory Techniques (1-2)
CHEM 480	Chemical Toxicology (3)

Ancillary Courses

PHYS 211, 212	General Physics I, II (4, 4) or
PHYS 241, 242	General Physics Calculus-Based I, II (4, 4)
BIOL 190	Introductory Biology for the Health Professions (4) or
BIOL 201	Biology I: Cellular Biology and Genetics (4)
GEOL 121	Physical Geology (4) or
ASTR 161	General Astronomy (4)
MATH 211/273	Calculus for Applications, Calculus I (4, 4)

Earth-Space Science**Required Earth-Space Science Courses**

GEOL 121	Physical Geology (4)
GEOL 123	Historical Geology (4)
GEOL 357	Physical Oceanography (3)
ASTR 161	General Astronomy I (4)
ASTR 162	General Astronomy II (4)
BIOL 115	Basic Mathematics for the Sciences (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
MATH 115	Basic Mathematics for the Sciences (3)
PHYS 211	General Physics I (4)
PHYS 212	General Physics II (4)
GEOL 331	Mineralogy (4)
GEOL 305	Environmental Geology (4)
GEOG 377	Meteorology (4)
	Elective (3-4)

Electives*Choose one of the following:*

GEOL 321	Structural Geology (4)
GEOL 415	Hydrogeology (4)
GEOL 443	Sedimentology and Stratigraphy (4)
GEOG 315	Geographical Aspects of Pollution (4)
GEOG 410	Environmental Geography (3)
GEOG 411	Studies in Natural Hazards (3)
GEOG 412	Introduction to Geographical Information Systems (3)

Physics**Required Physics Courses**

PHYS 185	Introductory Seminar in Physics (1)
PHYS 241	General Physics I Calculus-Based (4)
PHYS 242	General Physics II Calculus-Based (4)
PHYS 243	General Physics III (3)
PHYS 307	Introductory Mathematical Physics (4)
PHYS 311	Modern Physics I (3)
PHYS 341	Modern Physics II (3)
PHYS 351	Mechanics (4)

Additional Physics Courses

PHYS 342	Intermediate Physics Laboratory (3)
PHYS 385	Physics Seminar (1)

Non-physics Requirements

BIOL 201	Biology I: Cellular Biology and Genetics (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
MATH 273	Calculus I (4)
MATH 274	Calculus II (4)
WRIT 312	History of Science (3)

Earth Science Course Requirement*Choose one of the following:*

ASTR 161	General Astronomy I (4)
GEOL 121	Physical Geology (4) or
GEOL 357	Physical Oceanography (3)

Dual Degree Programs

Towson University offers a Dual Degree Engineering Program with University of Maryland, College Park (UMCP); a Dual Degree Program in Medicinal Chemistry with the University of Maryland School of Pharmacy; and Dual Degree programs with the University of Tasmania in Biological Sciences and either Aquaculture or Antarctic and Southern Ocean Studies. In addition, Towson offers a five-year program for students interested in obtaining a B.S. degree in Physics and an M.S. degree in Computer Science. These programs are described below.

DUAL DEGREE PROGRAMS WITH THE UNIVERSITY OF TASMANIA**B.S. IN BIOLOGICAL SCIENCES AND M.S. IN EITHER AQUACULTURE OR ANTARCTIC AND SOUTHERN OCEAN STUDIES****OFFICE**

Smith Hall 312, 410-704-2121

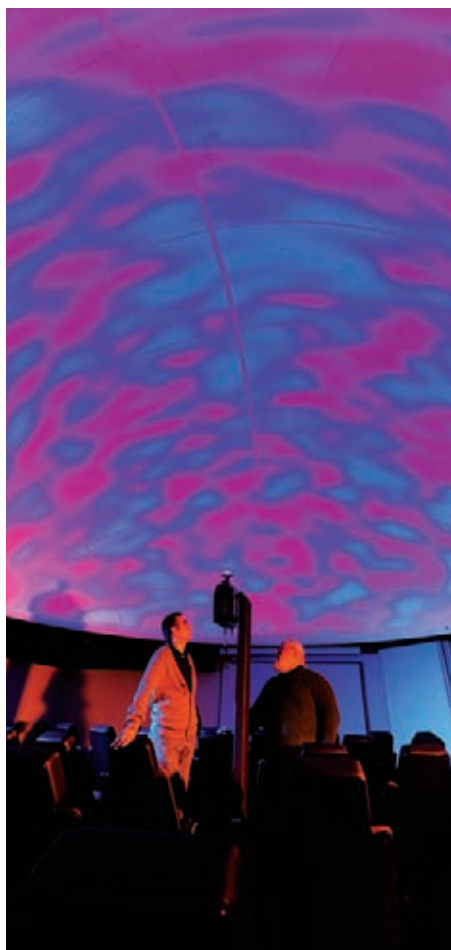
Towson University offers two dual degree programs with the University of Tasmania, Australia: one in Aquaculture and another in Antarctic and Southern Ocean Studies. Students entering either of these (3 + 2) five-year programs will study at Towson University for the first three years of the program and at the University of Tasmania for the last two years. These programs will lead to a Bachelor of Science degree from Towson University, and a Master of Science degree from the University of Tasmania.

Both of these programs require the completion of 96 units at Towson University, including 38 units of Core Curriculum requirements. To ensure that students are adequately prepared for the honors-level course work and research at the University of Tasmania, the required 58 units of biology courses, and ancillary chemistry, physics and mathematics courses have been carefully selected in consultation with faculty at the University of Tasmania. The remaining 24 units of course work will be completed at the University of Tasmania.

Students interested in these programs must first meet the general requirements for undergraduate admission outlined in Towson University's *Undergraduate Catalog*. After completing three years of study at Towson, students with a cumulative GPA of 3.00 or higher will transfer to either the School of Aquaculture or the Institute of Antarctic and Southern Ocean Studies, both at the University of Tasmania. Upon the satisfactory completion of the first year at the University of Tasmania, students may apply to Towson University to receive the B.S. degree in Biological Sciences. Upon the satisfactory completion of the second year, students earn the M.S. degree from the University of Tasmania.

Advising

Upon admission to Towson University, students interested in either of these two programs should contact the associate dean of



the College of Science and Mathematics, who will assist them in planning the program, declaring a major and obtaining the necessary information.

Towson University Requirements (96 units)

Students in either of these dual-degree programs must complete 96 units at Towson University, which include the following required courses:

Core Curriculum Requirements (38 units)

Students must complete courses in English composition, literature, humanities or physical or social sciences in 14 Core categories as outlined in this catalog.

Required Biology Courses (21 units)

BIOL 201	Cellular Biology and Genetics (4)
BIOL 202	Introduction to Ecology, Evolution and Behavior (4)
BIOL 205	General Zoology (4)
BIOL 207	General Botany (4)
BIOL 309	Principles of Genetics (4)

Ancillary Courses Specific to the Aquaculture Program

Chemistry (18 units)

CHEM 110-111	General Chemistry (4,4)
CHEM 330	Essentials of Organic Chemistry (5)
CHEM 351	Biochemistry I (3)
CHEM 356	Biochemistry Laboratory (2)

Physics (minimum of 5 units)

PHYS 203	Topics in Physics for Biology Majors (5) or
PHYS 211-212	General Physics I, II (4,4) or
PHYS 241-242	General Physics I, II (4,4) [Calculus-based physics]

Mathematics (minimum of 3 units)

MATH 211	Calculus for Application (3)
MATH 237	Elementary Biostatistics (4)
MATH 273	Calculus (4)
PSYC 212	Behavioral Statistics (4)

Required Biology Elective Courses Needed for Entry into the Aquaculture Program

The following two courses are required:

BIOL 455	Fish Biology (4)
BIOL 353	Invertebrate Zoology (4)

Students may wish to, but are not required, to take one or more of the following additional recommended electives:

BIOL 310	Conservation Biology (4)
BIOL 315	Medical Microbiology (4)
BIOL 347	Marine Biology (3)
BIOL 360	Histology (4)
BIOL 402	General Ecology (4)
BIOL 406	Limnology (4)
BIOL 413	Evolution (3)

Ancillary Courses Specific to the Antarctic and Southern Ocean Studies Program

Chemistry (18 units)

CHEM 110-111	General Chemistry (4,4)
CHEM 331-332	Organic Chemistry I and II (5,5)

Physics (8 units)

PHYS 211-212	General Physics I, II (4,4) or
PHYS 241-242	General Physics I, II (4,4) [Calculus-based physics]

Mathematics (minimum of 3 units)

The mathematics requirement can be fulfilled by taking KMA153 Data Handling and Statistics at the University of Tasmania during the first term of study or by taking one of the following:

MATH 211	Calculus for Application (3)
MATH 237	Elementary Biostatistics (4)
MATH 273	Calculus (4)
PSYC 212	Behavioral Statistics (4)

Required Biology Elective Courses Needed for Entry into the Institute of Antarctic and Southern Ocean Studies Program

BIOL 347 Marine Biology (3)
Students will take at least three electives from among the following list to equal 12 units:

BIOL 309	Principles of Genetics (4)
BIOL 310	Conservation Biology (4)
BIOL 353	Invertebrate Zoology (4)
BIOL 455	Fish Biology (4)
BIOL 402	General Ecology (4)

University of Tasmania Requirements

I. Dual Degree Program in Aquaculture

First year at the University of Tasmania (24 units):

Towson University will grant 3 units for each of eight courses taken at the University of Tasmania as biology upper-level electives.

Term 1	Term 2
Technology for Aquaculture	Intensive Crustacean and Zooplankton Culture
Physiology of Aquatic Organisms	Intensive Molluscan Culture
Nutrition of Aquatic Organisms	Intensive Finfish Culture
Intensive Algal Culture	Aquatic Animal Health

Upon the successful completion of these courses, the units will be transferred to Towson University and the B.S. degree in Biological Sciences will be conferred.

Second year at the University of Tasmania:

Students will complete a literature review (written and oral presentation), research dissertation (written and poster presentation), and specialist practical skills (eight weeks of work experience). The research project occupies most of the year, addresses a research topic in an area of interest identified by the student in Year 1, and serves as a recognized pathway either into employment or higher research via a Ph.D. program. Following the successful completion of these elements of the program, an M.S. degree in Aquaculture will be conferred by the University of Tasmania.

For more specific details about the last two years of this program, see the University of Tasmania School of Aquaculture Web site: www.scieng.utas.edu.au/aqua.

II. Dual Degree in Antarctic and Southern Ocean Studies

First year at the University of Tasmania (24 units):

Towson University will grant 3 units for each of eight courses taken at the University of Tasmania as biology upper-level electives.

Term 1 (beginning in July)

HAB103	Historical Indigenous Australia
KMA153	Data Handling and Statistics

and two of the following:

KZA351	Antarctic Ecology
KZA 353	Evolutionary Biology and Biogeography
KZA 352	Environmental Adaptation

Term 2

Life Sciences Unit
Physical Sciences Unit
Social Sciences Unit
Antarctic Operations

Upon the successful completion of these courses, the units will be transferred to Towson University and the B.S. degree in Biological Sciences will be conferred.

Second Year at the University of Tasmania:

This is devoted to full-time research on a topic within the student's particular specialty. The work is supervised by appropriate research staff either within the University of Tasmania's Institute of Antarctic and Southern Ocean Studies (IASOS) or within one or more of the associated federal government research agencies. Depending on the topic and circumstances of the time, it may be necessary or desirable for the student to spend some time in Antarctica.

For specific details about the last two years of this program, see the University of Tasmania's IASOS Web site: www.scieng.utas.edu.au/iasos.

DUAL DEGREE ENGINEERING PROGRAM WITH UNIVERSITY OF MARYLAND, COLLEGE PARK OFFICE

Smith Hall 445, 410-704-3020
www.towson.edu/physics

The objective of the Dual Degree Engineering Program at Towson University is to provide an educational opportunity for students interested in both a "liberal science" and a professional education at the undergraduate level. Students choosing this program will be able to obtain a Bachelor of Science or Arts degree from Towson and a Bachelor of Engineering degree from University of Maryland, College Park. In principle, students can seek a degree in any discipline offered by Towson; but in practice, Biology, Chemistry, Computer Science, Mathematics and Physics are the natural choices for students interested in the Dual Degree Program.

Requirements for Dual Degree Students While at TU

1. Complete required courses in Dual Degree Program.
2. Complete a minimum of 90 units.
3. Complete Core Curriculum requirements.
4. Complete a major program (with transfers approved by department).
5. Obtain recommendation from chair of TU major department.

Requirements for Admission

In order for students to become Dual Degree candidates at Pennsylvania State University or University of Maryland, College Park, they must have satisfied Towson University requirements and, in addition, have the following:

1. A cumulative GPA at TU of 3.00 or better.
2. A recommendation from the designated official at Towson University.

About the Dual Degree Program with University of Maryland, College Park

Dual Degree candidates from Towson University are eligible to seek a baccalaureate degree majoring in any one of the following areas at University of Maryland, College Park:

Aerospace Engineering
Biological Resources Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Fire Protection Engineering
Mechanical Engineering
Materials Science Engineering
B.S. in Engineering

In order to be eligible for transfer into the engineering program of their choice at University of Maryland, College Park, students must have included in their work at Towson University the following courses:

CHEM 110-111	General Chemistry I, II (8)
COSC 236	Introduction to Computer Science I (4)
MATH 273-274-275	Calculus I, II and III (12)
MATH 374	Differential Equations (3)
PHYS 241-242-243	Physics I, II and III (11)
PHYS 351	Mechanics I (4)
PHYS 352	Thermodynamics and Kinetic Theory (3)

Additional required courses for Dual Degree students at TU for selected majors are listed below.

Courses at Towson University	Equivalent Courses at UMCP

Students interested in Biological Resources Engineering must take the following courses at TU:

BIOL 201 Biology I: Cellular Biology and Genetics (4)	BIOL 105
BIOL 315 Medical Microbiology (4)	MICB 200
ECON 202 Macroeconomic Principles (3)	ECON 201
BIOL 408 Cell Biology (4)	ZOOL 201

Students interested in Chemical Engineering must take the following courses at TU:

CHEM 331, 332 Organic Chemistry I, II (5, 5)	CHEM 233, 243
CHEM 345 Principles of Physical Chemistry (3)	CHEM 481
CHEM 346 Theoretical Foundations of Physical Chemistry (3)	CHEM 483
CHEM 373, 374 Intermediate Lab I, II (1, 1)	CHEM 483

Students interested in Civil Engineering must take the following courses at TU:

CHEM 330 Essentials of Organic Chemistry (5)	CHEM 237
MATH 330 Introduction to Statistical Methods (4)	ENCE 302

Students interested in Electrical Engineering must take the following courses at TU:

PHYS 354, 454 Electricity and Magnetism I, II (4, 3)	ENEE 380, 381
PHYS 335 Basic Electronics (4)	ENEE 204
PHYS 337 Digital Electronics (4)	ENEE 244, 206
PHYS 311 Modern Physics (4)	PHYS 421

Students interested in Materials Engineering must take the following courses at TU:

PHYS 335 Basic Electronics (4)	ENEE 204
CHEM 331 Organic Chemistry I (5) or	CHEM 233
CHEM 345 Principles of Physical Chemistry (3)	CHEM 481

DUAL DEGREE PROGRAM IN MEDICINAL CHEMISTRY WITH THE UNIVERSITY OF MARYLAND SCHOOL OF PHARMACY

Program Director: Boon H. Loo

OFFICE

Smith Hall 543, 410-704-3055 or 410-704-3058

E-mail: bloo@towson.edu

The program requires Prepharmacy students to study chemistry at Towson University for three years prior to application and acceptance into the Doctor of Pharmacy (Pharm.D.) program at the University of Maryland School of Pharmacy. The three years at Towson University, combined with successful completion of the first two years of study in the School of Pharmacy, will provide the student the units and understanding needed to meet the requirements for the B.S. or B.A. degree in Medicinal Chemistry from Towson University. This 3 + 2 Dual Degree Program between Towson University and the University of Maryland School of Pharmacy provides students the opportunity to broaden their background and allows them flexibility of career options as summarized in the following chart.

Dual Degree Program and Options

After Completing	Decision Points (Career Options)
Three years at Towson University	- Continue studies for B.S. or B.A. in Medicinal Chemistry at University of Maryland School of Pharmacy (contingent upon admission to the program). - Pursue B.S. or B.A. at TU (Chemistry; Environmental Science; Molecular Biology, Biochemistry and Bioinformatics).
Five years (three years at TU and two years at UMD School of Pharmacy)	- Earn B.S. or B.A. in Medicinal Chemistry from TU and continue in the Pharm.D. program at UMD. - Earn B.S. or B.A. in Medicinal Chemistry at TU and pursue other post-baccalaureate study. - Earn B.S. or B.A. in Medicinal Chemistry at TU and enter marketplace.
Seven years (three years at TU and four years at UMD School of Pharmacy)	- Complete Pharm.D. at UMD and enter the marketplace. - Complete Pharm.D. and continue Ph.D. specialization.*

*Combined Pharm.D./Ph.D. or Pharm.D./MBA programs are available at University of Maryland School of Pharmacy.

Towson University Admission Requirements

Applicants must meet the requirements for undergraduate admission to Towson University. While completing the third year of study as outlined below at Towson, the student must apply and be admitted to the School of Pharmacy at University of Maryland to complete the Dual Degree Program.

Towson University Requirements (90-91 units)

Leading to B.S. or B.A. in Medicinal Chemistry

Chemistry (26 units)

CHEM 110/111	General Chemistry I and II (4,4)
CHEM 210	Introduction to Analytical Chemistry (5)
CHEM 331/332	Organic Chemistry I and II (5,5)
CHEM 351	Biochemistry I (3)

Biology (16 units)

BIOL 201	Cellular Biology and Genetics (4)
BIOL 213/214	Human Anatomy and Physiology I and II (4,4)
BIOL 315	Medical Microbiology (4)
	or
BIOL 318	Microbiology (4)

Physics (8 units)

PHYS 211/212	General Physics I and II (noncalculus-based) (4,4)
	or
PHYS 241/242	General Physics I and II (calculus-based) (4,4)

Mathematics (7-8 units)

MATH 231	Basic Statistics (3)
	or
MATH 237	Elementary Biostatistics (4)
MATH 273	Calculus I (4)

Humanities and Social Science Requirements (9 units)

COMM 131	Fundamentals of Speech Communication (3)
ECON 201	Microeconomic Principles (3)
ENGL 102	Writing for a Liberal Education (3)

Additional Core Curriculum Requirements (24 units)

Pharm.D. Admission Requirements

To be considered for admission, applicants must:

- Submit a completed application, transcripts of all higher education institutions attended and the Pharmacy College Admission Test (PCAT) scores.
- Have an overall minimum GPA of 2.50.

Students having average GPAs of 3.50 or better, PCAT scored in the 80th percentile, and with strong backgrounds in biology and chemistry are competitive for admission to the program. Good written and verbal communication skills are essential in the program and in the profession of pharmacy. Students considered for admission are invited to admission interviews each spring with faculty, students and alumni.

University of Maryland School of Pharmacy (31 units)

(Currently required courses in the Pharm. D. program taken in the first two years.)

Chemistry (13 units)

PHAR 510	Biochemistry (3)
PHAR 513	Drug Chemistry (2)
PHAR 526	Physical Chemistry (2)
PHAR 531	Pharmaceutical Chemistry (2)
PHAR 533	Medicinal Chemistry I (1)
PHAR 542	Clinical Chemistry (1)
PHAR 543	Medicinal Chemistry II (2)

Biology (18 units)

PHAR 514	Human Biology I (3)
PHAR 520	Molecular Biology (3)
PHAR 524	Human Biology II (3)
PHAR 525	Immunology (2)
PHAR 530	Microbiology/Antibiotics I (2)
PHAR 534	Human Biology III (3)
PHAR 540	Microbiology/Antibiotics II (2)

BACHELOR OF SCIENCE IN PHYSICS AND MASTER OF SCIENCE IN COMPUTER SCIENCE**OFFICE**

Smith Hall 445, 410-704-3020

The Department of Physics, Astronomy and Geosciences and the Department of Computer and Information Sciences offer a “four-one” program which leads to the degrees B.S. in Physics and M.S. in Computer Science in five years. Students can satisfy the requirements for a Physics major and graduate with their class. By taking additional computer science courses as their free electives, they will be able to take 6 to 9 units of graduate computer science courses in their senior year. (These graduate courses will not be counted toward their undergraduate degree requirements.)

The remaining courses and thesis requirements for the M.S. in Computer Science would then be completed in a fifth year.

This option is especially attractive to students who are considering dual majors in Physics and Computer Science or who are planning careers in the area of computational sciences.

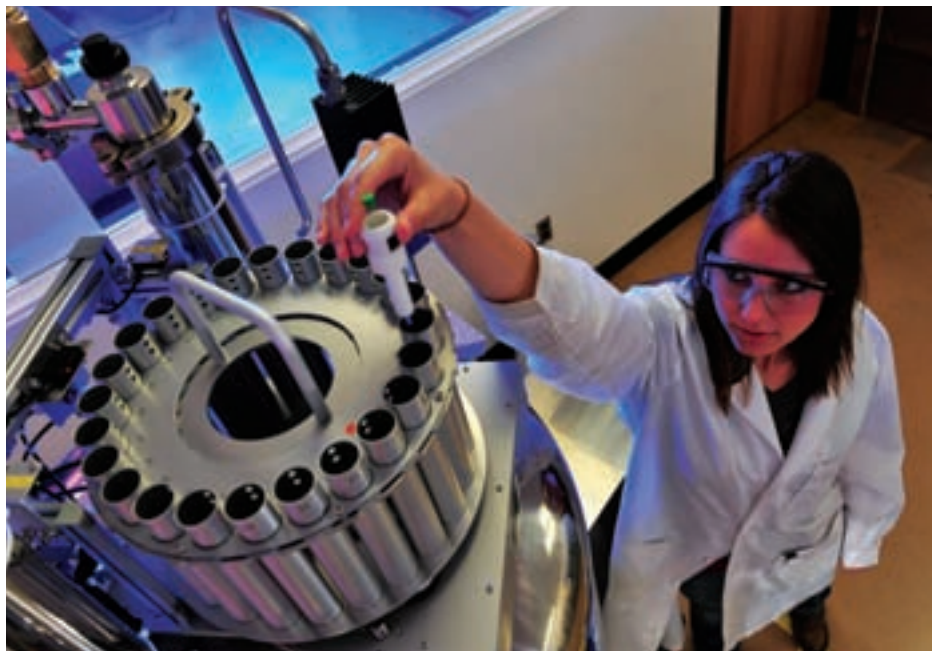
Those students interested in the “four-one” program should declare their intent by the end of the second (sophomore) year and meet with Ramesh Karne, computer science graduate coordinator, early in the fall of the third (junior) year.

Required Courses in Computer and Information Sciences and Mathematics

MATH 263	Discrete Mathematics (3)
COSC 236	Introduction to Computer Science I (4)*
COSC 237	Introduction to Computer Science II (4)
COSC 280	Assembly Language and Computer Architecture (3)
COSC 336	Data Structures and Algorithm Analysis (4)†
COSC 338	Computer Organization and Architecture (4)

*COSC 236 will replace the physics requirement of COSC 165. Students may take PHYS 337 and PHYS 437 in place of COSC 280 and COSC 338.

†Students completing COSC 236 and COSC 237 with a grade equivalent of 3.00 or higher are exempt from taking COSC 336.

**Pre-Professional Programs**

The Fisher College of Science and Mathematics offers pre-professional preparation in medicine, dentistry, pharmacy, and veterinary medicine. The programs are described below.

PREMEDICAL/PREDENTAL PROGRAM—UNDERGRADUATE

Undergraduate PreMedical/PreDental Committee Chair: George H. Harrison

OFFICE

7800 York Road, Room 371, 410-704-2275

E-mail: pre-professional@towson.edu

Students who are interested in careers in medicine or dentistry must keep the following facts in mind during their studies:

- Students must have an outstanding academic record in all the courses they take—science and otherwise—to be competitive for admission to medical or dental school.
- Most students who are admitted to medical or dental school have a B.S. or B.A. degree. A very few exceptional students are admitted to professional school with the minimum required 90 units of university work.
- The B.S. or B.A. degree may be in any discipline, but most students get their degrees in one of the sciences. However, all students must take the science courses that are required by the professional schools and listed under Required Courses below.
- Students interested in medical or dental school usually take the Medical College Admission Test (MCAT) or the Dental Aptitude Test (DAT) one to one and one-half years in advance of entering professional school. Both tests are computerized and are given throughout the year. Students are strongly urged to prepare for the MCAT or DAT, either on their own or by taking a commercial preparation course.
- Letters of recommendation are required, and at Towson University these letters are prepared by the PreMedical/PreDental Committee.
- Careful planning and organization on the part of the student are absolute necessities.

Information should be obtained from the PreMedical and PreDental Committee before or upon entering Towson University. Write to the Pre-Professional Program, Towson University, 8000 York Road, Towson, MD 21252-0001 or e-mail pre-professional@towson.edu.

Requirements for Admission to Medical or Dental School

A student must have an outstanding undergraduate record to be competitive for admission to medical or dental school. Criteria used by professional schools to evaluate applicants include:

- academic achievement with emphasis on performance in biology, chemistry, mathematics and physics

2. scores on the Medical College Admission Test (MCAT) or Dental Admission Test (DAT)
3. motivation to pursue a career in medicine or dentistry
4. clinical and/or research experience
5. participation in extracurricular activities
6. interview with members of the medical or dental school admissions committee
7. letter of recommendation prepared by the applicant's undergraduate Premedical/Pre dental Committee

Letters of recommendation written by the Towson University PreMedical/PreDental Committee are based upon evaluation of Items 1–6 above as well as letters of evaluation obtained by students from science faculty of their choosing and an interview with members of the committee.

Although educational philosophies and specific undergraduate course requirements differ among the nation's medical and dental schools, these institutions recognize the value of a broad-based undergraduate education including a strong foundation in the natural sciences (biology, chemistry, physics and mathematics), well-developed communication skills, and a solid background in the humanities and social sciences.

Required and Recommended Science Courses

Premedical and Pre dental students, regardless of major, must take the required courses as part of their curriculum. Students are also advised to take as many of the highly recommended courses as possible as these courses should help improve their performance on the MCAT or DAT exams.

Required Courses (34 units)*

These courses are almost always required by medical and dental schools.

BIOL 201	Cellular Biology and Genetics (4)
BIOL xxx	Elective (4)
CHEM 110	General Chemistry I (4)
CHEM 111	General Chemistry II (4)
CHEM 331	Organic Chemistry I (5)
CHEM 332	Organic Chemistry II (5)
PHYS 211	General Physics I (4)**
PHYS 212	General Physics II (4)**

**All of the required courses should be completed before taking the MCAT or DAT exams. Some medical schools also require calculus and/or other specific courses. Many dental schools now require a biochemistry course. Students should determine the admission requirements of the schools they are especially interested in attending.*

***PHYS 241 Physics I and PHYS 242 Physics II, both of which require calculus, may be taken in place of PHYS 211, 212. PHYS 241, 242 must be taken by Physics majors.*

Highly Recommended Courses

These courses are sometimes required by medical and dental schools.

MATH 115	Basic Mathematics for the Sciences (3) (Students are encouraged to take other mathematics courses, such as calculus, to meet the requirements of specific medical schools.)

BIOL 213	Human Anatomy and Physiology I (4)
BIOL 214	Human Anatomy and Physiology II (4)
BIOL 309	Principles of Genetics (3)
BIOL 408	Cell Biology (4)
BIOL 409	Molecular Biology (3)
CHEM 351	Biochemistry I (3)

Undergraduate students may obtain the B.S. or B.A. degree in any major but **must** as a minimum take the Required Courses before applying to professional school. Most Premedical and Pre dental students major in Biology or Chemistry.

An undergraduate degree from Towson University requires a minimum of 120 units. This includes the completion of the Core Curriculum requirements and the courses required for a major (approximately 36 units).

PREPHARMACY PREPARATION

Program Director: Boon Loo

OFFICE

Smith Hall 543, 410-704-3058

E-mail: bloo@towson.edu

Students planning a career in pharmacy may apply to a college of pharmacy after taking or expecting to complete a total of 68 units of university credit, including the required courses. Student averages are evaluated in the following four areas: (a) overall college work, (b) required courses, (c) chemistry courses, and (d) mathematics and physics courses. In addition, applicants are required to satisfactorily pass the Pharmacy College Admission Test (PCAT), followed by a personal interview by the admission committee of the pharmacy school.

Required courses include 3 units of English, 6 units of mathematics (through Calculus I), 16 units of biology, 8 units of physics, and 18 units of chemistry. The remaining units (18–20) include elective courses, such as sociology, economic principles and problems, public speaking, modern languages, art, music, psychology, botany, biology and computer programming.

Students interested in pharmacy as a professional career should consult with the prepharmacy adviser in the Department of Chemistry upon admission to Towson University. Students need to plan a course program, declare an academic major, and become cognizant of the specific admissions requirements of the pharmacy college that they plan to attend. The recommended course sequence is based upon the requirements of the University of Maryland and is typical of most pharmacy schools.

Prepharmacy Course Requirements

BIOL 201	Cellular Biology and Genetics (4)
BIOL 213	Human Anatomy and Physiology I (4)
BIOL 214	Human Anatomy and Physiology II (4)

BIOL 315	Medical Microbiology (4) or Microbiology (4)
BIOL 318	General Chemistry I (4)
CHEM 110	General Chemistry II (4)
CHEM 111	Fundamentals of Speech Communication (3)
COMM 131	Microeconomic Principles (3)
ECON 201	Writing for a Liberal Education (3)
ENGL 102	Basic Statistics (3) or Elementary Biostatistics (4)
MATH 231	Calculus I (4)
MATH 237	Organic Chemistry I (5)
MATH 273	Organic Chemistry II (5)
CHEM 331	General Physics I (4)
CHEM 332	General Physics II (4)
PHYS 211*	
PHYS 212*	

**Physics 241 and 242 can be substituted for the above, but these two courses require calculus as a prerequisite.*

PREVETERINARY PREPARATION

Program Director: Jack D. Shepard

OFFICE

Smith Hall 259, 410-704-2394

jshepard@towson.edu

Students planning a career in veterinary medicine should be aware of the following considerations as they prepare for admission to veterinary school:

- To be admitted to these very selective schools, students must have an outstanding record, usually with a minimum of 90 undergraduate units.
- Most entering veterinary students have a B.S. or B.A. degree with a major in Biology or Chemistry, although other specific disciplines may be acceptable if basic courses in biology, chemistry, physics and mathematics are included.
- Although there are no specific tests required for admission to some veterinary schools, most request indications of aptitude as reflected in the GRE or other standardized examinations.
- Veterinary schools expect applicants to have experience in aiding or assisting a veterinarian or working in adjunct fields as a volunteer or paid assistant. Varied experience, including research, is considered valuable.
- Advising for preveterinary students is available through the Department of Biological Sciences. It is strongly suggested that students seek these advisory services upon entering Towson University to maximize their career planning strategies.

Careful planning and early contact with veterinary schools is crucial. For further information, contact Professor Jack Shepard, Department of Biological Sciences, at jshepard@towson.edu.



The Honors College

The Honors College at Towson University is designed to provide unique and challenging opportunities for the most highly qualified and motivated students seeking intellectual and personal growth. The Honors College involves students and faculty from across the university in a community of scholars who together explore questions within and beyond their disciplines. The Honors College serves, therefore, as the center and symbol of the university's commitment to academic excellence in the education of its undergraduates. The "Living and Learning Community" was specifically designed to create an intellectual community where students live together on campus and share ideas, integrate residential living with classroom activity, and nurture an environment conducive to academic achievement.

Approximately 700 students from all degree granting colleges and major departments participate in the Honors College. Professors from a variety of disciplines are selected to lead small Honors classes that encourage interdisciplinarity, multiple pedagogies, student involvement, creativity, open discussion and independent critical thinking. In this way, students' perspectives are expanded as they explore areas not closely related to their disciplines and are encouraged to work in their majors with greater intensity than would be possible within traditional curricular programs. Thus, the Honors College provides an environment in which students develop their skills, cultivate their talents, and achieve excellence in academics, research, service and individual development, leading to professional success and personal fulfillment.

Joseph McGinn, Dean
Erin Mountz, Assistant Dean

COLLEGE OFFICE
Stephens Hall 302, 410-704-4677
Fax: 410-704-4916
E-mail: honors@towson.edu
www.towson.edu/honors

The Honors College

Honors College Faculty: Howard Baetjer (*Economics*), Barbara Bass (*English*), Peter Baker (*English*), Amy Bennett (*Psychology*), Fran Botkin (*English*), Lillian Carter (*Health Sciences*), Chris Cain (*English*), Carol Caronna (*Sociology*), Elizabeth Clifford (*Sociology*), Chris D'Addario (*English*), Darush Davani (*Computer Science*), Christos Evangeliou (*Philosophy*), Jack Fruchtman (*Political Science*), Gail Gasparich (*Biological Sciences*), Cindy Gissendanner (*History*), Beth Haller (*Mass Communications*), Scott Hilberg (*Computer Science*), Gail Kaplan (*Mathematics*), Cristina Magaldi (*Music*), Jonathan Mattanah (*Psychology*), Alison McCartney (*Political Science*), Suzanne Obenshain (*Educational Technology & Literacy*), Andrew Reiner (*English*), Akim Reinhardt (*History*), Cecilia Rio (*Women's Studies*)

MISSION STATEMENT

The Honors College at Towson University is committed to academic excellence in the education of our most highly qualified and motivated undergraduates by providing an enriched learning environment in which students develop their skills, cultivate their talents, and achieve excellence in academics, research, service and individual development.

VISION STATEMENT

The Honors College experience at Towson University is to support a creative learning environment in which students explore a greater understanding of course content, use complex critical and analytic thinking, and gain values of self and community to enhance leadership competencies within an intellectually demanding undergraduate curricular framework.

What Honors Students Experience:

- Smaller class sizes (20 or fewer students per honors class)
- Priority scheduling for course registration
- Enriched curriculum with a more stimulating environment
- Access to special campus facilities including honors housing and an honors computer lab and student study
- Individualized academic and professional advising with designated honors faculty
- Renewable Honors College Merit Scholarships and eligibility for an Honors College study abroad scholarship
- Recognition of honors course work on transcripts, diploma and at graduation

Admission Requirements

New freshman and transfer students must complete an Honors College application to be considered for admission to the Honors College. Most honors students apply in high school and are admitted for their freshman year, but transfer and current Towson University students may also apply to the Honors College. High school and transfer applicants with fewer than 30 credits are evaluated based on their high school academic record; SAT scores; participation in leadership, extracurricular and community service activities; and a well-written application essay.

Transfer students with 30 credits or more of graded, college-level courses must have at least a 3.50 GPA to apply and will be evaluated on the basis of their collegiate record instead of their high school grades and SATs. Applicants from other honors programs will be given special consideration for admission.

Current Towson University students may apply to the Honors College if they have been enrolled at Towson University for two terms (at least 30 units) but no more than four terms (60 units) and have a cumulative GPA of 3.50 or higher.

SCHOLARSHIPS

All new freshmen and transfer students admitted to the Honors College receive a renewable Honors College scholarship between \$1,000 and \$3,000 per year. The scholarships are a one-time offer at the time of admission to Towson University. Students are required to remain in "good standing" in the Honors College each term to continue to receive the scholarship. Once students become academically ineligible to participate in the Honors College, they are no longer considered a member of the honors community.

GOOD STANDING IN THE HONORS COLLEGE

To remain in "good standing" in the Honors College students must maintain a minimum cumulative GPA of 3.30 every term. Students will be placed on probation after their first term below the required GPA and may become academically ineligible to participate in the Honors College if their cumulative GPA remains below 3.30 for a second term. Students need to complete at least 6 honors units by the end of the first year in the program, 12 honors units by the end of the second year and 18 honors units by the end of the third year. Students who fall below these standards will be placed on probation for one term and become academically ineligible to participate in the Honors College if they fail to reach the standards at the end of the probationary term. Students must maintain a 3.00 average for all Honors College courses taken to fulfill Honors College requirements. **Courses taken to fulfill requirements for the Honors College may not be taken on a pass grading option.**

Curriculum (24 units)

The curriculum includes an Honors English course, 15 units of Honors College courses (9 units must be Honors College seminars) and 6 units of Honors Electives.

I. Honors English (3 units – 100/200 level)

ENGL 190 Honors Writing Seminar
(If advanced placement credit is granted, ENGL 290 may satisfy this requirement.)

II. Honors College Courses (15 units)

a. Honors College Seminars

All Honors College students must complete at least 9 units of Honors College seminars.

Seminars change every term. The Honors College seminar list, published each term, explains which courses are offered, what their topics are and who will teach them. The Honors College seminars may satisfy Core Curriculum requirements; some may count toward required departmental major courses.

200 level

Lower-level Honors College seminars allow for in-depth study of fundamental issues, ideas, topics or problems. The seminars are on a wide range of original topics that are based on the instructors' areas of interest. Most courses integrate knowledge across disciplines. Emphasis for these seminars is on developing and strengthening skills important to success in honors and undergraduate education, including oral and written communication skills, reading skills, critical and creative thinking, etc. These seminars may satisfy Core Curriculum requirements and may be repeated for credit as topics change.

300/400 level

Upper-level Honors courses are designed to deepen knowledge about a particular intellectual issue and demonstrate the interconnectedness of academic disciplines. The approach is interdisciplinary, but the specific discipline content is used to further greater understanding of a broader issue. Many of these seminars incorporate moral or ethical thinking and problem-solving components and independent writing projects as part of a culminating activity. Like the lower-level seminars, these courses have original topics that are based on the instructor's area of interest. These seminars may satisfy major department requirements.

b. Honors Versions of Existing Courses

These courses are special sections of already existing and highly demanded courses at the university. They offer students the opportunity to take required courses in an enriched, enhanced manner. These courses are designed to be smaller, more discussion-based, more focused on critical thinking and more writing intensive than non-Honors sections of the same course.

III. Honors Electives (6 units)

All Honors College students must complete an additional 6 units of Honors Electives. The Honors Electives are designed to allow students maximum flexibility in designing a project or course of study most suitable to their academic needs and goals. All Honors Electives include a significant piece of writing and a public presentation.

Students may fulfill their Honors Electives requirement by completing 6 units from the following course options:

a. Honors Independent Study/Directed Readings/Independent Investigations/Internship

Students who are interested in receiving Honors credit for a departmental independent study, directed readings, independent investigations or internship must submit a proposal syllabus for the course to the Honors College no later than the last day of the Change of Schedule period. Students may use the honors syllabus templates as a guide, and they should clearly state how the honors course differs from a traditional departmental independent study, directed reading, independent investigation or internship. In order to obtain Honors College credit for any of these courses, students must work directly with a faculty member, submit a formal written

component for the course and complete a public presentation before their peers.

b. Study Abroad

Students participating in short-term study abroad courses may receive 3 units toward their Honors Electives if they complete an approved study abroad project. Honors students participating in a full-term study abroad may receive 6 units toward their Honors Electives if they complete an approved study abroad project. *Students participating in Honors College sponsored study abroad programs do not have to complete a separate project to receive honors units.*

c. Upper-Level Honors Seminars

Honors students may complete an additional 6 units of upper-level Honors College seminars toward their honors course requirements. These courses have original topics that are based on the instructor's area of interest and incorporate independent writing projects and a public presentation as part of the course's culminating activities. These seminars may satisfy a major department requirement.

d. Honors Thesis/Creative Project

Honors students may complete an honors thesis or creative project of their own design under the mentoring of a faculty member in their discipline and/or an Honors College faculty member. The honors thesis or creative project provides students with flexibility in designing a final honors experience that relates to their interests and career goals. Honors theses and creative projects result in a significant piece of writing submitted to the Honors College and a public presentation of the work.

COURSES FULFILLING THE HONORS COLLEGE REQUIREMENTS

Courses taken to fulfill requirements for the Honors College may not be taken on a pass grading option. To graduate as a University Honors Scholar, students must be in the Honors College at the time of graduation.

Sample Four-Year Schedule

Lower Division (four courses – 12 units)

First year (6 units)

Honors English

Honors College course

Second year (6 units)

Honors College courses

Upper Division (four courses – 12 units)

Third year (6 units)

Honors College courses

Fourth year (6 units)

Honors Electives

TRANSFER REQUIREMENTS

The Honors College requirements for transfer students depend on the total number of transferable credits completed (not including AP credits). Transfer students may request that a maximum of two classes taken at their previous institution be counted as honors versions if those classes were designated as honors at the original institution, carried at least 3 credits, and were passed with a 3.00 or better.

Students transferring into the Honors College with:

Fewer than 30 credits: Requirements are the same as for first-time freshmen, including Honors English, 15 units of honors classes (9 units must be honors seminars) and 6 units of Honors Electives.

30–59 credits: Exempt from Honors English (only if the Core Curriculum Advanced Writing Seminar has been satisfied with transfer credits). These transfer students must complete 15 units of honors classes (9 units must be honors seminars) and 6 units of Honors Electives.

60 or more credits: Exempt from Honors English (only if the Core Curriculum Advanced Writing Seminar has been satisfied with transfer credits) and 6 units of honors versions of existing courses. These transfer students must complete 9 units of honors seminars and 6 units of Honors Electives.

HONORS RECOGNITION

The appropriate designation, based on Honors curriculum completed, appears on the student's diploma and final transcript. An Honors College student who completes the curriculum will graduate as a University Honors Scholar. If an Honors College student completes his or her Honors Electives by following the Departmental Honors program requirements, the student will graduate as both a University Honors Scholar and Department Honors Scholar. A student, who is not in the Honors College, who chooses to complete the Departmental Honors program requirements will graduate as a Department Honors Scholar.

- **University Honors Scholar** – University Honors Scholars complete 3 units of Honors English, 15 units of Honors courses (9 units must be Honors College seminars) and 6 units of Honors Electives (may be completed by the academic Department Honors requirements). They must have an overall GPA of 3.30 and maintain a 3.00 average for all courses taken to fulfill Honors College requirements.
- **Department Honors Scholar** – Department Honors Scholars complete only the Department Honors requirements in their academic major (see **Departmental Honors Programs** section below).

HONORS COLLEGE CONNECTIONS

Every Honors College student has an opportunity to participate in the Honors College student group, Honors College Connections. The purpose of Honors College Connections is to advise the Honors College administration and the Honors College Advisory Council on student issues; to assist in the planning and execution of select honors academic, cultural and social events; and to promote and foster community and peer support among Honors College students. One of Honors College Connections' primary tasks is to coordinate the Honors College Peer Mentoring Program, in which new Honors College students can meet advanced Honors College students and receive guidance from them.

Students can learn more about Honors College Connections by e-mailing HCCconnections@towson.edu.

THE HONORS COLLEGE GRADUATION CONVOCATION

At the end of the spring term, the Honors College hosts a ceremony for graduating seniors to award their Honors Certificate and Medallion. It is an opportunity for graduates to be honored for their accomplishments and recognized by the faculty for their hard work and diligence. Invited faculty say a few words about the graduating senior who will be presented with the Honors medallion to be worn at Graduation, a certificate of completion of the program, and a gift from the Honors College. A reception follows the ceremony. Graduates unable to attend the Honors College Graduation Convocation may pick up their medallion in the Honors College office before the Commencement ceremony.



The College of Graduate Studies and Research

The team of administrators and staff of the College of Graduate Studies and Research is committed to providing outstanding service and premier quality education to all the students it serves.

The Graduate School prepares qualified and dedicated students for career advancement, leadership positions and further graduate study. Its graduate programs satisfy professional and personal needs of students and fulfill the demand for advanced education in the professions. Programs are offered at times convenient to employed students, and many students also take advantage of graduate offerings without enrolling in degree programs. Four applied doctorates, a Ph.D., 46 master's degree programs and 29 certificates are available in the areas of business, education, liberal arts, fine arts, health professions, math, science and technology.

The graduate faculty includes recognized scholars and practitioners in many fields who are committed to excellence in teaching in a scholarly environment. The classroom, library, clinical and faculty assets of the graduate programs are supplemented by a community rich in cultural, artistic, social, technological and scientific resources.

Lawrence Shirley, Associate Dean
Mary Louise Healy, Director, University Research Services

GRADUATE SCHOOL OFFICE
7800 York Road, Suite 216, 410-704-2501
<http://grad.towson.edu>

GRADUATE SCHOOL**Programs****Applied Doctorates**

Audiology
Information Technology
Instructional Technology
Occupational Science

Doctor of Philosophy

Jewish Studies

Advanced Study Certificates

Early Childhood Education
Organizational Change
Psychology: Counseling
Psychology: School
Reading Education

Master of Fine Arts

Art, Studio
Theatre

Master of Arts

Geography and Environmental Planning
Humanities
Jewish Communal Services
Jewish Education
Jewish Studies
Professional Studies
Psychology

Master of Arts in Teaching

Master of Business Administration (jointly with
University of Baltimore)

Executive MBA (in Poland)**Master of Education**

Art Education
Early Childhood Education
Elementary Education
Reading Education
Secondary Education
Special Education

Master of Science

Accounting and Business Advisory Services
(jointly with University of Baltimore)
Applied Gerontology
Applied and Industrial Mathematics
Applied Information Technology
Biology
Child Life, Administration and Family
Collaboration
Communications Management

Computer Science
Environmental Science
Health Science
Human Resource Development
Instructional Technology
Integrated Homeland Security Management
Kinesiology
Mathematics Education
Music Education
Nursing
Occupational Therapy
Physician Assistant Studies
Professional Writing
Science Education
Social Science
Speech-Language Pathology
Supply Chain Management
Women's and Gender Studies

Mathematics Education
Music Education

Nursing
Occupational Therapy
Physician Assistant Studies
Professional Writing
Science Education
Social Science
Speech-Language Pathology
Supply Chain Management
Women's and Gender Studies

Master of Music

Performance/Composition

Professional Science Master's

Applied Physics
Forensic Science

Post-Baccalaureate Certificates

Applied Gerontology
Arts Integration Institute
Autism Studies
Clinician-Administrator Transition
Database Management Systems
Environmental Science
Family-Professional Collaboration
Information Security and Assurance
Information Systems Management
Interactive Media Design
Internet Application Development
Jewish Communal Service
Jewish Education
Leadership for Organizations
Management and Leadership Development
Music Education
Networking Technologies
Nursing Education
Project, Program and Portfolio Management
Security Assessment and Management
Software Engineering
Strategic Public Relations and Integrated
Communication
Supply Chain Management
Women's and Gender Studies

ADMISSION

Admission to the Graduate School at Towson University is granted to applicants whose academic and personal qualifications give promise of success in graduate study. The applicant must hold a baccalaureate degree from a regionally accredited college or university and satisfy minimum GPA requirements.

Students seeking admission to a graduate degree program, or to take courses carrying graduate credit, must apply prior to first enrollment. Applicants must file an application together with all credentials and official transcripts of all college work. Some programs have selection cut-off dates and admit students on a competitive, space-available basis. Applications are available online at <http://grad.towson.edu>.

Graduate School Office Hours

The Graduate School office is open Monday through Thursday from 8 a.m. to 6 p.m. and Fridays from 8 a.m. to 5 p.m. During registration, the office is open in the evening according to the registration schedule. Students may arrange for appointments with the Graduate School staff at other hours.

The Graduate Catalog

The *Graduate Catalog* contains the academic regulations governing graduate studies at Towson University. It also includes information regarding programs, course offerings and the application process. It is available online at <http://grad.towson.edu>. A schedule of courses for the coming term and registration information are available online at <http://students.towson.edu>.

Correspondence and Information

All correspondence and requests for information concerning graduate study should be addressed to:

Graduate School
Towson University
8000 York Road
Towson, MD 21252-0001
410-704-2501
<http://grad.towson.edu>
grads@towson.edu



Division of Economic and Community Outreach

The Division of Economic and Community Outreach (DECO) continues to further Towson University's mission as Maryland's metropolitan university by forging stronger links between the university and the community it serves.

For Towson University to fulfill the important role it plays in the region, it must be deeply committed to addressing education, economic development and broad social issues. Several highly successful centers within the university, each with a history of being actively involved in community and economic outreach efforts, serve as the cornerstones of DECO. These centers include the Center for Applied Information Technology, the Center for Geographic Information Sciences, Economic and Workforce Development, and Extended Education and Online Learning.

DECO works closely with the university's academic units serving as the primary bridge between the community and the university. DECO is constantly working toward developing new collaborative opportunities between the two.

Towson University, through its Division of Economic and Community Outreach, recently launched Towson Global, TU's first business incubator for early-stage companies.

DECO's ultimate goal is to connect Towson University to the broader community and allow the community to benefit from the expertise of our faculty, staff and students. The division's structure provides a focus for interaction with the external community. Towson University is striving to – and will – make a difference in the business community and in the community-at-large.

Dyan Brasington, Vice President

Center for Applied Information Technology
 Center for Geographic Information Sciences
 Coalition of Urban and Metropolitan Universities
 Headquarters
 Community Outreach
 Economic and Workforce Development
 Economic Development Administration University
 Center
 Extended Education and Online Learning
 Maryland Alliance for Information Security
 Assurance
 Mid-Atlantic CIO Forum
 Off Campus Programs
 Osher Lifelong Learning Institute
 Regional Economic Studies Institute
 Information Systems Solutions
 Towson Global-Business Incubator
 University Economic Development Association
 Headquarters

OFFICE
 Administration Building 301, 410-704-DECO (3326)
 7720 York Road
 Towson, MD 21252
 Fax: 410-704-2152
 E-mail: outreach@towson.edu
 www.towson.edu/outreach

The Division of Economic and Community Outreach

OFFICE

Administration Building 301
410-704-DECO (3326)

Vice President: Dyan Brasington

The Division of Economic and Community Outreach (DECO) was established to strengthen links between the university and the community it serves. DECO is committed to addressing educational, economic development and broad social issues through collaborative relationships among business, government and individuals. DECO allows the community to benefit from the expertise of Towson University faculty, researchers, staff and students by serving as a bridge between them. DECO offers a variety of services including:

- Community Outreach initiatives
- Customized Geographic Information Systems (GIS) applications
- Customized training programs
- Economic forecasting and analysis
- GIS database development and data conversion
- Graduate IT programs
- Health care training
- Internet mapping (map-enabled websites)
- Leadership training
- Management consulting
- Technology solutions
- Workforce development initiatives

CENTER FOR APPLIED INFORMATION TECHNOLOGY

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-7374

Contact: Michael O'Leary, Executive Director

The Center for Applied Information Technology (CAIT) at Towson University responds to the needs of the business community in the region by providing education and training in current information technology skills and practices, as well as providing consulting services to the community in information technology issues and solutions. In addition, CAIT has partnered with the Department of Computer and Information Sciences to offer a doctorate in Applied Information Technology. TU is recognized by the National Security Agency as a National Center of Academic Excellence.

CENTER FOR GEOGRAPHIC INFORMATION SCIENCES

7800 York Road, Suite 306
Phone: 410-704-5292

Contact: Mark Helmken, Director

The Center for Geographic Information Sciences (CGIS) has been in existence at Towson University since 1984. In affiliation with the Department of Geography and Environmental Planning, CGIS not only offers continued support to the university's GIS and related courses but for the past decade has also provided geographic information systems (GIS) services in the mid-atlantic region to government agencies, businesses and nonprofit organizations. CGIS' specialists develop GIS databases; perform data conversion, and remote sensing

and digital image processing; and create custom maps and map-driven applications. Multimedia specialists offer Web and print graphic design, map-enabled website development and Web programming.

COALITION OF URBAN AND METROPOLITAN UNIVERSITIES (CUMU) HEADQUARTERS

Administration Building 312C
Phone: 410-704-3700

Contact: Bobbie Laur, Coalition Administrator

CUMU's purpose is to facilitate the exchange of information among its members about urban and metropolitan issues; create a unified approach to resolving its members' common challenges; and perpetuate a better understanding among policy makers, the higher education community and the public about the distinctive roles played by urban and metropolitan universities in their communities. As CUMU headquarters, TU manages the finances and operations of the organization including engaging the members in different CUMU initiatives and serving as liaison between the executive committee, the entire membership and other higher education associations such as ACE and AASCU.

COMMUNITY OUTREACH

DECO has built stronger links between the university and the surrounding community through numerous supported outreach programs in arts, athletics, education, health, media, research, student outreach, and teacher training and education.

ECONOMIC AND WORKFORCE DEVELOPMENT

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-7374

Contact: Daraius Irani, Director

Towson University has created a critical mass of services and expertise to help business and government find the right solutions for success. The Economic and Workforce Development group has gathered responsive specialists to work in a customized manner, which integrates the right expertise and experience to offer a complete solution. We have a full-time dedicated staff, as well as the ability to access additional expertise from the Towson University campus community.

ECONOMIC DEVELOPMENT ADMINISTRATION (EDA) UNIVERSITY CENTER

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-6363
Contact: Daraius Irani

Towson University was awarded a grant through the U.S. Department of Commerce as a designated Economic Development Administration University Center. EDA University Centers are established and funded to provide technical assistance to public and private sector organizations with the goal of enhancing local economic development. As a University Center, Towson University will provide economically distressed communities with a source of funding for planning; infrastructure development; and business financing that will contribute to long-term economic stability and growth.

EXTENDED EDUCATION AND ONLINE LEARNING

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-3742

Contact: Michael Schroder, Director

The Extended Education and Online Learning (EEOL) unit meets the diverse educational and consultation needs of clients regardless of their location. EEOL establishes effective working partnerships among corporations, government agencies, nonprofit organizations, military, small business and other enterprises throughout the area to make services accessible to anyone via satellite centers and distance learning options. With qualified staff available to help business, government, communities and individuals connect with and benefit from Towson University's considerable educational resources, EEOL strengthens the university's community outreach efforts.

MARYLAND ALLIANCE FOR INFORMATION SECURITY ASSURANCE

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-4909

Contact: Michael O'Leary

Funded by a grant from the National Science Foundation, Towson became the founder and home to the Maryland Alliance for Information Security Assurance (MAISA), a collaborative effort between five universities and 10 community colleges. MAISA exists for the purpose of strengthening information technology security programs on Maryland campuses, and to support Maryland's efforts in protecting its state infrastructures.

MID-ATLANTIC CIO FORUM

7400 York Road
Phone: 410-704-6228

Contact: Liz Young, Executive-In-Residence

Designed to foster excellence in business and information technology among chief information officers (CIOs) facing similar challenges and issues, the Mid-Atlantic CIO Forum provides an environment that promotes educational and networking opportunities. CIOs share information and experiences, and exchange best practices in peer-to-peer discussion sessions. The Mid-Atlantic CIO Forum provides executive educational opportunities through targeted presentations on current issues and trends in business and information technology. CIOs in the mid-Atlantic region, in partnership with Towson University, have created this exciting new forum for the region's prominent information technology executives.

OFF-CAMPUS PROGRAMS

Phone: 410-704-3742
Contact: Michael Schroder

Towson University offers courses and programs at numerous locations throughout the state to provide convenient access to a Towson education for Marylanders who are unable to take courses on the Towson campus. In addition,

these off-campus courses and programs provide convenient locations for a variety of collaborative programs.

OSHER LIFELONG LEARNING INSTITUTE (OLLI)

7400 York Road
Phone: 410-704-3535
Contact: Jacqueline Gratz, Director

OLLI, formally the Auburn Society, is Towson University's Learning in Retirement program. Founded in 1999, this self-funded membership organization offers adults ages 50 and older opportunities for continued learning along with programs and activities for social and cultural enrichment. A college education or degree is not a prerequisite for participation in the program.

RESI—APPLIED ECONOMICS AND HUMAN SERVICES

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-7374
Daraius Irani, Director

The Regional Economic Studies Institute (RESI), founded in 1989, is the leading provider of economic forecasting and analysis, fiscal and economic impacts, and statistical modeling for the region. RESI employs professional staff in its Applied Economics Group and Human Services Group. Annually the unit produces the Statistical

Abstract for the state and provides the Economic Outlook for Maryland. Recently, RESI has been instrumental in preparing Maryland decision makers and citizens for the impacts associated with the Base Realignment and Closure (BRAC) decisions.

INFORMATION SYSTEMS SOLUTIONS (ISS)

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-7374
Contact: Linda Bowyer, Director

ISS is a full-service IT organization that has a full-time staff of professionals specializing in IT project management, business process consulting and technical writing, software development, systems engineering, and consulting and hosting. ISS is self-funded through client contracts and serves a wide range of state and government agencies, private sector companies and nonprofits. ISS emphasizes an interdisciplinary approach that combines knowledge with technology.

TOWSON GLOBAL—BUSINESS INCUBATOR

Terrace Dale, 7801 York Road, Suite 342
Phone: 410-769-6449
Contact: Clay Hickson, Director

Towson University through its Division of Economic and Community Outreach (DECO) recently launched

the university's first incubator for early-stage companies. Towson Global will be the gateway to international markets for product-oriented Maryland companies and a magnet for foreign companies looking to market their products in the mid-Atlantic region. Additionally, the center will focus on providing services to the greater business community by offering workshops and resources to help companies be competitive in a global marketplace. The Incubator will provide office space for companies working on projects from medical diagnostics to cryptoanalysis to computer gaming and beyond. Incubator staff will help businesses develop international markets for their products and export their products overseas.

UNIVERSITY ECONOMIC DEVELOPMENT ASSOCIATION HEADQUARTERS

Terrace Dale, 7801 York Road, Suite 260
Phone: 410-704-3776
Contact: Leslie Pachol, Executive Director

Towson University serves as the operational and management organization for the University Economic Development Association (UEDA). UEDA serves institutions of higher education and their economic development affiliates across the country. UEDA focuses on effective economic development strategies, best practices, metrics and emerging opportunities. UEDA is the only national organization that represents the entire spectrum of higher education-based economic development.



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To Be Determined

Immediate Past President

Kim Fabian '88

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COLLEGE DEANS

SHOHREH KAYNAMA '76
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SUSAN PICINICH
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CHARLOTTE E. EXNER
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 Charles Flippen
 James Flood
 Edna Fordyce
 Carolyn Foster
 Barbara Frankel
 Robert O. Freedman
 Barry Frieman
 George Friedman
 Marcella Fultz
 James Furkawa
 Neil Gallagher
 Rela Mintz Geffen
 William Gehring
 Jeremiah German
 Rosalyn Ghitler
 Lorenzo Gilchrist
 Richard Gillespie
 John Gissendanner
 Jorge Giró
 Irwin Goldberg
 William Grazer
 David S. Greene
 Alan Grimshaw
 Harold Griswold
 Henri Groenheim
 Kenneth Haddock
 Marilyn Tuls Halstead
 Irene Hanson
 Robert Hanson
 Frances Harrell
 Phoebe Harris
 Thomas Haupt
 Billy Hauserman
 Hlib Hayuk
 Marjorie Henry
 Carolyn Hill
 Evelyn S. Hill
 James J. Hill
 Edwin Hirschman
 Eleanore Hofstetter

Abolmajd Hojjati
 Edward Holmes
 Arthur Holt
 Martin Horak
 Jacob Huang
 James Hull
 Ernest Ilgenfritz
 Helen Jacobson
 Hester C. Jeffers
 Michael Jessup
 Jenny Jochens
 Robert Johnson
 Dan Jones
 A. Justine Jones
 E. Sharon Jones
 Muriel Jones
 Paul Jones
 Joan Jordan
 Ruth Josselson
 Maya Kalyanpur
 Bernice Kastner
 Daniel Kealy
 Elizabeth Keenen
 Cynthia Kielinen
 Margaret Kiley
 Earl W. Killian
 Algin King
 Nechie King
 Chang Min Kong
 Charlotte Koomjohn
 Elmer Kreisel
 Thomas Kruggel
 Fredericka Kundig
 Frederick Ladd
 Richard Lainhart
 Karl Larew
 David Larkin
 Mary Lu Larsen
 M. Barbara Laufer
 Mara Lauterbach
 James Lawlor
 Vincent Lawrence
 Lena Lee
 Ock Lee
 Beverly Leetch
 Suzanne Legault
 Barbara Leons
 Arthur Lesley
 Yvonne Lev
 Arley Levno
 Marilyn Lewis
 Doris Lidtke
 Dinorah Lima
 Samuel Litov
 Brenda Logue
 Selma Lyons
 Robert A. Magill
 Man Maloo
 Luz Mangurian
 John Manlove
 David Marchand

Michael Mark
 Keith Martin
 Ronald Matlon
 Jack McDonald
 Mark McElreath
 George McGinty
 Joan McMahon
 Wayne McWilliams
 Thomas Meinhardt
 Katherine Merani
 John Melick
 Allan Miller
 Lloyd D. Miller
 Stuart Miller
 Loretta Molitor
 Delcie Mollick
 Barry Moore
 Raymond Moore
 Frederick Morsink
 Armin Mruck
 Theldon Myers
 Mary-Ann Myrant
 Sam Nass
 Marilyn Nicholas
 Jack Osman
 Edward Palanker
 Carolyn Parmenter
 Jane Parson
 Caryl Peterson
 Harvey Paul
 JoAnn Piliardi
 Harry Piotrowski
 Robert Pitman
 Roger Poirier
 Barbara Pour
 Jean Pollack
 Stanley Pollack
 Helen Pullen
 Betty Lou Raskin
 Dale Rauschenberg
 Jack Ray
 Bina Raval
 Joyce Reitzel
 Julie Ries
 Gerald Riggelman
 Ray Riordan
 Fred Rivers
 Gary Rosecrans
 Frances Rothstein
 Carl Runk
 Jean Ruviella
 Roderick Ryon
 Henry Sanborn
 Marion Sargent
 Harvey L. Saxton
 Aubrey Scarbrough
 Ann Scheper
 Myron Scholnick
 Joan Schuetz
 Ruth Schwalm
 Ralph Scott

Bong-Ju Shin
 Robert Shoemaker
 Robert Shouse
 Ruby Shubkagle
 Dorothy Siegel
 Barbara Slater
 Louise Smith
 Robert Smith
 Janet Solomon
 Thomas Spacht
 Jay Stanley
 Sandra Stanley
 Lamont Steedle
 Marshall Stevenson
 Barbara Stewart
 Ray Stinar
 Thomas Strader
 Roberta Strosnider
 Cynthia Sulfridge
 Joseph Suhorsky
 Thomas Supensky
 Zoltan Szabo
 Jane Tan
 John Terwilliger
 B. June Thearle
 Shirley Thompson
 John Tinkler
 Joseph Topping
 Leon Ukens
 John Van Osdell
 Beth Vanfossen
 Alexander Vlangas
 Milton Velder
 Spyros Vennos
 Robert Wall
 William Wallace
 Carolyn Walter
 Harriet H. Warren
 Patricia Waters
 Donald Watts
 Irvin Weintraub
 Donald Wesley
 Mark Whitman
 Jane Wiley
 Richard Williams
 Isabel Wilner
 Nancy Wiltz
 Donald Windler
 Rosemary Wittstadt
 Guy Wolf
 Alfred Wolkowitz
 Wing-Chun Wong
 Lucy Wood
 Arthur Yarbrough
 June Yum
 Robert Zeigler
 Carl Zimmerman
 Mildred Zindler
 Margaret C. Zipp

Appendix A

MISSION STATEMENT

I. Summary Mission Statement

Towson University, as the state's comprehensive Metropolitan University, offers a broad range of undergraduate and graduate programs in the liberal arts, sciences, arts and applied professional fields that are nationally recognized for quality and value. Towson emphasizes excellence in teaching, scholarship, research and community engagement responsive to the needs of the region and the state. In addition to educating students in the specialized knowledge of defined fields, Towson's academic programs develop students' capacities for effective communication, critical analysis, and flexible thought, and they cultivate an awareness of both difference and commonality necessary for multifaceted work environments and for local and global citizenship and leadership. Towson's core values reflect high standards of integrity, collaboration, and service, contributing to the sustainability and enrichment of the culture, society, economy, and environment of the state of Maryland and beyond.

II. Institutional Identity

Towson University began as The Maryland State Normal School and was founded in Baltimore City in 1866, moved to its current Towson location in 1915, and became the Maryland State Teachers College at Towson in 1935, offering a Bachelor of Science degree in education. The institution's mission was expanded in 1946 with the introduction of a variety of degree programs in the arts and sciences. This programmatic development led to its becoming Towson State College in 1963. The move to a more diverse academic portfolio including health professions, business, and technology were interwoven into the transition to Towson State University in 1976 and Towson University in 1997. It is Maryland's largest comprehensive university. The quality of its programs, its educational value, and its focus on student achievement and civic engagement has brought it national recognition as a premier metropolitan institution. With strong baccalaureate programs in the arts and sciences, the fine arts and communication, health and nursing, education, business, information and computer science, and interdisciplinary studies to serve as the foundation, it similarly provides high quality graduate programs in a variety of areas of professional practice and applied fields. Towson University responds to the needs of the region and greater metropolitan area by serving as an engine of change in Maryland's academic and socioeconomic environments. Towson strives to create a productive future for our students and our region by enriching the lives and opportunities for all members of its community.

The University's longstanding commitment to creating a multicultural campus is advanced by policies and practices that assure the recruitment and retention of a diversified student body, staff and faculty who accurately reflect local, regional, national and global diversity. This commitment is sustained through a focus on community service, democratic principles and globalization as it relates to the curriculum, services, activities and partnerships on and off the campus. Through its international education program, it enrolls students from as many as 100 nations. Diversity initiatives provide a direction that mirrors the face of the

population in the region and the state, and foster and model a respectful and inclusive environment that serves to prepare all members of the institution to appreciate differences and to live comfortably within an increasingly multicultural society.

The undergraduate curriculum promotes the intellectual skills essential for effectively communicating, gathering and evaluating information, thinking critically, meaningfully, using technology effectively, appreciating diversity and commonalities, and making informed choices. These skills are grounded in the University's long-standing commitment to a strong liberal arts core that emphasizes an understanding of how the arts and sciences gather, evaluate, and apply information to reach valid conclusions. The liberal arts core, combined with a commitment to students' co-curricular experience, also serves to develop intellectual and social skills that will guide students as contributing members of the workforce and of a democratic society.

As a complex comprehensive learning community, the University currently emphasizes the systematic addition of strong undergraduate and graduate programs that represent emerging disciplines, address economic and workforce needs, and serve the metropolitan region. Master's degree programs in the health professions, applied information technology, education, homeland security, business, and a variety of interdisciplinary or applied fields have been developed in response to pressing regional needs and student demands. The applied and unique doctoral programs build on the foundation and strengths of the University and are in areas that are fundamental to the development and vigor of the institution.

The certification and professional development of educators has been and will remain central to Towson University's future. As the largest single provider of certified teachers in Maryland, Towson plays a leadership role in the continuing professional development of the state's educators. The College of Education's strategies for improving the quality of teacher preparation serve as regional and national models, as do its highly regarded Professional Development School Network and the professional development programs of its different centers and projects. To meet the critical needs for more and better teachers in Maryland and the nation, the University has expanded programming in teacher education with plans to add specialized master's and doctoral programs responding to market demands and the Maryland State Plan.

Towson University is committed to a student-centered learning environment that uses a variety of formats to provide innovative access to information. Towson University's faculty and staff work actively to enable students to develop as citizens and leaders of the community by combining classroom learning with out-of-class experiences (internships, practica, service-learning, and related experiential opportunities). Through academic partnerships and collaborative programs, it advances the statewide goal of attaining a cost effective and accountable system for delivering high quality post-secondary education. It is an active participant in four regional higher education centers and has expanded its current certificate and baccalaureate programming through formal 2+2 partnerships with community colleges in the state. The largest off-campus site is in Harford County offering upper division academic programs. It works closely with profit and non-profit organizations to provide

educational opportunities, including baccalaureate and post-baccalaureate programs meeting the organizations' specific needs. It has created a technology infrastructure for providing improved access to degree programs for a greater number of Maryland residents. In so doing, Towson strengthens Maryland's role as a national leader in the use of technology to enhance its economy and to improve life-long access to learning for all of its citizens.

Towson's faculty members actively pursue scholarship and creativity that complement disciplinary knowledge and superior teaching. The University values and rewards equally the scholarships of discovery, teaching, integration, and application. Faculty members also engage in a wide range of activities, which support the University's institutional outreach programs to government, health care organizations, nonprofit groups, education, business, and the fine arts in its region. Its research and consulting centers, such as the Regional Economic Studies Institute, the Center for Geographic Information Sciences, the Center for Applied Information Technology, and the Center for Leadership in Education continue to link faculty expertise with community needs and interests. Partnerships with corporations engage the University both as learners and as teachers. WTMD Radio Station, The Baltimore Hebrew Institute, The Asian Cultural Arts Center, and numerous faculty and student performances and exhibits throughout the year contribute to the cultural life of the community. Multiple clinical sites and centers provide clinical opportunities for faculty members and students and serve the well being of members of the community. The Institute for Teaching and Research On Women and The National Center for Curriculum Transformation Resources On Women provide international as well as national services for a full variety of disciplines and agencies. Towson University is designated by the Carnegie Foundation as a recognized university for curricular engagement and outreach and partnership.

Towson University's role of addressing Maryland's workforce needs depends on its ability to respond quickly to changing circumstances and emerging needs by revising or introducing high quality undergraduate, masters, doctoral, and certificate programs. Program development can be readily targeted to support economic and social development as identified by national, state, and regional government agencies. Its plans for expanding its graduate programming, increasing the number of both students and degrees offered, will lead to an increase in the number of teaching and research opportunities available to the graduate student body and will allow the institution to provide valuable expertise to regional and state agencies and organizations. This design gives Towson a strong presence in the educational growth of employees from local school districts, health care fields, the arts, government agencies, and technology and service industries, including e-Business. Towson University plays a major role in efforts to sustain Maryland's social, cultural and economic fabric as well as its natural environment.

III. Institutional Capabilities

By Carnegie Classification, Towson University is a Masters (Comprehensive) University I. It has achieved national prominence as a premier metropolitan comprehensive university by offering a wide-range of excellent graduate and undergraduate degree programs and by increasing its regional

and national reputation through its focus on student learning, innovative programs and pedagogies, faculty creativity and scholarship, applied and sponsored research, community service, and cultural outreach to business, education, non-profit and health care organizations.

The University has a strong commitment to a liberal arts education that serves as a general intellectual resource for more specialized disciplinary work and as it enriches students' cultural and social awareness. A highly regarded general education program provides undergraduates with multiple ways of knowing and specific skills that equip them to reason in and respond to a wide range of work and life settings. Active initiatives to recruit African-Americans, other American minorities, first-generation/low-income individuals, women, and a range of international faculty, staff, and students advance Towson's commitment to diversity. Support for strong multicultural and international studies programming along with robust study abroad programs enhance global understanding. It further augments and enriches students' academic programs through an expanding Honors College experience, extensive practice of faculty-student and student-student mentoring, a model first year experience program, undergraduate research projects, internships, practica, career services, clinical placements, departmental honors, colloquia, forums, and performance and lecture series.

Faculty members value excellent teaching and give it high priority. Their active engagement in scholarship and service generates sustained originality and outstanding performance throughout their academic careers. Their frequent participation in more than one academic unit or department sustains the unusually high number of innovative multi-disciplinary programs offered by the University. Their large number of refereed publications and presentations are noted for their quality and innovation, and the richness and diversity of their research and interests provide a wide array of learning and research opportunities for students, who often engage in collaborative research and creative projects with their instructors.

The University capitalizes on its urban/suburban location by providing varied and distinctive opportunities for students and faculty learning, teaching, and research. It recognizes its obligation to serve at the local, regional, and state levels through its academic programs and professional services. It uses its metropolitan context as the environment for basic and applied research, as a teaching laboratory for the curriculum, and to strengthen its program and course offerings from the baccalaureate to the doctoral level. These strengths also support the ability to draw on national and international candidacy pools for faculty and administrative positions. As part of its pursuit to meet societal needs in a more comprehensive manner, Towson University will move eventually to the Carnegie Classification of Doctoral/Research Universities – Intensive level. This means the University will maintain a wide range of baccalaureate programs along with further development of graduate education through the doctorate, and it will focus more on applied research.

The University, while designated as a growth institution, maintains its commitment to student-centered, small class engagement. This value is reflected in the Master Plan that calls for substantial modification to

and growth of the academic precinct over the next ten years. The plan includes a focus on designing new academic and academic support spaces that emphasize the values of interactive learning, informal teaching and learning communication, and individual student attention. Other areas of growth that will enhance the student experience at Towson include art facilities, athletic facilities, housing, and student gathering spaces.

IV. Institutional Objectives and Outcomes

In keeping with the Towson University 2016 Strategic Plan, the University System of Maryland Strategic Plan, and the Maryland State Plan for Higher Education, the University will pursue the following directions:

Academic Achievement

Building on our past success, we continue to emphasize excellence in teaching, scholarship, research and community engagement responsive to the needs of the region and the state.

Assess and strengthen academic programs to ensure students develop Towson's Learning Outcomes.

- Review and evaluate curriculum to ensure challenging content that addresses the workforce and geographic demands.
- Employ faculty development programs; enhance learning assessments, use of online delivery and new technology to support faculty and students.

Enhance and expand academic endeavors to improve the well-being of the Baltimore Metropolitan Region and the State of Maryland.

- Embrace the metropolitan mission by taking a leadership role in addressing urban problems, developing creative partnerships, and adapting to the needs of urban/suburban students and school systems.
- Right-size enrollment, faculty and staff to build capacity in high demand fields such as STEM, health professions and education.

Challenge, inspire, and support students and faculty to perform at the highest level.

- Inspire students to become educated, engaged, informed citizens with leadership skills and a passion for intellectual challenge.
- Empower faculty with innovative pedagogical methodologies and establish best practices within each discipline.

Optimize retention and time to graduation for all students.

- Strengthen student advising.
- Implement an early warning system to assist students throughout their academic career.
- Take the trimester from pilot to program.
- Develop The Towson Promise of degree attainment in 4 years.

Student Experience, Engagement and Success

The Towson University experience expects students to be academically, civically and socially engaged through exciting and challenging endeavors.

Enhance and celebrate a diverse and complex university.

- Broaden perspectives for all members of the university.
- Continue to cultivate a welcoming and diverse campus community.
- Include diverse perspectives across the curriculum.

Provide support programs for student populations with non-traditional needs.

- Identify and address non-traditional needs of students.
- Support transfer student transition through model programs focusing on orientation and advising.

Involve students in co-curricular educational experiences on- and off-campus that build civic engagement, global literacy, and promote the Towson University experience.

- Further implement service learning as a component of the academic experience tied to the curriculum with linkages to the metropolitan region.
- Support students and faculty in their quest for focused international experiences and through the inclusion of global awareness in the curriculum.

Respond to student needs to strengthen student satisfaction and success.

- Identify and respond to students needs and promote access and availability of services, resources, and technology.
- Develop innovative approaches to provide student support.
- Support the Library's role in academic support, student development and campus life.

Partnerships Philosophy

Collaborate within the University and reach out to our partners in education, business, non-profits and government to facilitate a path to success.

Continue to be a leader in workforce development in Maryland.

- Identify workforce trends and adapt programs, certificate, and non-credit offerings to meet demands.
- Enhance existing partnerships and develop strategic partnerships as they relate to workforce.

Emphasize the shared governance structure throughout the university to ensure responsive organizational leadership.

- Encourage and support the university community to engage in effective shared governance.
- Improve communication in the development of policies.

Maximize resources and success through stronger internal partnerships and collaborations.

- Increase collaborations across the university.
- Create strong linkages as we grow our reputation and strengthen our Towson pride.

Enhance and support partnerships and collaborations with government, business and educational sectors throughout the region to promote economic development and address social issues.

- Strengthen social partnerships and stewardship throughout the region.
- Build upon the successful community outreach efforts and continue to enhance collaboration with our neighbors.

Resources for Success

Targeted resources are crucial to achieving the universities priorities and laying the groundwork for the next 150 years.

Increase philanthropic support to enable the university's goals to thrive.

- Maximize fundraising opportunities and collaboration throughout the university.

- Aggressively identify and cultivate friends and extramural funds for academic, arts, athletics, and community and student development endeavors.

Enhance recruitment, retention and development opportunities for faculty and staff.

- Improve succession planning and leadership development.
- Define faculty work and implement a more effective peer review process.

Cultivate a campus-wide culture of excellent customer service and encourage innovation and continual improvement in the delivery of services for both internal and external constituencies.

- Clarify expectations and provide motivation, training, and the tools necessary to implement best practices for excellent customer service across the university.

Emphasize campus-wide applied research and scholarship efforts.

- Support faculty efforts in grants and contract initiatives.
- Promote projects to support applied research and engaged scholarship.

Continue to execute the Master Plan to address the educational, research, environmental, housing, recreation, and co-curricular space needs to support the Towson University experience.

- Ensure commitment to the Campus Master Plan through continued construction and renovation.

Maintain a healthy, safe and environmentally sustainable campus.

- Engage a campus-wide culture of energy conservation and sustainability.
- Address the health and wellness of the university community.
- Ensure the safety of all throughout the campus.

Telling and Selling Our Story

Sharing the Towson University experience allows us to convey the impact of the work of faculty, students, staff and alumni on the region and beyond.

Continue to improve internal and external communications.

- Seek innovative ways to promote the accolades of the university and alumni.
- Improve access to information for alumni, supporters, and friends.
- Enhance and adopt technology that allows us to effectively reach more people.
- Improve recruitment, marketing, and outreach to make Towson a first choice institution for an increasing percentage of students.

Feature the arts, athletics, academics, and community outreach as key components of the Towson University experience.

- Celebrate the accomplishments of the university community and alumni within the university and beyond.
- Encourage broader participation in activities by all members of the university and greater community.

Communicate the significance of applied research and community engagement initiatives.

- Find additional creative methods to emphasize faculty, staff and student initiatives.
- Highlight the scope and impact of faculty, staff and student research.

Through alumni, donors, employers, and business and government leaders continually assess our success in meeting marketplace demands and continuing education needs.

- Continue to develop and implement regular market research from opinion leaders, alumni and employers.

CORE ACADEMIC VALUES

Towson's academic community is a special one in which friendliness, caring and nurturing are much more than hollow words. In addition to the preservation of these important characteristics, Towson's academic plan identifies a set of core values that guides and informs the decisions and actions of every academic unit at the university. While other factors may change, the following core academic values will remain unchanged and because of this, adherence to these principles by the academic community's leadership and decision-makers will determine the successful attainment of the university's academic goals. These core academic values are:

- Intellectual depth and integrity
- Creativity in teaching, learning and discovery that leads to individual and collective transformation
- Collaboration across disciplines
- High standards in personal and unit performance
- Commitment to a diverse and multicultural community
- Civic responsibility and engagement

Appendix B

TITLE 13B

MARYLAND HIGHER EDUCATION COMMISSION

Subtitle 06 GENERAL EDUCATION AND TRANSFER

Chapter 01 Public Institutions of Higher Education

Authority: Education Article, (11-201 - 11-206, Annotated Code of Maryland)

.01 Scope and Applicability.

This chapter applies only to public institutions of higher education.

.02 Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

- (1) "A.A. degree" means the Associate of Arts degree.
- (2) "A.A.S. degree" means the Associate of Applied Sciences degree.
- (3) "Arts" means courses that examine aesthetics and the development of the aesthetic form and explore the relationship between theory and practice. Courses in this area may include fine arts, performing and studio arts, appreciation of the arts, and history of the arts.
- (4) "A.S. degree" means the Associate of Sciences degree.
- (5) "Biological and physical sciences" means courses that examine living systems and the physical universe. They introduce students to the variety of methods used to collect, interpret, and apply scientific data, and to an understanding of the relationship between scientific theory and application.
- (6) "English composition courses" means courses that provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.
- (7) "General education" means the foundation of the higher education curriculum providing a coherent intellectual experience for all students.
- (8) "General education program" means a program that is designed to:
 - (a) Introduce undergraduates to the fundamental knowledge, skills, and values that are essential to the study of academic disciplines;
 - (b) Encourage the pursuit of lifelong learning; and
 - (c) Foster the development of educated members of the community and the world.
- (9) "Humanities" means courses that examine the values and cultural heritage that establish the framework for inquiry into the meaning of life. Courses in the humanities may include the language, history, literature and philosophy of Western and other cultures.

- (10) "Mathematics" means courses that provide students with numerical, analytical, statistical and problem-solving skills.
- (11) "Native student" means a student whose initial college enrollment was at a given institution of higher education and who has not transferred to another institution of higher education since that initial enrollment.
- (12) "Parallel program" means the program of study or courses at one institution of higher education which has comparable objectives as those at another higher education institution, for example, a transfer program in psychology in a community college is definable as a parallel program to a baccalaureate psychology program at a 4-year institution of higher education.
- (13) "Receiving institution" means the institution of higher education at which a transfer student currently desires to enroll.
- (14) "Recommended transfer program" means a planned program of courses, both general education and courses in the major, taken at a community college, which is applicable to a baccalaureate program at a receiving institution, and ordinarily the first two years of the baccalaureate degree.
- (15) "Sending institution" means the institution of higher education of most recent previous enrollment by a transfer student at which transferable academic credit was earned.
- (16) "Social and behavioral sciences" means courses that examine the psychology of individuals and the ways in which individuals, groups or segments of society behave, function and influence one another. The courses include, but are not limited to, subjects which focus on:
 - (a) History and cultural diversity;
 - (b) Concepts of groups, work and political systems;
 - (c) Applications of qualitative and quantitative data to social issues; and
 - (d) Interdependence of individuals, society and the physical environment.
- (17) "Transfer student" means a student entering an institution for the first time having successfully completed a minimum of 12 credits at another institution which is applicable for credit at the institution the student is entering.

.02-1 Admission of Transfer Students to Public Institutions.

A. Admission to Institutions.

- (1) A student attending a public institution who has completed an A.A., A.A.S., or A.S. degree or who has completed 56 or more credits, shall not be denied direct transfer to another public institution if the student attained a cumulative GPA of at least 2.00 on a 4.00 scale or its equivalent in parallel courses, except as provided in subsection A(4) below.
- (2) A student attending a public institution who has not completed an A.A., A.A.S., or A.S. degree or who has completed fewer than 56 credits shall be eligible to transfer to a public institution regardless of the number of credits earned if the student:
 - (a) Satisfied the admission criteria of that receiving public institution as a high school senior; and
 - (b) Attained at least a cumulative GPA of 2.00 on a 4.00 scale or its equivalent in parallel courses.
- (3) A student attending a public institution who did not satisfy the admission criteria of a receiving public institution as a high school senior, but who has earned sufficient credits at a public institution to be classified by the receiving public institution as a sophomore, shall meet the stated admission criteria developed and published by the receiving public institution for transfer.
- (4) If the number of students seeking admission exceeds the number that can be accommodated at a receiving public institution, admission decisions shall be:
 - (a) Based on criteria developed and published by the receiving public institution; and
 - (b) Made to provide fair and equal treatment for native and transfer students.

B. Admission to Programs.

- (1) A receiving public institution may require higher performance standards for admission to some programs if the standards and criteria for admission to the program:
 - (a) Are developed and published by the receiving public institution; and
 - (b) Maintain fair and equal treatment for native and transfer students.
- (2) If the number of students seeking admission exceeds the number that can be accommodated in a particular professional or specialized program, admission decisions shall be:
 - (a) Based on criteria developed and published by the receiving public institution; and
 - (b) Made to provide fair and equal treatment for native and transfer students.
- (3) Courses taken at a public institution as part of a recommended transfer program leading toward a baccalaureate degree shall be applicable to related programs at a receiving public institution granting the baccalaureate degree.

C. Receiving Institution Program Responsibility.

- (1) The faculty of a receiving public institution shall be responsible for development and determination of the program requirements in major fields of study for a baccalaureate degree, including courses in the major field of study taken in the lower division.
- (2) A receiving public institution may set program requirements in major fields of study which simultaneously fulfill general education requirements.
- (3) A receiving public institution, in developing lower-division course work, shall exchange information with other public institutions to facilitate the transfer of credits into its programs.

.03 General Education Requirements for Public Institutions.

A. While public institutions have the autonomy to design their general education program to meet their unique needs and mission, that program shall conform to the definitions and common standards in this chapter. A public institution shall satisfy the general education requirement by:

- (1) Requiring each program leading to the A.A. or A.S. degree to include not less than 30 and not more than 36 credits, and each

baccalaureate degree program to include not less than 40 and not more than 46 credits of required core courses, with the core requiring, at a minimum, course work in each of the following five areas:

- (a) Arts and humanities,
- (b) Social and behavioral sciences,
- (c) Biological and physical sciences,
- (d) Mathematics, and
- (e) English composition; or
- (2) Conforming with COMAR 13B.02.02.16D(2)(b)-(c).

B. Each core course used to satisfy the distribution requirements of A(1) of this regulation shall carry at least 3 credits.

C. General education programs of public institutions shall require at least:

- (1) One course in each of two disciplines in arts and humanities;
- (2) One course in each of two disciplines in social and behavioral sciences;
- (3) Two science courses, at least one of which shall be a laboratory course;
- (4) One course in mathematics at or above the level of college algebra; and
- (5) One course in English composition.

D. Interdisciplinary and Emerging Issues.

- (1) In addition to the five required areas in A of this regulation, a public institution may include up to 8 credits in a sixth category that addresses emerging issues that institutions have identified as essential to a full program of general education for their students. These courses may:
 - (a) Be integrated into other general education courses or may be presented as separate courses; and
 - (b) Include courses that:
 - (i) Provide an interdisciplinary examination of issues across the five areas, or
 - (ii) Address other categories of knowledge, skills, and values that lie outside of the five areas.
- (2) Public institutions may not include the courses in this section in a general education program unless they provide academic content and rigor equivalent to the areas in A(1) of this regulation.

E. General education programs leading to the A.A.S. degree shall include at least 20 credits from the same course list designated by the sending institution for the A.A. and A.S. degrees. The A.A.S. degree shall include at least one 3-credit course from each of the five areas listed in A (1) of this regulation.

F. A course in a discipline listed in more than one of the areas of general education may be applied only to one area of general education.

G. A public institution may allow a speech communication or foreign language course to be part of the arts and humanities category.

H. Composition and literature courses may be placed in the arts and humanities area if literature is included as part of the content of the course.

I. Public institutions may not include physical education skills courses as part of the general education requirements.

J. General education courses shall reflect current scholarship in the discipline and provide reference to theoretical frameworks and methods of inquiry appropriate to academic disciplines.

K. Courses that are theoretical may include applications, but all applications courses shall include theoretical components if they are to be included as meeting general education requirements.

L. Public institutions may incorporate knowledge and skills involving the use of quantitative data, effective writing, information retrieval, and information literacy when possible in the general education program.

M. Notwithstanding A(1) of this regulation, a public 4-year institution may require 48 units of required core courses if courses upon which the institution's curriculum is based carry 4 units.

N. Public institutions shall develop systems to ensure that courses approved for inclusion on the list of general education courses are designed and assessed to comply with the requirements of this chapter.

.04 Transfer of General Education Credit.

A. A student transferring to one public institution from another public institution shall receive general education credit for work completed at the student's sending institution as provided by this chapter.

B. A completed general education program shall transfer without further review or approval by the receiving institution and without the need for a course-by-course match.

C. Courses that are defined as general education by one institution shall transfer as general education even if the receiving institution does not have that specific course or has not designated that course as general education.

D. The receiving institution shall give lower-division general education units to a transferring student who has taken any part of the lower-division general education credits described in Regulation .03 of this chapter at a public institution for any general education courses successfully completed at the sending institution.

E. Except as provided in Regulation .03M of this chapter, a receiving institution may not require a transfer student who has completed the requisite number of general education credits at any public college or university to take, as a condition of graduation, more than 10–16 additional units of general education and specific courses required of all students at the receiving institution, with the total number not to exceed 46 units. This provision does not relieve students of the obligation to complete specific academic program requirements or course prerequisites required by a receiving institution.

F. A sending institution shall designate on or with the student transcript those courses that have met its general education requirements, as well as indicate whether the student has completed the general education program.

G. A.A.S. Degrees.

(1) While there may be variance in the numbers of credits of general education required for A.A., A.S., and A.A.S. degrees at a given institution, the courses identified as meeting general

education requirements for all degrees shall come from the same general education course list and exclude technical or career courses.

(2) An A.A.S. student who transfers into a receiving institution with fewer than the total number of general education units designated by the receiving institution shall complete the difference in units according to the distribution as designated by the receiving institution. Except as provided in Regulation .03M of this chapter, the total general education units for baccalaureate degree-granting public receiving institutions may not exceed 46 units.

H. Student Responsibilities. A student is held:

- (1) Accountable for the loss of units that:
 - (a) Result from changes in the student's selection of the major program of study,
 - (b) Were earned for remedial course work, or
 - (c) Exceed the total course credits accepted in transfer as allowed by this chapter; and
- (2) Responsible for meeting all requirements of the academic program of the receiving institution.

.05 Transfer of Nongeneral Education Program Credit.

A. Transfer to Another Public Institution.

- (1) Credit earned at any public institution in the state is transferable to any other public institution if the:
 - (a) Credit is from a college or university parallel course or program;
 - (b) Grades in the block of courses transferred average 2.00 or higher; and
 - (c) Acceptance of the credit is consistent with the policies of the receiving institution governing native students following the same program.
- (2) If a native student's "D" grade in a specific course is acceptable in a program, then a "D" earned by a transfer student in the same course at a sending institution is also acceptable in the program. Conversely, if a native student is required to earn a grade of "C" or better in a required course, the transfer student shall also be required to earn a grade of "C" or better to meet the same requirement.

B. Credit earned in or transferred from a community college is limited to:

- (1) 1/2 the baccalaureate degree program requirement, but may not be more than 70 credits; and
- (2) The first two years of the undergraduate education experience.

C. Nontraditional Credit.

- (1) The assignment of credit for AP, CLEP, or other nationally recognized standardized examination scores presented by transfer students is determined according to the same standards that apply to native students in the receiving institution, and the assignment shall be consistent with the state minimum requirements.
- (2) Transfer of credit from the following areas shall be consistent with COMAR 13B.02.02. and shall be evaluated by the receiving institution on a course-by-course basis:
 - (a) Technical courses from career programs;
 - (b) Course credit awarded through articulation agreements with other segments or agencies;

- (c) Credit awarded for clinical practice or cooperative education experiences; and
- (d) Credit awarded for life and work experiences.

- (3) The basis for the awarding of the credit shall be indicated on the student's transcript by the receiving institution.
- (4) The receiving institution shall inform a transfer student of the procedures for validation of course work for which there is no clear equivalency. Examples of validation procedures include ACE recommendations, portfolio assessment, credit through challenge, examinations, and satisfactory completion of the next course in sequence in the academic area.
- (5) The receiving baccalaureate degree-granting institution shall use validation procedures when a transferring student successfully completes a course at the lower-division level that the receiving institution offers at the upper-division level. The validated units earned for the course shall be substituted for the upper-division course.

D. Program Articulation.

- (1) Recommended transfer programs shall be developed through consultation between the sending and receiving institutions. A recommended transfer program represents an agreement between the two institutions that allows students aspiring to the baccalaureate degree to plan their programs. These programs constitute freshman/sophomore-level course work to be taken at the community college in fulfillment of the receiving institution's lower-division course work requirement.
- (2) Recommended transfer programs in effect at the time that this regulation takes effect, which conform to this chapter, may be retained.

.06 Academic Success and General Well-Being of Transfer Students.

A. Sending Institutions.

- (1) Community colleges shall encourage their students to complete the associate degree or to complete 56 credits in a recommended transfer program which includes both general education courses and courses applicable toward the program at the receiving institution.
- (2) Community college students are encouraged to choose as early as possible the institution and program into which they expect to transfer.
- (3) The sending institution shall:
 - (a) Provide to community college students information about the specific transferability of courses at 4-year colleges;
 - (b) Transmit information about transfer students who are capable of honors work or independent study to the receiving institution; and
 - (c) Promptly supply the receiving institution with all the required documents if the student has met all financial and other obligations of the sending institution for transfer.

B. Receiving Institutions.

- (1) Admission requirements and curriculum prerequisites shall be stated explicitly in institutional publications.

- (2) A receiving institution shall admit transfer students from newly established public colleges that are functioning with the approval of the Maryland Higher Education Commission on the same basis as applicants from regionally accredited colleges.
- (3) A receiving institution shall evaluate the transcript of a degree-seeking transfer student as expeditiously as possible, and notify the student of the results not later than mid-term of the student's first term of enrollment at the receiving institution, if all official transcripts have been received at least 15 working days before mid-term. The receiving institution shall inform a student of the courses which are acceptable for transfer credit and the courses which are applicable to the student's intended program of study.
- (4) A receiving institution shall give a transfer student the option of satisfying institutional graduation requirements that were in effect at the receiving institution at the time the student enrolled as a freshman at the sending institution. In the case of major requirements, a transfer student may satisfy the major requirements in effect at the time when the student was identifiable as pursuing the recommended transfer program at the sending institution. These conditions are applicable to a student who has been continuously enrolled at the sending institution.

.07 Programmatic Currency.

A. A receiving institution shall provide to the community college current and accurate information on recommended transfer programs and the transferability status of courses. Community college students shall have access to this information.

B. Recommended transfer programs shall be developed with each community college whenever new baccalaureate programs are approved by the degree-granting institution.

C. When considering curricular changes, institutions shall notify each other of the proposed changes that might affect transfer students. An appropriate mechanism shall be created to ensure that both 2-year and 4-year public colleges provide input or comments to the institution proposing the change. Sufficient lead time shall be provided to effect the change with minimum disruption. Transfer students are not required to repeat equivalent course work successfully completed at a community college.

.08 Transfer Mediation Committee.

A. There is a Transfer Mediation Committee, appointed by the secretary, which is representative of the public 4-year colleges and universities and the community colleges.

B. Sending and receiving institutions that disagree on the transferability of general education courses as defined by this chapter shall submit their disagreements to the Transfer Mediation Committee. The Transfer Mediation Committee shall address general questions regarding existing or past courses only, not individual student cases, and shall also address questions raised by institutions about the acceptability of new general education courses. As appropriate, the Committee shall consult with faculty on curricular issues.

C. The findings of the Transfer Mediation Committee are considered binding on both parties.

.09 Appeal Process.

A. Notice of Denial of Transfer Credit by a Receiving Institution.

- (1) Except as provided in A(2) of this regulation, a receiving institution shall inform a transfer student in writing of the denial of transfer credit not later than mid-term of the transfer student's first term, if all official transcripts have been received at least 15 working days before mid-term.
- (2) If transcripts are submitted after 15 working days before mid-term of a student's first term, the receiving institution shall inform the student of credit denied within 20 working days of receipt of the official transcript.
- (3) A receiving institution shall include in the notice of denial of transfer credit:
 - (a) A statement of the student's right to appeal; and
 - (b) A notification that the appeal process is available in the institution's catalog.
- (4) The statement of the student's right to appeal the denial shall include notice of the time limitations in B of this regulation.

B. A student believing that the receiving institution has denied the student transfer credits in violation of this chapter may initiate an appeal by contacting the receiving institution's transfer coordinator or other responsible official of the receiving institution within 20 working days of receiving notice of the denial of credit.

C. Response by Receiving Institution.

- (1) A receiving institution shall:
 - (a) Establish expeditious and simplified procedures governing the appeal of a denial of transfer of credit; and
 - (b) Respond to a student's appeal within 10 working days.
- (2) An institution may either grant or deny an appeal. The institution's reasons for denying the appeal shall be consistent with this chapter and conveyed to the student in written form.
- (3) Unless a student appeals to the sending institution, the writing decision in C(2) of this regulation constitutes the receiving institution's final decision and is not subject to appeal.

D. Appeal to Sending Institution.

- (1) If a student has been denied transfer credit after an appeal to the receiving institution, the student may request the sending institution to intercede on the student's behalf by contacting the transfer coordinator of the sending institution.
- (2) A student shall make an appeal to the sending institution within 10 working days of having received the decision of the receiving institution.

E. Consultation Between Sending and Receiving Institutions.

- (1) Representatives of the two institutions shall have 15 working days to resolve the issues involved in an appeal.
- (2) As a result of a consultation in this section, the receiving institution may affirm, modify or reverse its earlier decision.

(3) The receiving institution shall inform a student in writing of the result of the consultation.

(4) The decision arising out of a consultation constitutes the final decision of the receiving institution and is not subject to appeal.

.10 Periodic Review.

A. Report by Receiving Institution.

- (1) A receiving institution shall report annually the progress of students who transfer from 2-year and 4-year institutions within the state to each community college and to the secretary of the Maryland Higher Education Commission.
- (2) An annual report shall include ongoing reports on the subsequent academic success of enrolled transfer students, including graduation rates, by major subject areas.
- (3) A receiving institution shall include in the reports comparable information on the progress of native students.

B. Transfer Coordinator. A public institution of higher education shall designate a transfer coordinator, who serves as a resource person to transfer students at either the sending or receiving campus. The transfer coordinator is responsible for overseeing the application of the policies and procedures outlined in this chapter and interpreting transfer policies to the individual student and to the institution.

C. The Maryland Higher Education Commission shall establish a permanent Student Transfer Advisory Committee that meets regularly to review transfer issues and recommend policy changes as needed. The Student Transfer Advisory Committee shall address issues of interpretation and implementation of this chapter.

Administrative History

Effective date: December 4, 1995
(22:24 Md. R. 1901)

Regulations .02, .03, and .05 amended.

Effective date: July 1, 1996 (23:13 Md. R. 946)
Revised: February 11, 1998

Appendix C

USM Bylaws, Policies and Procedures of the Board of Regents

VIII-2.70 POLICY ON STUDENT CLASSIFICATION FOR ADMISSION AND TUITION PURPOSES

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003; Amended February 15, 2008.)

I. Policy

A. Purpose

To extend the benefits of its system of higher education while encouraging the economical use of the State's resources,¹ it is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the tuition categories of in-state and out-of-state students for the purpose of admission and assessing tuition at USM institutions.

B. Burden of Proof

The person seeking in-state status shall have the burden of proving by clear and convincing evidence that he or she satisfies the requirements and standards set forth in this Policy. Assignment of in-state or out-of-state status will be made by the applicable USM institution upon a review of the totality of facts known or presented to it.

C. In-state Status

To qualify for in-state tuition, a student must demonstrate that, for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status, the student had the continuous intent to:

1. Make Maryland his or her permanent home; and
2. Abandon his or her former home state; and
3. Reside in Maryland indefinitely; and
4. Reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

Satisfying all of the requirements in Section II (and Section III, when applicable) of this policy demonstrates continuous intent and qualifies a student for in-state tuition. Students not entitled to in-state status under this policy shall be assigned out-of-state status for admission and tuition purposes.

D. Presumption

Either of the following circumstances raises a presumption that the student is residing in the State of Maryland primarily for the purpose of attending an educational institution and therefore, does not qualify for in-state status under this policy:

1. A student is attending school or living outside Maryland at the time of application for admission to a USM institution, or
2. A student is Financially Dependent on a person who is not a resident of Maryland.

This presumption may be rebutted. The student bears the burden of rebutting the presumption. See "III. Rebuttal Evidence" below.

II. Requirements

Before a request for classification to in-state status will be considered, a student must comply with all of the following requirements for a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status. The student must demonstrate he or she:

1. Owns or possesses, and has continuously occupied, including during weekends, breaks and vacations, living quarters in Maryland. The student must provide evidence of a genuine deed or lease and documentation of rent payments made. In lieu of a deed or lease, a notarized affidavit from a landlord showing the address, name of the student as occupant, term of residence, and history of rent payments made will be considered. As an alternative, a student may demonstrate that he or she shares living quarters in Maryland which are owned or rented and occupied by a parent, legal guardian or spouse.
2. Has substantially all of his or her personal property, such as household effects, furniture and pets in Maryland.
3. Has paid Maryland income tax on all taxable income including all taxable income earned outside the State and has filed a Maryland tax return.
4. Has registered all owned or leased motor vehicles in Maryland.
5. Possesses a valid Maryland driver's license, if licensed.
6. Is registered to vote in Maryland, if registered to vote.
7. Receives no public assistance from a state other than the State of Maryland or from a city, county or municipal agency other than one in Maryland.
8. Has a legal ability under Federal and Maryland law to live permanently without interruption in Maryland.
9. Has rebutted the presumption that he or she is in Maryland primarily to attend an educational institution, if the student's circumstances have raised the presumption.

III. Rebuttal Evidence

Satisfying the requirements listed in paragraphs 1–9 of Section II, does not rebut the presumption that a student is in Maryland primarily to attend an educational institution. To overcome the presumption, a student must present additional evidence.

To determine a student's intent, the University will evaluate evidence of a student's objectively verifiable conduct. Evidence that does not document a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status is generally considered an unfavorable factor under this policy. Evidence of intent must be clear and convincing and will be evaluated not only by

the amount presented but also based upon the reliability, authenticity, credibility and relevance of the evidence.

The absence of objective, relevant evidence is generally considered an unfavorable factor. A student's statement of intent to remain in Maryland in the future is generally not considered to be objective evidence under this policy.

Additional evidence that will be considered includes, but is not limited to, the following:

A. Source of financial support:

1. Maryland employment and earnings history through sources beyond those incident to enrollment as a student in an educational institution e.g., beyond support provided by work study, scholarships, grants, stipends, aid, student loans, etc. (Tuition costs will be considered as a student expense only to the extent tuition exceeds the amount of any educational scholarships, grants, student loans, etc.), or
2. Evidence the student is Financially Dependent upon a person who is a resident of Maryland.

B. Substantial participation as a member of a professional, social, community, civic, political, athletic or religious organization in Maryland, including professionally related school activities that demonstrate a commitment to the student's community or to the State of Maryland.

C. Registration as a Maryland resident with the Selective Service, if male.

D. Evidence showing the student uses his or her Maryland address as his or her sole address of record for all purposes including on health and auto insurance records, bank accounts, tax records, loan and scholarship records, school records, military records, leases, etc.

E. An affidavit from a person unrelated to the student that provides objective, relevant evidence of a student's conduct demonstrating the student's intent to live permanently in Maryland.

IV. Non-Residents Who May Temporarily Qualify for In-State Status

In addition, persons with the following status shall be accorded the benefits of in-state status for the period in which they hold such status:

- A. A full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.
- B. The spouse or Financially Dependent child of a full-time or part-time (at least 50 percent time) regular employee of USM or a USM institution.
- C. A full-time active member of the Armed Forces of the United States whose home of record is Maryland or one who resides or is stationed in Maryland, or the spouse or a Financially Dependent child of such a person. Students that qualify under this provision will retain in-state status for tuition purposes as long as they are Continuously Enrolled regardless of a change in military assignment or status of the active member of the military.
- D. A veteran of the United States Armed Forces with an honorable discharge who, within one year of discharge, presents documentation that he or she attended a secondary school in the

State for at least three years, and graduated or received the equivalent of a high school diploma from a secondary school in the State. The veteran must present documentation and register at a USM institution within one year of discharge for this provision to apply.

- E. For UMUC, a full-time active member of the Armed Forces of the United States on active duty, or the spouse of a member of the Armed Forces of the United States on active duty.
- F. A graduate assistant appointed through a USM institution for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

V. Procedures

- A. An initial determination of in-state status will be made at the time of admission. The determination made at that time, and any determination made thereafter, shall prevail for each semester/term until the determination is successfully challenged in a timely manner.
- B. A change in status must be requested by submitting a USM institution's "Petition for Change in Classification for Tuition." A student applying for a change to in-state status must furnish all evidence that the student wishes the USM institution to consider at the time the petition is due. The due date is based on the deadline set forth by the USM institution at which the student seeks to enroll. If the applicable USM institution has no such deadline, the due date is the last published date to register for the forthcoming semester/term for which the change in classification is sought.
- C. The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status.
- D. In the event incomplete, false, or misleading information is presented, the USM institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution's policy. Such action may include suspension or expulsion. If in-state status is gained due to false or misleading information, the institution reserves the right to retroactively assess all out-of-state charges for each semester/term affected.
- E. Each USM institution shall develop and publish additional procedures to implement this Policy. Procedures shall provide that on request the institution President or designee has the authority to waive any requirement set forth in Section II if it is determined that the application of the requirements creates an unjust result. These procedures shall be filed with the Office of the Chancellor.

VI. Definitions

- A. Financially Dependent: For the purposes of this policy, a financially dependent student is one who is claimed as a dependent for tax purposes.
- B. Parent: A parent may be a natural parent, or, if established by a court order recognized under the law of the State of Maryland, an adoptive parent.

C. Guardian: A guardian is a person so appointed by a court order recognized under the law of the State of Maryland.

- D. Spouse: A spouse is a partner in a legally contracted marriage.
- E. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.
- F. Regular Employee: A regular employee is a person employed by USM or a USM institution who is assigned to a State budget line or who is otherwise eligible to enroll in a State retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees, and independent contractors.
- G. Continuous Enrollment:
 1. Undergraduate Student - An undergraduate student who is enrolled at a USM institution for consecutive fall and spring semesters, until completion of the student's current degree program or unless on an approved leave of absence or participating in an approved program off-campus.
 2. Graduate and Professional - Continuous enrollment for a graduate or professional student is defined by the institution in accordance with program requirements.

VII. Implementation

This policy as amended by the Board of Regents on June 23, 2006 shall be applied to all student tuition classification decisions made on or after this date.

¹ Annotated Code of Maryland, Education Article, §12-101

Appendix D

THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA/BUCKLEY AMENDMENT)

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. This law states that a) a written institutional policy must be established and b) a statement of adopted procedures covering the privacy of students be made available. The university has taken the appropriate steps to comply with this law.

Towson University accords all the rights under the law to students who have reached the age of majority. Information may be released to parents who have established students' dependency as defined by the Internal Revenue Code of 1954, Section 152. The Office of the Registrar will review the parent's claim of dependency and notify students of the claim prior to release of any academic information. Except as permitted under the Act, no one outside the institution will have access to any information from students' education records without their written consent. Those permitted access under the Act include personnel within the institution, officials of other institutions in which students seek to enroll, persons or organizations providing financial aid, accrediting agencies, persons in compliance with a judicial order, and persons acting in an emergency situation to protect the health or safety of others.

Within the Towson University community, only those individuals acting in students' educational interest are allowed access to student education records. These include personnel in the offices of Admissions, Academic Advising, Registrar, Bursar, Financial Aid, and other academic personnel within the limitations of their need to know. The Registrar may grant access to education records for other legitimate reasons permitted under the Act.

The university may provide Directory Information in accordance with the provisions of the Act without the written consent of students. Directory Information includes student name, address, telephone number(s), e-mail address, date and country of birth and country of citizenship, major field of study, dates of attendance, degrees and awards received, the most recent previous educational institution attended by students, class standing, participation in officially recognized activities and sports, and the weight and height of members of athletic teams. The Office of the Registrar will release Directory Information at its discretion and may release it over the telephone or in writing. Students may withhold Directory Information by notifying the Office of the Registrar in writing within two weeks after the first day of classes.

Requests for non-disclosure will be honored for only one academic year; thereafter, authorization to withhold Directory Information must be filed annually with the Office of the Registrar.

The Act also provides students with the right to inspect and review information contained in their education records. The registrar at Towson University has been designated to coordinate the inspection and review of student education records. Students wishing to review their education records must make written requests to the Registrar's Office. Records covered by the Act will be made available within 30 days of the request. Students may have copies made of their records at their expense with certain exceptions (e.g., copies of the original or source document that exists elsewhere or when students have an outstanding financial obligation to the university). Education records do not necessarily include records of instructional, administrative, or educational personnel, which are the sole possession of the makers. Health records, employment records or alumni records will not be released to students but may be reviewed by them or by physicians of their choosing.

FERPA does not allow students to inspect and review the following: financial information submitted by their parents, confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review. Education records containing information about more than one student are restricted, and the institution will permit access only to that part of the records that pertains to the individual student. The institution will not permit students to inspect and review confidential letters and recommendations placed in their files prior to January 1, 1975.

The university has established an appeal mechanism in accordance with the Act. Students who believe their education records contain inaccurate, misleading or unlawful information may discuss their problems informally with the registrar. If the Registrar agrees with the request, the appropriate records will be amended. If students' requests are denied, they will be notified by the registrar of the right to a formal hearing.

Requests for formal hearings must be made in writing to the vice president for Student Affairs who will inform students of the date, place and time of the hearing. Students may present evidence and may be assisted or represented at the hearings by counsel. The hearing panel that will adjudicate such challenges may include the provost, the vice president for Student Affairs, the dean of the Graduate School, the academic dean of students' colleges and university counsel, or their designees. Decisions of the hearing panel will be final. The findings will be based solely on the evidence presented at the hearing and will consist of written statements summarizing the evidence and stating the reasons for the decisions, and will be delivered to all parties

concerned. The education records will be corrected or amended in accordance with the decisions of the hearing panel. Students dissatisfied with the outcome of their hearings may prepare a written statement to be placed in the education records and maintained as part of students' records.

Students who believe the adjudications of the challenges were unfair or not in keeping with the provisions of FERPA may request that the hearing be reviewed by the president of the university. In addition, students who wish to file a complaint under FERPA, should do so in writing to the Family Policy Compliance Office, sending pertinent information through the mail, concerning any allegations to the following address:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

Revisions and clarifications of this policy will be published as the law warrants.

Appendix E

FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS (SAP) POLICY

Financial aid recipients must make satisfactory academic progress toward the completion of a degree while maintaining good standing as defined in the university catalogs.

The SAP Policy measures three areas:

1. Number of units completed in relation to the number of units attempted at Towson and transferred to Towson. All students (undergraduate and graduate) must successfully complete at least 67 percent of units attempted at TU plus transfer units accepted toward TU degree. For example, a student who has attempted 60 units must have earned at least 41 units (67 percent of all units).
2. Timeframe for completion of degree. Undergraduate first bachelor's degree and post-baccalaureate students must complete their degree requirements within 180 attempted units, including all units attempted at Towson University plus all undergraduate transferred units.

Graduate students must complete their degree requirements within 7 years.

3. Cumulative grade point average. Undergraduate students must have a minimum cumulative grade point average of 2.0 after completing 59 units.

ADDITIONAL INFORMATION:

- All units on a student's schedule on the first day of class each term count, unless the student drops the course or completely withdraws from the university during the 100 percent refund period for that term.
- Developmental courses do not count as attempted and/or earned units and cannot exceed 30 units.
- Only units completed with an earned letter grade or passed under Pass/Fail provision count toward units completed. Units for coursework earning the following grades will not count as units completed: AU (Audit), W (Withdraw), I (Incomplete), U (Unsatisfactory), F or FX (Failure).
- Students who have aid canceled because of failure to comply with the SAP policy may appeal to the Financial Aid Appeals Committee. Appeals must be written by the student, and must include a statement outlining the causes of poor academic performance and a formal plan for regaining compliance with the policy. If the Appeals Committee approves the appeal, the student will receive an aid offer of funds available at the time of approval.

Appendix F

CODE OF CONDUCT

I. Student Rights and Responsibilities

A. Preamble

Academic institutions exist for the transmission of knowledge, the pursuit of truth, the development of students, and the general well-being of society. Free inquiry and free expression are indispensable to the attainment of these goals. As members of the academic community, students should be encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus and in the larger community. Students should exercise their freedom with responsibility. The responsibility to secure and respect general conditions conducive to the freedom to learn is shared by all members of the community. The present code is designed to establish policies and procedures which provide and safeguard this freedom.

B. Purpose

Towson University's mission to the community at large is one of academic excellence and achievement. To that end, its campus community must be one wherein respect for the individual pursuit of academic excellence and achievement is given priority. In order to foster this environment, it is incumbent upon students to conduct themselves within the framework of the reasonable rules and regulations designed to enhance and protect the academic environment of the university. By specifying behavioral standards and by establishing fair and efficient processes for adjudicating conflict, the university seeks to protect the environment in which learning is nurtured and respect for that goal is continually afforded.

C. Individual Rights and Responsibilities

1. Access to Higher Education

- a. Within the limits of its facilities, the institution and its courses, programs and activities shall be open to all applicants who are qualified, according to its admission requirements.

- 1) The institution shall, in the university *Undergraduate Catalog*, make clear to the students the standards of its programs.

- 2) Admission to Towson University shall be in compliance with federal and state laws and regulations that prohibit illegal discrimination.

2. Classroom Expression

- a. Discussion and expression of all views relevant to the subject matter are permitted in the classroom, subject only to the responsibility of the instructor to maintain order and reasonable academic progress.

- 1) Faculty comportment shall be in accordance with standards set forth by the American Association of University Professors.

- 2) Students shall not be penalized for expressing controversial views relevant to the subject matter in class.

- b. Evaluation of a student's academic performance shall be neither prejudiced nor capricious.

3. Personal Expression

- a. Discussion and expression of all views is permitted within the institution subject only to requirements for the maintenance of order. Support of any cause, by orderly means which does not disrupt the operation of the institution, is permitted.
- b. Students, groups and campus organizations may invite to hear any persons of their own choosing, subject only to the requirements of the use of institutional facilities and regulations of the university and the Board of Regents of the University System of Maryland.
- c. Students' dress and grooming, of any style, are permitted subject to legal prohibitions.
- d. Students, groups, or organizations may distribute written material on campus, providing such distribution does not disrupt the operations of the institution or deface property and adheres to the Advertising Policy and/or the Distribution and Solicitation Policy, which is available at the University Union Information Desk (410-704-4636).
- e. The right of assembly is granted within the institutional community. The institution retains the right to assure the safety of individuals, the protection of property, and the continuity of the educational process.
- f. Orderly picketing and other forms of peaceful protest are permitted on institutional premises. Interference with entrances to institutional facilities, intentional interruption of classes or damage to property exceed permissible limits.
- g. Orderly picketing and orderly demonstrations are permitted in public areas within institutional buildings subject to the requirements of non-interference.
- h. Every student has the option to be interviewed on campus by an organization authorized to recruit at the institution.

4. Privacy

- a. Students have the same rights of privacy as any other citizens and surrender none of those rights by becoming members of the academic community.
- b. Information about student views, beliefs and political associations acquired by faculty and staff in the course of their work as instructors, advisers and counselors is confidential and is not to be disclosed to others unless under legal compulsion or with permission of the student.
- c. The privacy and confidentiality of all student records shall be preserved. Official student academic records, supporting documents and other student files shall be maintained only by full-time members of the institution's staff employed for that purpose and students employed by them who may have access in line of employment. Separate files shall be maintained for the following: academic records, supporting documents and general educational records, records of disciplinary proceedings, medical and psychiatric records, and financial aid records.
- d. No entry may be made on a student's academic record and no document may be placed in the student's file without actual notice to the student.
- e. Every student is guaranteed the right to inspect and review all information in his or her own files maintained by the Office of Student Conduct and Civility Education, subject only

to reasonable regulations as to time, place and supervision. However, the student may not have copies of items in a file.

- 1) A student may challenge the accuracy or presence of any item by following the standard appeal process (see Appeal Procedures below).
- 2) When a case is referred, a disciplinary file may be developed in the name of the charged student.
- 3) The file will be voided if the charges against the student are not substantiated.
- 4) The file including any university hearing audio recordings will be retained for seven years if the charges are substantiated. Disciplinary records may be retained for longer periods of time or permanently if the sanction is suspension or expulsion from the university or university housing.
- 5) Any record, file or incident report to which the student has access and an opportunity to respond, or records of previous hearings, may be taken into consideration by the decision-maker in arriving at an appropriate decision.
- 6) Pursuant to recent changes in the Family Educational Rights and Privacy Act of 1974, as revised, the Office of Student Conduct and Civility Education reserves the right to notify parents of students under the age of 21 who are found responsible for alcohol or drug violations of the Code of Student Conduct.
- f. No record may be made in relation to any of the following matters except upon the express written request of the student: religion, political or social views, and membership in any organization other than honorary and professional organizations directly related to the educational process.
- g. Agencies of the university which keep student records must make students aware of how and to whom those records may be divulged. No information in any student file may be released to anyone except with prior written consent of the student concerned or as stated below.
 - 1) Administrators may have access to student records for internal educational and administrative purposes.
 - 2) Members of the faculty may have access to academic records for internal educational and administrative purposes.
 - 3) Non-academic records shall be routinely available only to administrators and staff charged with their maintenance. Faculty and staff may have access to all records for statistical purposes.
 - 4) Directory information, as defined in Appendix F, may be released to any inquirer unless the student has specifically asked the registrar to withhold that information.
 - 5) Unless under legal compulsion, all other information regarding students' records shall be denied to any person making an inquiry.
- h. Upon graduation or withdrawal from the institution, the records and files of former students shall continue to be subject to the provisions of this code.

D. Rights and Responsibilities of Campus Organizations

1. Organizations, groups and NCAA teams may be established within the institution for any legal purpose. Their recognition will be in accordance with established guidelines.

2. Membership in all institution-related organizations, within the limits of their facilities, shall be open to any fee-paying member of the institution community who is willing to subscribe to the stated aims and meet the stated obligations of the organization.

3. Individual members, as well as the organization, group or team itself, can be charged with violations of the Code of Student Conduct, including those actions defined in the "Hazing Policy" section of this document.

4. Use of university facilities shall be granted to recognized student organizations. Student organizations shall be given priority for use of space as outlined in procedures established by Event & Conference Services and the Student Government Association.

5. The authority to allocate institutional funds derived from student fees for use by organizations shall be delegated to a body in which student participation in the decision-making process is assured.

- a. Approval of requests for funds is conditional upon submission of budgets to and approval by this body.
- b. Financial accountability, in full accordance with university and state policies, regulations, procedures and practices, is required for all allocated funds, including statement of income and expenses on a regular basis.
- c. Otherwise, organizations shall have independent control over the expenditure of allocated funds.

6. The student press is to be free of censorship. The editors and managers shall not be arbitrarily suspended because of student, faculty, administration, alumni or community disapproval of editorial policy or content. Similar freedom is assured oral statements of views on institution-controlled and student-operated radio or television stations. This editorial freedom entails a corollary obligation under the canons of responsible journalism and applicable regulations of the Federal Communications Commission.

7. All student communications shall explicitly state that the opinions expressed are not necessarily those of the institution or its student body.

E. Rights of Students in Institutional Government

1. All constituents of the institutional community are free, individually and collectively, to express their views on issues of institutional policy and on matters of interest to the student body. Clearly defined means shall be provided for student expression on all institutional policies affecting academic and student affairs.

2. The role of student government and its responsibilities shall be made explicit. There should be no review of student government actions except where review procedures are agreed upon in advance, or where actions of the government are either potentially illegal or present a clear danger to either individual or institutional rights.

3. On questions of educational policy, students are entitled to a participatory function. Students shall be designated as members of standing and special committees concerned with institutional policy affecting academic and student affairs, including those concerned with curriculum, discipline, admission, academic standards, university governance and allocation of student funds.

F. Student Grievance Procedures

1. Any student or group may file a grievance against an administrative official or faculty member for violation of student rights as listed above.

2. The Office of Student Conduct and Civility Education may make a preliminary investigation to determine whether the charges can be disposed of informally by mutual consent without the initiation of official proceedings.

3. If the charges cannot be disposed of informally, the student or group may file an appeal to the Student Appeals Committee.

II. Code of Student Conduct

A. Rationale

The primary purpose for the imposition of discipline in the university setting is to protect the campus community. Consistent with that purpose, reasonable efforts will also be made to foster the personal, educational and social development of those students who are held accountable for violations of university regulations. However, the university must commit its policies and procedures first of all to protect and promote the academic enterprise. Consequently, it may be necessary to suspend or expel students who have been found responsible for violations of this Code, or who otherwise pose a substantial danger to the campus community.

B. Definitions

1. The terms "university" and "institution" mean Towson University (TU).

2. The term "student" includes all persons taking courses at the university, both full-time and part-time, pursuing undergraduate, graduate, professional, certificate or continuing studies. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the university are considered "students."

3. The terms "faculty member" and "instructor" mean any person hired by the university to conduct classroom activities.

4. The term "university official" includes any person employed by the university, performing assigned administrative, professional or paraprofessional responsibilities (including student resident assistants and building managers).

5. The term "member of the university community" includes any person who is a student, faculty member, university official, or any other person employed by the university.

6. The term "university premises" includes all land, buildings, facilities and other property in the possession of or owned, used or controlled by the university (including adjacent streets and sidewalks).

7. The term "organization" means any number of persons who have complied with formal requirements for university recognition (including SGA, Greek and NCAA).

8. The term "group" means a number of persons who are associated with each other but who have not complied with university requirements for registration as an organization.

9. The term "Hearing Board" means the hearing officer and student conduct aides authorized by the director the Office of Student Conduct and Civility Education to determine whether a student has violated the Code of Student Conduct.

10. The director of Student Conduct and Civility Education is that person designated by the university president to be responsible for the administration of the Code of Student Conduct.

11. The term "policy" is defined as the written regulations of the university as found in, but not limited to, the Code of Student Conduct, the Policies for University Housing, the Faculty Handbook, the Undergraduate Catalog, the Student Organization Handbook, and the Event & Conference Services Guide for Student Organizations.

12. The term "interim disciplinary action" means discipline which is imposed pending the outcome of a court case for off-campus behavior.

13. The term "banned from campus" means that a student is prohibited from coming onto university property. A student who is banned from campus may be allowed to finish current course work off campus, if appropriate, and a tuition refund may be granted. As a result of a ban, the student will not have a permanent file in the Office of Student Conduct and Civility Education. A ban will normally only be issued after the student has been offered a meeting with a representative of the Office of Student Conduct and Civility Education.

14. The term "non-consensual sexual intercourse" means any sexual intercourse (anal, oral or vaginal), however slight, with any object, by a man or woman upon a man or a woman, without effective consent.

15. The term "non-consensual physical conduct of a sexual nature" means any intentional sexual touching, however slight, with any object, by a man or a woman upon a man or a woman, without effective consent.

16. The term "effective consent" means consent that is informed, freely and actively given, and that uses mutually understandable words or actions which indicate a willingness to participate in mutually agreed upon sexual activity. Consent is not effective if it results from the use of physical force, threats, intimidation or coercion.

17. The term "incapacitated sex" means to have sex with someone who you know or should know to be incapable of making a rational, reasonable decision about a sexual situation. This includes but is not limited to someone whose incapacity results from being intoxicated or from the taking of a so-called "date-rape drug."

18. The USM Policy on Sexual Assault can be found at: www.usmd.edu/Leadership/BoardOfRegents/Bylaws/Section VI/V1130.html.

19. The term "stalking" means to follow or otherwise contact another person repeatedly, so as to put that person in fear for his or her life or personal safety.

20. The term "harassment" is defined as engaging in intentional conduct directed at a specific person or persons which seriously alarms or intimidates such persons and which serves no legitimate purpose. Such conduct may include: explicit or implicit threats, including gestures which place a person in reasonable fear of unwelcome physical contact, harm or death; following a person about in a public place or to or from his or her residence; making remarks in a public place to a specific person which are by common usage lewd, obscene, expose a person to public hatred or that can reasonably be expected to have a tendency to

cause acts of violence by the person to whom the remark is addressed; or communicating anonymously by voice or graphic means or making a telephone call anonymously whether or not a conversation ensues.

21. The term “event-related misconduct” is defined as serious misconduct that is related to university-sponsored events, including athletic events. Event-related misconduct includes rioting, vandalism, fire-setting, or other misconduct related to a university-sponsored event, occurring on- or off-campus, that results in harm to persons or property or otherwise poses a threat to the stability of the campus or the campus community.

22. Preponderance of evidence is that evidence which, when fairly considered, produces the stronger impression, has the greater weight, and is more convincing as to its truth when weighted against the evidence in opposition thereto.

C. Scope

1. Generally, student or group conduct subject to institutional discipline is limited to: on-campus actions; off-campus actions which affect the university community or the university’s pursuit of its mission, policies or procedures; off-campus actions by officially sponsored organizations, groups, or NCAA teams; or actions on university property which is leased to, or managed by, an entity other than the university.

2. However, a student charged with a violation of federal, state, or local laws for off-campus behavior may be disciplined by the university without a university hearing or informal investigation when: the student is found guilty by a court of law; the student pleads guilty or nolo contendere to the charges; the student is given probation before judgment; the student chooses to accept alternative sentencing by the court, i.e. community service; or, the case is settled.

Allegations of off-campus event-related misconduct (see Definitions) must be supported by a report, statement or accusation from a law enforcement agency in whose jurisdiction the misconduct is alleged to have occurred.

Additionally, interim or final disciplinary action may be taken before any court action is completed. Examples of charges that may result in action include acts of violence, drug- and alcohol-related violations, and a citation for a disorderly house. Such action will be taken only after a limited investigation by the Office of Student Conduct and Civility Education. The student will be offered a meeting with a university official to discuss the incident. In situations where a student is not able to meet with a university official, interim action may still be taken pending a meeting with the student.

Any interim action shall be reviewed, and appropriate final action taken, at the student’s request or at the university’s discretion, when a final court decision is rendered or when the university receives additional persuasive evidence.

3. Some conduct clearly disturbs only the campus environment; when such behavior occurs, the university shall take internal action.

4. When there is evidence that a student has committed a crime on campus, disciplinary action at the university will normally proceed independently of pending criminal charges, including when charges involving the same incident have been dismissed or

dropped. The student may then be subject to civil authorities as well as internal disciplinary action.

5. When a student is charged with a violation of one or more provisions of this Code, a letter listing the charges will be given or sent to the student within a reasonable amount of time. At a meeting with a representative of the office of Student Conduct and Civility Education, the student will be informed of:

- a. Specific violation(s)
- b. Description of alleged incident
- c. Hearing or informal investigation procedure
- d. Rights of appeal

D. Prohibited Conduct

The following misconduct is subject to disciplinary action:

1a. Intentionally furnishing false information to the institution; this includes lying to university officials.

1b. Forging, altering or using institutional documents or instruments of identification with intent to defraud, or to otherwise benefit therefrom.

1c. Possession of false identification (e.g., a false driver’s license).

2a. Disruption or obstruction of teaching, research, administration or disciplinary proceedings.

2b. Disruption or obstruction of university-sponsored activities or events.

2c. Off campus conduct that is disorderly and disrupts others in the community. (See Off-campus Disorderly and Disruptive Behavior Policy.)

3. Lewd, obscene or indecent behavior.

4. Physical abuse of any person.

5a. Unwanted physical contact or threat of physical contact with a university official.

5b. Threats of violence or placing a person in fear of imminent physical injury or danger.

5c. Any endangering conduct that imperils or jeopardizes the health or safety of any person or persons, including oneself.

5d. Stalking of any person.

6. Inflicting mental or emotional distress upon a person through a course of conduct involving abuse or disparagement of that person’s race, religion, sex, creed, sexual orientation, age, national origin or disability.

7. Acts that invade the privacy of another person.

8. Sexual assault, as defined by the USM Policy on Sexual Assault, including but not limited to non-consensual sexual intercourse, incapacitated sexual intercourse, and non-consensual verbal or physical conduct of a sexual nature.

9. Abuse of any person; this includes verbal, written, e-mail, or telephone abuse.

10. Intentionally or recklessly damaging, destroying, defacing or tampering with university, public or personal property of another.

11a. Uncooperative behavior and/or failure to comply with proper instructions of officials acting in performance of their duties.

11b. Event-related misconduct. (See Definitions)

12. Violation of published institutional regulations and policies.

13. Violation of state, federal and local laws.

14. Unauthorized presence in institutional facilities.

15a. The possession or use of illegal drugs controlled substances, or drug paraphernalia when not in accordance with established policy.

15b. The sale, distribution or intent to distribute, and/or manufacture of illegal drugs controlled substances, when not in accordance with established policy.

16. The possession or use of any firearms or instrument which may be construed as a weapon, without express permission of the University Police.

17. The possession of explosives, fireworks, or pyrotechnic paraphernalia on campus.

18a. The possession or use of alcoholic beverages when not in accordance with established policy.

18b. Public intoxication.

19. The unauthorized use of or entry into university computer systems.

20. Violation of the university housing policy.

21. Violation of any disciplinary sanction.

22. Charging telephone or telecommunications charges to university telephones or extension numbers without authorization.

23. Theft, attempted theft, possession of stolen property, conspiracy to steal or misappropriation of another’s property. This includes, but is not limited to, removing, possessing, concealing, altering, tampering or otherwise appropriating goods or property without authorization.

24. Violation of the Student Academic Integrity Policy (www.towson.edu/academicintegritypolicy).

25. Harassment of any person.

26. Unauthorized use of the name “Towson University” or the unauthorized use of any University trademark, service mark, logo or seal for advertising or promotional purposes in a manner that expressly or implicitly indicates the University’s endorsement.

E. Penalties

The following penalties may be imposed upon students and all student organizations for violations of the Code of Student Conduct. With only two exceptions, federal regulation prohibits disclosing the outcome of disciplinary proceedings to anyone other than to the accused and to appropriate university personnel. The first exception relates to allegations of sexual assault: in those cases, the university will disclose to the victim of a sexual offense the outcome of any investigation by University Police or the Office of Student Conduct and Civility Education pursuant to the victim’s complaint against the alleged perpetrator of the sexual offense. The second case relates to alcohol and drug violations: the parents of students under the age of 21 may be notified when students are found responsible for violations of the university’s alcohol or drug policies.

1. **CENSURE:** A written reprimand for violation of specified regulations, including a warning that continuation or repetition of prohibited conduct may be cause for additional disciplinary action. This may include a specified period of probation.

2. **PROBATION:** Notice to the student that any further disciplinary violation, during a specified period of time, may result in suspension or expulsion from the university and or on-campus housing.

3. **SOCIAL PROBATION:** Exclusion from participation in privileged or extracurricular institutional activities, including NCAA athletic events or practice, for a specified period of time. Additional restrictions or conditions may also be imposed. Violations of the terms of social probation, or any other violation of this Code during the period of probation, will normally result in a fine, suspension or expulsion from the university.

4. **SUSPENSION:** Suspension involves separation of the student from the university for a specified period of time and usually impairs a student's ability to pursue work at other colleges and universities. Normally, the student will also be barred from university premises during the period of suspension. Any student who is suspended shall not be entitled to any tuition or fee refund.

5. **EXPULSION:** Expulsion constitutes permanent separation of the student from the university. Normally, the student will also be barred from university premises upon expulsion. Any student who is expelled shall not be entitled to any tuition or fee refund.

6. **EVENT-RELATED MISCONDUCT SUSPENSION OR EXPULSION:** In general, a student found responsible on a charge of event-related misconduct shall be suspended or expelled. Any decision to impose a sanction less than suspension or expulsion for university-sponsored event-related misconduct (see Definitions) must be supported by written findings signed by the vice president for Student Affairs. A record of any suspension or expulsion for university-sponsored event-related misconduct shall be noted on the student's transcript for the duration of the sanction, or longer if so specified in the final notice of sanction. A student suspended for event-related misconduct shall not be admitted to any other institution in the University System of Maryland during the term of the suspension. A student expelled for event-related misconduct shall not be admitted to any other institution in the University System of Maryland for at least one year from the effective date of the expulsion. Any student who is suspended or expelled shall not be entitled to any tuition or fee refund.

7. **SUSPENSION OF GROUP:** Suspension shall consist of the withdrawal of an organization's recognition by the university, for a stated period of time, when an organization is found to have violated regulations. Suspension shall result in complete suspension of activities of the group during the stated period of time and may also include conditions for removal of suspension.

8. **ORGANIZATIONAL DISSOLUTION:** Organizational dissolution is a sanction imposed only upon student organizations guilty of serious and/or repeated violations of these standards. The sanctions involve permanent withdrawal of recognition by the university, denial of the use of university facilities or funds, and official dissolution of the organization on the campus.

9. **RESTITUTION:** Restitution may be imposed on students whose violation has involved monetary loss or damage. Fines may be imposed in addition to restitution. Restitution becomes a financial obligation to the university and either full payment or an agreement for partial payment according to a schedule agreed to by the director of the Office of Student Conduct and Civility Education is required

before a student may register for classes again, or in the case of seniors, before the student may graduate or before the diploma is released.

10. **TERMINATION OF UNIVERSITY HOUSING CONTRACT:** Termination of a student's university housing contract may be imposed in order to safeguard the residence community if the seriousness of the violation warrants such action.

11. **FINES:** Fines of varying amounts may be imposed for certain violations, such as alcohol- and drug-related incidents. Fines must be paid prior to the end of the current term, otherwise a student's registration privileges will be withheld or prior registration canceled.

12. **OTHER SANCTIONS:** Other sanctions may be imposed instead of or in addition to those specified above. For example, students may be subject to restrictions upon or denials of university parking privileges for violations involving the use or registration of motor vehicles on campus; sanction hours or research projects may be assigned; educational sanctions may be assigned; or the university housing contract may be placed on probation.

13. **DRUG PENALTIES:** see Substance Abuse Policy below.

F. Standards and Procedures of Due Process

1. Students subject to suspension or expulsion from the university will be entitled to a university hearing, except as described in section C.2. With the exception of allegations of academic dishonesty (see Student Academic Integrity Policy, students subject to any other sanction will be entitled to an informal investigation.

2. The purpose of a disciplinary proceeding is to provide a fair evaluation of an accused's responsibility for violating disciplinary regulations. Although formal rules of evidence need not be applied, procedures shall comport with standards of fundamental fairness. Harmless deviations from the prescribed procedures shall not necessarily invalidate a decision or proceeding unless significant prejudice to an accused student or the university may result.

3. Any person may refer students or student groups or organizations suspected of violating this Code to the Office of Student Conduct and Civility Education. Allegations of violations occurring within on-campus housing should be referred to the Department of Housing & Residence Life. Those referring cases are normally expected to serve as a witness and to present relevant evidence in disciplinary hearings or informal investigations. The director of the Office of Student Conduct and Civility Education may appoint a member of the campus community to serve as an adviser to university witnesses. The role of the adviser shall be limited to consultation with the witnesses.

4. Suspensions and expulsions from the university will be made by the vice president for Student Affairs or designee. All other sanctions will be determined by the director of the Office of Student Conduct and Civility Education or designee. In all cases, the accused will be notified in writing of any sanctions to be imposed and of his or her rights of appeal.

G. Informal Investigation and University Hearing Procedure

1. **Informal Investigation:** The informal investigation is designed to reduce unnecessary proceduralism and potential contentiousness in disciplinary proceedings.

An informal investigation will normally begin with an informal, non-adversarial meeting between the accused and a university administrator, as designated by the director of the Office of Student Conduct and Civility Education. The university shall consider all matters that reasonable persons would accept as having probative value, including documentary evidence, written statements and hearsay. The accused will be given access to documentary evidence and written statements in advance or during the initial meeting and allowed to respond to them. Accused are also allowed to submit the names of appropriate and relevant witnesses. The accused will be found responsible if the university administrator decides that a preponderance of evidence supports the charges.

The following procedural protections are provided to respondents in the informal investigation:

- a. Written notice of the specific charges prior to or at the initial meeting
- b. Reasonable access to the case file during the informal investigation or at the student's request
- c. An opportunity to respond to the evidence and call appropriate and relevant witnesses

2. **University Hearing:** The following procedural guidelines shall be observed for all hearings held by the University Hearing Board. The University Hearing Board will be composed of the hearing officer, who shall preside and make the final decision, and student conduct aides. In the absence of the student conduct aides, the hearing officer may hear and decide the case alone. A case may not be heard if the hearing officer, is not in attendance. The hearing officer shall be responsible for submitting the hearing panel's report to the Office of Student Conduct and Civility Education.

- a. The accused shall be given notice of the hearing date and the specific charges against him or her at least three business days in advance and shall be accorded reasonable access to the case file, which will be retained in the Office of Student Conduct and Civility Education. (In some cases, the accused may choose not to wait three days for a hearing to take place.)
- b. The hearing will be audio recorded.
- c. The accused will be present for the hearing. If more than one student is charged with the same incident, the university may hold a combined hearing. If the accused fails to appear, this will be stated for the record and the hearing will continue.
- d. The accused and the complainant may be accompanied by a friendly observer. This party may not be or act as legal counsel, except when concurrent criminal charges have been filed. In this situation counsel may not participate in the hearing, but may advise the accused.
- e. The hearing officer shall exercise control over the proceedings to avoid needless consumption of time and to achieve orderly completion of the hearing. Any person, including the accused, who disrupts a hearing may be excluded by the hearing officer.
- f. The accused will be found responsible if the hearing officer decides that a preponderance of evidence supports the charges.
- g. Formal rules of evidence shall not be applicable in disciplinary proceedings conducted pursuant to this Code. The hearing officer shall

admit all matters into evidence that reasonable persons would accept as having probative value, including documentary evidence, written statements, and hearsay. Repetitious or irrelevant evidence may, however, be excluded. Documentary evidence and written statements shall only be admitted into evidence if available to the accused before or during the hearing.

- h. The director of Student Conduct and Civility Education may appoint a special hearing panel member in complex cases. Special panel members may question all parties, participate in hearing panel deliberations, and offer advice to the hearing officer.
- i. The hearing officer's report will be presented to the Office of Student Conduct and Civility Education. The student may view the hearing officer's written report by appointment.
- j. The accused will receive the decision in writing from the vice president for Student Affairs or designee.

H. Judicial Procedures for Student Organizations, Groups and NCAA Teams

1. Student organizations, groups and NCAA teams (referred to here collectively as "group") may be charged with violations of the Towson University Code of Student Conduct.

2. When one or more members of a group are charged with a violation of the Code of Student Conduct, the university may charge the group as well. A student group and its officers may be held collectively and individually responsible when violations of this Code by those associated with the group have received the consent or encouragement of the group or of the group's leaders or officers.

3. A position of leadership in a student group entails responsibility. Student officers or leaders cannot knowingly permit, condone or acquiesce in any violation of this Code by the group. This section of the Code is designed, in part, to hold a group and its officers accountable for any act of hazing. The express or implied "consent" of the victim or participant is not a defense.

4. The officers, leaders or any identifiable spokesperson for a student group may be directed by the vice president for Student Affairs or designee, to take appropriate action designed to prevent or end violations of this Code by the group. Failure to make reasonable efforts to comply with the vice president for Student Affairs' directive shall be considered a violation of this Code, both by the officers, leaders or spokesperson for the group and by the group itself.

5. An informal investigation or, whenever appropriate, a university hearing for student groups will be conducted in a manner similar to the procedures listed above. Conferences shall be conducted with one spokesperson representing the group, usually the president. Any sanction listed in the Code of Student Conduct may be imposed on a group and its individual members. If individual members are subject to suspension or expulsion from the university for actions of the group, those individuals will be offered a university hearing.

6. A group may be held responsible for violations of the Code of Student Conduct resulting from the actions of its members, if the actions: arose out of activities related to the group; were encouraged, fostered or condoned by the group; were known or should have been known by members of the group; or were activities that the group could have

prevented ("Group Misconduct").

7. To be held responsible for Group misconduct, it is not necessary that the misconduct be approved by the entire group nor is it necessary that more than one group member be involved in the misconduct.

8. In determining whether a group is responsible, the university may consider, among other factors, whether the misconduct would have occurred if the participating individuals were not members of the group or whether the misconduct was encouraged, fostered or condoned by the group or whether the misconduct could have been prevented by the collective action of the group.

I. Emergency Suspensions

1. When there is evidence that the continued presence of a student on the university campus poses a substantial threat to him/herself or others, or to the stability and continuance of normal university functions, the vice president for Student Affairs or designee, may immediately suspend a student from any or all university activities, including university housing, for an interim period pending a hearing or medical evaluation. Such an emergency suspension may become effective immediately without prior notice.

2. An emergency suspension may be imposed only:

- a. to ensure the safety and well-being of members of the university community;
- b. to ensure the student's own physical or emotional safety and well-being;
- c. if the student poses a definite threat of, disruption of, or interference with the normal operations of the university.

3. A student issued an emergency suspension shall be denied access, as determined appropriate by the vice president for Student Affairs or designee, to:

- a. the entire campus, including classes;
- b. university housing and dining facilities;
- c. all other activities or privileges for which the student might otherwise be eligible.

4. In these cases, a university hearing or medical evaluation will be scheduled as soon as is practicable.

J. Appeal Procedures

1. Any disciplinary determination resulting in expulsion or suspension from the university may be appealed to:

- a. the Student Appeals Committee
- b. the president of the university

2. Any disciplinary determination resulting in removal from on-campus housing may be appealed to: the Student Appeals Committee.

3. Any disciplinary determination resulting in any lesser sanction except as provided below may be appealed to: the vice president for Student Affairs or designee.

The basis for appeal of a disciplinary sanction must be one of the following:

- a. a flaw in the student's right of due process
- b. evident bias in the decision of the hearing board or the individual conducting an informal investigation
- c. inconsistent or overly severe sanction imposed
- d. new evidence or insufficient consideration of all aspects of the situation

Appeals must be submitted in writing to the Office of Student Conduct and Civility Education by the deadline indicated in the sanction letter. Failure to appeal within the allotted time will render the original decision final and conclusive. Appeals shall be decided upon the record of the original proceedings, written letters submitted by the parties, and any further information requested by the committee, Vice President for Student Affairs, or designee.

The imposition of sanctions will not be deferred during the appeal process unless the student presents a compelling reason to the vice president for Student Affairs or designee.

4. When a student has a dispute about a grade or substantive academic matter, the appeal process is:

- a. instructor
- b. department chairperson
- c. college dean
- d. Student Appeals Committee

In cases involving the awarding of grades, the Student Appeals Committee normally reviews whether a grade was determined in accordance with the terms set forth at the beginning of the term by the instructor, normally as outlined in the course syllabus. Disputes regarding the grading of a particular piece of work shall be assigned to the appropriate chairperson who shall establish impartial means to conduct a review of the grade.

Grade appeals must be initiated within one year.

5. When a student appeals a course-related sanction for academic dishonesty, the appeal process is:

- a. instructor
- b. department chairperson
- c. Student Appeals Committee

Please refer to the complete Student Academic Integrity Policy at www.towson.edu/academicintegritypolicy.

A list of policies affecting students can be found online at www.towson.edu/studentaffairs/policies.

Note: Towson University reserves the right to amend the Code of Student Conduct when necessary. Students should check the Towson University Web site for the most current code (www.towson.edu/judicialaffairs).

STUDENT ACADEMIC INTEGRITY POLICY

I. Policy Statement:

The acquisition, sharing, communication and evaluation of knowledge are at the core of a university's mission. To realize this part of its mission, a university must be a community of trust. Because integrity is essential to the purpose of an academic community, the responsibility for maintaining standards of integrity is shared by all members of that academic community.

As instructors, faculty members are ultimately responsible for maintaining the academic standards of integrity on which trust is founded because they set academic standards, award academic credit and confer degrees when standards are met. To carry out these responsibilities, faculty members will reasonably assess that student work submitted for academic credit is authentic as well as consistent with established academic standards. Therefore, academic

evaluation includes a judgment that the student's work is free from academic dishonesty of any type.

Through example in their own academic pursuits and through the learning environment that they create for their students, faculty members preserve and transmit the values of the academic community. They are expected to instill in their students respect for integrity and a desire to behave honestly. They must also take measures to discourage student academic dishonesty. The following policies, procedures and definitions are intended to help faculty meet these responsibilities.

As responsible members of the academic community, students are obligated not to violate the basic standards of integrity. They are also expected to take an active role in encouraging other members to respect those standards. Should a student have reason to believe that a violation of academic integrity has occurred, he/she is encouraged to make the suspicion known to a member of the faculty or university administration. Students should familiarize themselves with the university's policies, procedures and definitions of types of violations.

Commitment to maintaining and encouraging high standards of academic integrity is demonstrated in many ways. One way is through the establishment of policies and procedures governing violation of the standards. The provisions of Towson University's Student Academic Integrity Policy follow.

II. Reason for Policy:

To maintain and encourage high standards of academic integrity, and to comply with University System of Maryland Policy III-1.00 Policy on Faculty, Student and Institutional Rights and Responsibilities for Academic Integrity.

III. Definitions:

The following definitions and examples are not meant to be exhaustive. The university reserves the right to determine, in a given instance, what action constitutes a violation of academic integrity.

- A. Student - includes all persons taking courses at the university, both full-time and part-time, pursuing undergraduate, graduate, professional, and certificate or continuing studies.
- B. Plagiarism - presenting work, products, ideas, words or data of another as one's own is plagiarism. Indebtedness must be acknowledged whenever:
 1. one quotes another person's actual words or replicates all or part of another's product. This includes all information gleaned from any source, including the Internet.
 2. one uses another person's ideas, opinions, work, data or theories, even if they are completely paraphrased in one's own words.
 3. one borrows facts, statistics or other illustrative materials.

Because expectations about academic assignments vary among disciplines and instructors, students should consult with their instructors about any special requirements related to citation.

Some examples: Submitting as one's own the work of a "ghost writer" or commercial writing service; knowingly buying or otherwise acquiring and submitting, as one's own work, any research paper or other writing assignment;

submitting as one's own work in which portions were produced by someone acting as tutor or editor; collaborating with others on papers or projects without authorization of the instructor.

In addition to oral or written work, plagiarism may also involve using, without permission and or acknowledgement, Internet websites, computer programs or files, research designs, ideas and images, charts and graphs, photographs, creative works and other types of information that belong to another.

Verbatim statements must be enclosed by quotation marks, or set off from regular text as indented extracts, with full citation.

- C. Fabrication and Falsification - making unauthorized alterations to information, or inventing any information or citation in an academic exercise. Fabrication is a matter of inventing or counterfeiting information or citation, while falsification is a matter of altering information.

Some Examples: Fabrication - inventing or counterfeiting data, research results, information or procedures; inventing data or fabricating research procedures to make it appear that the results of one process are actually the results of several processes; counterfeiting a record of internship or practicum experiences.

Falsification - altering the record of data or experimental procedures or results; false citation of the source of information (e.g., reproducing a quotation from a book review while indicating that the quotation was obtained from the book itself); altering the record, or reporting false information about, practicum or clinical experiences; altering grade reports or other academic records; submitting a false excuse for absence or tardiness in a scheduled academic exercise; altering a returned examination paper and seeking re-grading.

- D. Cheating - Using or attempting to use unauthorized materials, information, notes, study aids or other devices in any academic exercise. This includes unauthorized communication of information during an exercise.

Some Examples: Copying from another student's paper or receiving unauthorized assistance during a quiz, test or examination; using books, notes or other devices (e.g., calculators) when these are not authorized; procuring without authorization tests or examinations before the scheduled exercise (including discussion of the substance of examinations and tests when it is expected these will not be discussed); copying reports, laboratory work, computer programs or files and the like from other students; collaborating on laboratory or computer programs or files and the like from other students; collaborating on laboratory or computer work without authorization and without indication of the nature and extent of the collaboration; sending a substitute to take an examination.

- E. Complicity in Academic Dishonesty - helping or attempting to help another commit an act of academic dishonesty.

Some Examples: Allowing another to copy from one's paper during an examination or test; distributing test questions or substantive information about the material to be tested without authorization before the scheduled exercise;

collaborating on academic work knowing that the collaboration will not be reported; taking an examination or test for another student, or signing a false name on an academic exercise. (Note: Collaboration and sharing information are characteristics of academic communities. These become violations when they involve dishonesty. Instructors should make expectations about acceptable collaborations clear to students. Students should seek clarification when in doubt).

- F. Abuse of Academic Materials - destroying, stealing or making inaccessible library or other resource materials.

Some Examples: Stealing or destroying library or reference materials needed for common academic exercises; hiding resource materials so others may not use them; destroying computer programs or files needed in academic work; stealing or intentionally destroying another student's notes or laboratory experiments; receiving assistance in locating or using sources of information in an assignment where such assistance has been forbidden by the instructor. (Note: The offense of abuse of academic materials shall be dealt with under this policy only when the abuse violates standards of integrity in academic matters, usually in a course or experience for which academic credit is awarded).

- G. Multiple Submissions - submitting substantial portions of the same academic work (including oral reports) for credit more than once without authorization of the instructor(s). What constitutes a "substantial portion" of the same work is determined solely by the university.

Some Examples: Submitting the same or substantially the same work for credit in more than one course without prior permission of the instructor. Building upon or reworking prior work is acceptable with permission of the instructor.

- H. Course Related - an alleged violation that occurs in a course being taken for academic credit.
- I. Non Course Related - an alleged violation that relates to any aspect of a student's program of studies that is not part of a course being taken for academic credit.

IV. Responsible Executive and Office:

Responsible Executive: Provost

Responsible Office: Registrar's Office

V. Entities Affected by this Policy:

This policy applies to all enrolled students, undergraduate and graduate, regardless of teaching site (e. g., off-campus) or teaching mode (e. g., distance learning).

VI. Procedures:

- A. Procedures for handling cases.

This Policy will cover two types of academic integrity violations: course related and non course related.

1. Course related violations.
 - a. A faculty member responsible for assigning final grades in a course may acquire evidence, either directly or through information supplied by others, that a student violation of academic integrity may have occurred. After collecting the evidence

available, the faculty member meets with the student to present the evidence of a violation and request an explanation.

If the faculty member accepts the student's explanation, no further action is taken. If the faculty member determines that a violation has occurred, the faculty member informs the student, in writing, of the academic penalty and of the student's rights of appeal. The faculty member sends a copy of the letter, together with any additional information, to the department chairperson and to the Office of the Registrar. The letter should include:

- (i) nature of the charge/evidence against the student;
- (ii) brief summary of the meeting with the student;
- (iii) faculty member's decision;
- (iv) right of appeal to the department chair.

- b. If the student is subsequently found not responsible for the charge, the student may either:
 - (i) remain in the course without penalty, or
 - (ii) withdraw from the course regardless of any published deadlines.

Once a faculty member has charged a student with academic dishonesty, the student may not withdraw from the course. Any student who withdraws from a course before the charge is made may be reregistered for the course so that appropriate action can be taken. If the student is found responsible for violating the Student Academic Integrity Policy, the student may not withdraw from the course and will receive the sanction imposed by the instructor or other academic authority.

2. Non course related violations.

- a. A department chair, or other academic authority, may acquire evidence, either directly or through information supplied by others, that a violation of academic integrity may have occurred in a departmental or comprehensive exam, or other departmental activity. After collecting the evidence available, the chair, or academic authority, meets with the student to present the evidence of a violation and request an explanation.

If the chair, or other academic authority, accepts the student's explanation, no further action is taken. If the chair, or other academic authority, determines that a violation has occurred, the chair, or other academic authority, informs the student, in writing, of the academic penalty and of the student's rights of appeal. The chair, or other academic authority, sends a copy of the letter, together with any additional information, to the college dean and to the Office of the Registrar. The letter should include:

- (i) nature of the charge/evidence against the student;
- (ii) brief summary of the meeting with the student;
- (iii) chair or designee's decision;

(iv) right of appeal to the college dean.

B. Procedures for group projects.

When academic dishonesty occurs in a group project, faculty should make a concerted effort to determine who was responsible for the violation of the academic integrity by examining each student's part of the project, and by meeting with each student individually and then collectively.

If the preponderance of evidence identifies the violator(s), that student (or students), not the group, may be charged with a violation of the academic integrity policy and the student(s) be informed of the penalty to be assessed.

In cases where the identity of the violator(s) is not easily determined with reasonable certainty, or when the violator(s) are not forthcoming, the faculty member may then hold the entire group responsible for a violation of the academic integrity policy, and assess a penalty to each member of the project team.

C. Penalties.

All acts of academic dishonesty violate standards essential to the existence of an academic community. Most offenses are properly handled and remedied by the faculty member teaching the course in which they occur, or by an academic department or college. Other violations will be referred to the Office of Student Conduct and Civility Education Affairs for sanctions listed in the Code of Student Conduct.

The penalties that may be assessed by a faculty member for a course-related violation may include the following:

- 1. revision of the work in question and/or completion of alternative work, with or without a grade reduction;
- 2. reduced grade (including "F" or zero) for the assignment;
- 3. reduced grade (including "F") for the entire course.

The penalties that may be assessed by a department, college or other academic authority for a non course-related violation may include the following:

- 1. failure of a comprehensive exam;
- 2. dismissal from an academic program;
- 3. dismissal from a Graduate program;
- 4. referral to the Office of Student Conduct and Civility Education.

Note: If a department or college has its own code of professional standards, any academic integrity violation, whether course related or non course related, may be sanctioned under the process described in those professional standards, in addition to those penalties outlined above.

Whatever the penalty, the letter describing the incident and recording the decision will be kept for seven years in the Office of the Registrar. The purpose of this record keeping is to ensure that students who violate the university's Student Academic Integrity Policy a second time are dealt with appropriately. A second purpose is to deter students from repeating offenses. The first-offense file is an internal record, not part of the student's disciplinary record or of the academic transcript.

A second violation will normally result in formal judicial charges being brought against

the student. In addition to the sanctions listed above, sanctions for a second or subsequent violation may include:

- 1. suspension from the university for a designated period of time;
- 2. expulsion from the university;
- 3. any sanctions listed in the Code of Student Conduct or Graduate School Catalog.

In the determination of penalties, the following factors may be considered:

- 1. the nature and seriousness of the offense;
- 2. the injury or damage resulting from the misconduct;
- 3. the student's prior disciplinary record;
- 4. frequency of academic integrity violations.

D. Appeal procedures.

- a. If the student chooses to appeal a course-related sanction, upon receipt of the faculty member's decision, the student must submit within five working days a letter of appeal to the department chairperson. If a department chairperson is also the instructor bringing the charge of academic dishonesty, any appeal will be sent to the dean of the college. After receiving the student's appeal letter, the chairperson will:

- (i) arrange a meeting with the student within five working days, unless there is a compelling reason to extend this time period. If the time is extended, the meeting will be held as soon as possible after the five days;
- (ii) arrange, if appropriate, a meeting with the faculty member, either separately or with the student in attendance;
- (iii) notify the student in writing of his/her decision within five working days following their meeting, unless there is a compelling reason to extend this time period. If the time is extended, the student will be notified as soon as possible after the five days;
- (iv) send copies of the decision to the Office of the Registrar and to the office of the dean of the college.

- b. If the student is dissatisfied with the chairperson's decision, in the case of either a course-related violation or a non course-related violation, the student may appeal to the dean of the college. The student must submit a letter to the dean within five working days following the receipt of the chair's letter.

- c. Finally, if the student is dissatisfied with the decision of the college dean, he or she may appeal to the Student Appeals Committee. The student must submit a letter of appeal to the Committee, in care of the Office of Judicial Affairs, within five working days of the dean's decision, unless there is a compelling reason to extend this time period. If the time is extended, the letter of appeal will be due as soon as possible after the five days. Once the Committee has received the appeal, it will set up a meeting where both student and faculty or departmental representative will be invited to give testimony to the Committee. The Committee may let the original decision stand or may modify it. The decision of the Committee is final.

HAZING POLICY

"Hazing" in any form is against the law (Annotated Code of Maryland, Article 27, Section 268H) and is strictly prohibited at Towson University. When this policy is violated, action may be taken against all participants, including new members or pledges. The most damaging instrument to campus organizations (social, honor, service, athletic) is the employment of a program of education, membership or induction that includes hazing. Hazing risks human lives, mistreats those involved and jeopardizes the affiliation of campus organizations at this university.

Definition

"Hazing" is defined as any action taken or situation created intentionally, whether on or off campus, to produce mental or physical discomfort, embarrassment, harassment or ridicule. Any mental or physical requirement, request or obligation placed upon any person that could cause pain, disgrace or injury, or is personally degrading or violates any federal, state, local statute or university policy is also considered hazing.

Such activities and situations include but are not limited to: paddling in any form; creation of excessive fatigue; road trips; scavenger hunts; publicly wearing apparel which is conspicuous and not normally in good taste; engaging in public stunts and humiliating games and activities; late night sessions that interfere with scholastic and occupational activities; calisthenics (push-ups, sit-ups, runs, etc.); line-ups (lining people up and harassing them verbally); running personal errands for the members; forced consumption of alcohol, illegal substances or food; and any other activities not consistent with the academic mission of the university.

Reporting Procedures

Anyone experiencing or witnessing a violation of this hazing policy is encouraged to report the incident and may bring their concerns to the Office of Judicial Affairs at 410-704-2057, Administration Building, room 236 and/or Campus Life at 410-704-2332, University Union 232.

NON-DISCRIMINATION POLICY

Towson University's policies, programs, and activities comply with federal and state laws and University System of Maryland regulations prohibiting discrimination on the basis of race, color, religion, age, national origin, sex, disability and sexual orientation. Sexual harassment (see following section) is considered a form of sexual discrimination.

Procedure for Filing and Investigating Complaints of Discrimination in Education or Employment:

Students and employees may bring concerns about discrimination or unfair practices in education or employment to the Fair Practices officer for investigation (Administration Building, room 211, 410-704-2361). After a student or employee has filed a formal complaint, full information from the complainant, from university records and from university personnel involved in the incident, will be gathered, and a determination as to the merits of the complaint will be made.

The investigation will normally be completed within 30 days. If a key person is unavailable or if the complaint is complex, involves a grade dispute or other faculty matter, the investigation may take longer. Every effort will be made to complete the investigation within the term in which it is filed,

unless the complaint is filed within the last two weeks of a term, in which case every effort will be made to complete the investigation by the beginning of the following term.

Students are encouraged to bring incidents that they think are discriminatory to the attention of university officials. The university cannot take appropriate action unless it is aware that a problem exists. For more information, visit www.towson.edu/aa.

SEXUAL OR GENDER HARASSMENT

Sexual harassment constitutes a serious threat to the free interaction and exchange necessary for educational and personal development, and it is entirely unacceptable on this campus. Definition: Sexual or gender harassment may range from offensive gender or sexual innuendos to coerced sexual relations. It can happen to both men and women, but women are more often victims.

Harassment occurs when a person in a position of control or influence uses authority and power to gain sexual advances and threats or punishes for refusal to comply. It includes suggestive remarks about clothing or physical attributes; leering or ogling; unnecessary touching; subtle or direct requests for sexual favors; implied or overt threats of consequence; or a hostile sexual environment. Students and employees may bring concerns about sexual harassment to the Fair Practices officer for investigation (Administration Building, room 211, 410-704-2361). For more information, visit www.towson.edu/aa.

AIDS POLICY

In accordance with the university's Non-Discrimination Policy, no student, faculty or staff member shall be denied access to the academic, social or employment opportunities offered by Towson University solely because he/she has AIDS or is an HIV carrier. A university committee will be appointed to evaluate individual cases of HIV infection and to make recommendations as questions of risk or cases of specific exigencies require. Educational programs will be implemented for the campus and the campus community to assist in preventing further spread of the virus.

POLICY ON SUBSTANCE ABUSE FOR FACULTY, STAFF, AND STUDENTS

University System of Maryland Policy

The University System of Maryland, as an employer, strives to maintain a workplace free from the illegal use, possession or distribution of controlled substances (as defined pursuant to Controlled Substances Act, 21 U.S.C. Sections 801, et. seq.). Unlawful manufacture, distribution, dispensation, possession or use of controlled substances by university employees in the workplace is prohibited under university policy. In addition to any legal penalties under federal and state law, employees found to be in violation of this policy or the Maryland Governor's Executive Order on Substance Abuse, 01.01.1991.16, may be subject to corrective action under applicable university personnel policies. The university supports programs aimed at the prevention of substance abuse by university employees. Employees are encouraged to seek assistance for substance-dependency problems. Employee-assistance counseling and leaves of absence to attend rehabilitation programs are appropriate means of dealing with these problems.

Towson University Policy

The use of controlled substances and the abuse of alcohol presents a serious threat to individual health and everyone's safety. Moreover, the use of illegal drugs and the abuse of alcohol can result in less than complete reliability, stability and good judgment, which is inconsistent with the standards set for the faculty, staff and students of this university. Towson University, as an employer, strives to maintain a workplace free from illegal use, distribution or possession of controlled substances. Any person found to be participating in such activity will be subject to administrative disciplinary action, mandatory counseling and treatment and/or criminal proceedings.

The use, possession and/or sale of illegal drugs are considered violations of Towson University's Code of Student Conduct, the faculty contract and the terms of employment of regular and contingent (exempt/non-exempt) staff. Faculty, students and employees who use, possess or sell illegal drugs shall be subject to discipline, including mandatory counseling, suspension or dismissal from the university. The university will take disciplinary action based on reasonable available information; such action will be independent of any civil or criminal processes precipitated by the same incident and will follow the policies and procedures of the university and the University System of Maryland Board of Regents. In the workplace, use, possession and/or sale of illegal drugs and controlled substances are also violations of state and federal laws for which individuals are subject to university disciplinary processes and/or arrest and criminal prosecution.

These serious workplace situations must be handled in ways which ensure the protection of the civil rights and handicapped rights of the accused, the treatment and rehabilitation of employees, and the notification of the necessary administrative and legal authorities.

Specific procedures for reporting drug use, penalties and appeals are part of the Towson University Code of Conduct. Employee disciplinary measures and appeals for violations of this policy as well as other policies of the university are part of the Faculty Handbook, the Part-Time Faculty Handbook and the Personnel Manual.

In addition to the university policy on substance abuse, all employees of the university, including student employees, are subject to the Maryland Governor's Executive Order 01.01.1991.16 on the Drug and Alcohol Free Workplace.

In accordance with federal legislation, Towson University's substance abuse policy will be distributed annually to all students and employees through the campus or U.S. mail.

Education

In accordance with federal legislation, there will be an annual distribution in writing, to each employee and student of:

1. the dangers of drug abuse in the workplace (to include student employees);
2. the institution's policy of maintaining a drug-free workplace and drug-free campus;
3. standards of conduct that clearly prohibit, at a minimum, the unlawful possession, use or distribution of illicit drugs and alcohol by students and employees on university property or as part of any university activities;

4. a description of applicable legal sanctions under local, state or federal law;
5. a description of health risks associated with the use of illicit drugs and abuse of alcohol;
6. a description of available drug or alcohol counseling, treatment, or rehabilitation and/or reentry programs;
7. a clear statement of the disciplinary sanctions that the university will impose on students and employees.

All supervisory faculty and staff will receive training on drug awareness and treatment. This training program shall include existing as well as new supervisory personnel. Drug awareness training will be an integral part of the university's student orientation program.

Faculty and staff orientations will include programming especially designed to focus on the university's policy toward substance abuse.

Employee/Student Assistance Programs

Towson University's health and drug education programs will inform the entire university community of the physical and psychological effects of the non-medically supervised use of illegal drugs, alcohol and consciousness-expanding drugs. The education program shall make employees aware of the consequences of prosecution under local, state and federal laws and the rules for governance for university-imposed discipline.

The university recognizes the importance of individual rights and respects the privacy of employees and students. To this end, the university has an established counseling program for students and an Employee Assistance Program (EAP) for faculty and staff. These programs have been designed to provide counseling and rehabilitative services. Employees and students are encouraged to contact the appropriate program in the event they have a substance abuse problem. In this way, a student or employee can correct the problem before it jeopardizes a job, an education, family, or individual well-being.

Employees or students who need help with a problem of drug abuse shall be encouraged to call the Counseling Center, the Health Center, Human Resources or the office of the vice president for Student Affairs. The resources of the Counseling Center shall be available for supervisors who wish consultation in handling employees who may have substance abuse problems. The call will be treated with confidentiality and respect.

Voluntary participants in an assistance program will not jeopardize their continued employment or enrollment at the university provided that their job performance or behavior is consistent with established standards. However, voluntary participation in an assistance program will not prevent disciplinary action for violation of the policy described herein, where such violation has already occurred.

Procedures for Grievances and Appeal

Towson University strongly encourages the use of drug rehabilitation programs as the keystone to a drug-free environment. For each class of employee and student category, the formal rules of procedure remain intact. These include the student judicial procedures and criminal justice procedures. Following a conviction for violation of a drug offense in the workplace, disciplinary action can be imposed, up to and including termination or disen-

rollment. As a condition of continued employment or education, an employee or student may be required to participate in an approved drug abuse rehabilitation program.

Suspected Drug Use, Possession or Sale

The use, possession or sale of illegal drugs are violations of state and federal laws for which all offenders are subject to arrest and criminal prosecution, as well as university administrative processes. These serious offenses must be handled in ways to ensure the guarding of evidence, the protection of civil rights of the accused and notification of the proper authorities. To this end, specific procedures outlined in this policy are to be followed in any campus situation where substances are suspected to be illegal drugs.

Any individual, student or employee, directly associated with the University System of Maryland who uses or becomes involved with illegal drugs without proper medical supervision, shall be subject to discipline, including suspension or dismissal, as appropriate.

Students, faculty and staff, in their routine activities, may observe suspected illegal drug activities. As a result, some staff members may become involved in the determination of disciplinary action that follows suspected use, possession or distribution of an illegal substance. Specific actions or responsibilities in regard to the suspicion of illegal substances have been outlined in other paragraphs of this policy.

The university reserves the right to conduct drug testing consistent with applicable federal and state laws.

Alcohol Use and Abuse

Towson University views with alarm the potential and real problems caused by alcohol abuse and alcoholism. The alcohol policy has been directed to students and employees engaged in the legal use of alcohol. The implicit as well as explicit focus for prudent drinking is with moderation rather than intoxication.

Any person using alcoholic beverages at any time and at any place while on the Towson University campus is responsible to civil and university authorities for compliance with state and county law.

It is against Maryland state law for anyone under the age of 21 to purchase, possess or consume alcoholic beverages.

It is unlawful for any minor to knowingly and willfully make any misrepresentation or false statement as to his/her age in order to obtain alcoholic beverages.

It is unlawful for any person to purchase alcoholic beverages for consumption by an individual who is known to be a minor.

It is unlawful for any person to possess open containers of any alcoholic beverages in a public place.

Policies concerning the possession and/or use of alcoholic beverages on campus and at special university/community events shall be the delegated responsibility of the vice president for Student Affairs.

Procedures for Reporting Substance Abuse

The following information shall provide the basic guidelines for the reporting of student or employee drug use, possession, sale or distribution. Other procedures to be followed have been specified in other sections of this policy.

Upon observing or receiving a report of suspected use, possession or distribution of an illegal drug or the illegal use of alcohol, faculty and staff, and/or students shall proceed in the following manner:

STEP ONE: Report suspicions of illegal drug or alcohol use or possession to the administrator of your area or the appropriate vice president. Any faculty or staff member who observes the workplace use or possession of illegal drugs or alcohol must take appropriate action.

Students observing drug activity in the residence halls should notify a housing staff member. These administrators will notify the appropriate authorities and take appropriate action.

STEP TWO: Use judicious thought and sound judgment when approaching individuals suspected of illegal drug or alcohol use, possession or distribution. It is preferable to leave drugs or alcohol in their original location until the authorities take action.

STEP THREE: The university administration will determine if state or federal laws may have been violated. University employees should not become involved in mediating any situation involving illegal drug or alcohol use.

Consistent with the Governor's Executive Order 01.01.1991.16 (found at www.dsd.state.md.us/comar/01/01.01.1991.16.htm), any employee charged with an alcohol driving offense or a controlled dangerous substance offense must report a finding of guilty, an acceptance of a plea of nolo contendere, or a probation before judgement to the employee's appointing authority within five work days.

Employees designated "sensitive" by Towson University are subject to penalties set forth by the Governor's Executive Order.

Penalties for Substance Abuse

Penalties for Faculty and Staff

Towson University strongly encourages the use of drug rehabilitation programs as an effective measure in creating a drug-free workplace program. However, additional penalties may be implemented up to and including reprimand, suspension, mandatory counseling, mandatory participation in a drug rehabilitation program and/or dismissal. Appropriate university grievance procedures shall be used for each classification of employee.

Consistent with the Governor's Executive Order 01.01.1991.16 (found at www.dsd.state.md.us/comar/01/01.01.1991.16.htm), any employee charged with an alcohol driving offense or a controlled dangerous substance offense must report a finding of guilty, an acceptance of a plea of nolo contendere, or a probation before judgement to the employee's appointing authority within five work days. Employees designated "sensitive" by Towson University are subject to penalties set forth by the Governor's Executive Order.

Any individual who has been convicted of a controlled dangerous substance offense on or after January 1, 1991, shall be required to disclose that fact when applying for a license renewal. The licensing authority may refuse to issue the license or impose appropriate conditions on the license, except for noncommercial driver's licenses (Maryland Drug Enforcement Act of 1990).

Maryland law [Art. 27, § 286, and 287 Annotated Code of Maryland (1990)] states that persons

who manufacture, distribute, dispense or possess a controlled dangerous substance may be subject to imprisonment (length of time varies) and fines (\$15,000 and up).

Penalties for Students

In addition to the laws of the University System of Maryland, the state of Maryland and the nation, Towson University students shall be governed by rules referred to as the "Towson University Code of Conduct." Within these campus guidelines, students shall be subject to institutional discipline if they use, possess, distribute or sell illegal drugs and illegally use or abuse alcohol. There may be various penalties applied to the student convicted of misuse of drugs and alcohol, depending on the situation. Individuals are encouraged to use voluntary rehabilitation programs and may be required to receive mandatory counseling and treatment. If a student is suspected by the university police to have violated state and/or federal laws with regard to illegal drugs or use of alcohol, the student will be subject to arrest and criminal prosecution.

All students suspected of substance abuse violations may be referred to the director of Judicial Affairs. The student will be subject to a due process hearing in accordance with institutional disciplinary guidelines. Disciplinary action at the university will normally proceed whether or not criminal charges related to the same incident have been processed and sustained. The university encourages voluntary counseling and may require participation in an approved treatment program.

Where there is evidence that the continued presence of a student on the university campus poses a substantial threat to self, others, or to the stability and continuance of normal university functions, the vice president for Student Affairs, or a designee, may immediately suspend, on an emergency basis, a student from any or all university activities (including university housing programs and class attendance) pending a hearing or medical evaluation. A hearing will be scheduled in a timely fashion to adjudicate the case as swiftly as possible. During the period of emergency suspension, if the student needs access to the campus, arrangements can be made for the student to come to campus, on a limited basis, to attend counseling sessions and/or conduct business, usually with an escort. Such an interim suspension can become effective immediately without prior notice.

The following penalties described herein are in addition to those penalties listed in the section on general procedures and penalties for suspected drug use, possession or sale. The specific penalty prescribed will usually depend on the nature of the alleged violation. Penalties may be administered following a judicial hearing where the suspected offender has been found to be guilty of specific charges. Possible penalties for student violations may include, but are not limited to, the following:

PENALTY ONE: The student user may be subject to referral to a mandatory drug treatment/education program, and/or the termination of the university housing contract, denial of access to university housing halls and social functions. If suspended, permission to return to school will be considered after the period of suspension and a verified report of attendance in a drug treatment/education program. Repeat offenders may be subject to more severe actions.

PENALTY TWO: The student distributor may be subject to referral to a mandatory drug treatment/education program and/or suspension from school. Permission to return to school will be considered after the period of suspension and a verified report of attendance in a drug treatment/education program. Repeat offenders may be subject to more severe actions.

PENALTY THREE: The student conspirator, who brings together the seller and the buyer, may be subject to referral to a mandatory drug treatment/education program and/or suspension. Permission to return to school after the period of suspension will be considered with verified attendance in a drug treatment/education program.

PENALTY FOUR: Greek organizations that have been found to tolerate drug use, possession, and/or sale on the part of their members will be subject to a drug education program for the group.

Maryland law [Art. 27, 8, 286, and 287 Annotated Code of Maryland (1990)] states that persons who manufacture, distribute, dispense, or possess a controlled dangerous substance may be subject to imprisonment (length of time varies) and fines (\$15,000 and up).

Recipients of Federal Grant/Contracts/Awards

Any faculty, staff member or student applying 1) for a federal grant/contract in which an in-the-workplace drug-free policy has been required, 2) for a "Pell Grant" or any other student/faculty grant/award or fellowship in which an in-the-workplace drug-free policy has been required, and 3) for a subcontract with the Department of Defense, will be required to comply in accordance with federal regulations.

1. Each individual must certify in writing to abide by the terms of the Towson University Drug-Free Workplace Policy.
2. Each individual must notify the Office of University Research Services or the Office of Financial Aid of any criminal drug conviction occurring in the workplace, no later than five days after conviction.

The university will be responsible for notifying any contracting or granting agency within 10 days of employee notification, otherwise receiving actual notice, of a conviction in (2) above.

If a grant or award is directly made to an individual, rather than the institution, the individual will certify in writing to the institution to not engage in unlawful manufacture, distribution, dispensation, possession or use of any controlled substance in the workplace or while conducting any work activity with the grant/contract and will abide by the terms of this Towson University Substance Abuse Policy.

Relationship with External Contractors

The university is committed to encourage all non-state entities who do business with the university or otherwise receive funds from the university to make a "good faith" effort to eliminate illegal drug abuse from their workplace. Therefore, in accordance with Executive Order 01.01.1991.16, the university shall take whatever action necessary and appropriate to require a drug-free workplace, in accordance with applicable federal and state law, on each recipient of a state contract, grant, loan or other state funding instrument.

Biennial Review

The Towson University Substance Abuse Policy and Program will be reviewed every two years (a) to determine effectiveness and the need to implement change as necessary, and (b) to assure that sanctions developed and implemented were consistently enforced.

Responsibility

The president of Towson University will appoint a campus coordinator for all substance and alcohol abuse programs. This administrator will be responsible to the president for the implementation of this policy and the university's Drug-Free Workplace and Drug-Free Campus plans. The president shall also hold responsible all faculty, staff and students for supporting the campus coordinator, especially those who occupy positions of leadership and supervision.

"Good Faith" Efforts

Towson University will at all times make a "good faith" effort to maintain a drug-free and substance abuse-free workplace and campus through the implementation of this policy.



Course Descriptions

THE MEANING OF COURSE NUMBERS

Academic departments use specific abbreviations for each general subject area (for example, FREN for French in the Department of Foreign Languages). These three- or four-letter abbreviations (discipline codes) are listed below. In the course listings below, the discipline codes are followed by a three-digit code, which signifies course level:

Course Numbers	Significance of Numbers
100–299	Lower-Level Undergraduate Courses
300–499	Upper-Level Undergraduate Courses
	Certain courses may be taken for undergraduate or graduate credit. These courses' graduate-level equivalents are shown in brackets.
500–899	Graduate-Level Courses

ALPHA AND NUMERIC DISCIPLINE CODES

Accounting	ACCT
African and African American Studies	AFST
Allied Health	AHLT
American Studies	AMST
Anthropology	ANTH
Arabic	ARAB
Art + Design	ART
Art Education	ARED
Art History	ARTH
Asian Studies	ASST
Astronomy	ASTR
Audiology and Speech-Language Pathology	SPPA
Biology	BIOL
Business, Communication and Liberal Arts	BCLA
Business Excellence	BUSX
Chemical Dependency Counseling Education	CDCE
Chemistry	CHEM
Chinese	CHNS
Communication Studies	COMM
Computer Information Systems	CIS
Computer Science	COSC
Criminal Justice	CRMJ
Cultural Studies	CLST
Dance	DANC
Deaf Studies	DFST
Developmental Mathematics	DVMT
Developmental Reading	DVRD
Developmental Writing	DVWR
E-Business and Technology Management	EBTM
Early Childhood Education	ECED
Early Childhood Education/Special Education	ECSE
Economics	ECON
Education	EDUC
Electronic Media and Film	EMF
Elementary Education	ELED
Elementary Education/Special Education	EESE
English	ENGL
English for Speakers of Other Languages	ESOL
Entrepreneurship	ENTR
Environmental Science/Studies	ENVS
Family Studies	FMST
Finance	FIN
Financial Planning	FLPN
Forensic Chemistry	FRSC

French	FREN
General Studies	GENL
Geography and Environmental Planning	GEOG
Geology	GEOL
German	GERM
Gerontology	GERO
Greek	GRK
Health Care Management	HCMN
Health Science	HLTH
Hebrew	HEBR
History	HIST
Honors College	HONR
Information Technology	ITEC
Interdisciplinary Courses	INLA/IDFA/IDHP/IDNM

Interdisciplinary Studies	IDIS
International Studies	INST
Instructional Technology	ISTC
Italian	ITAL
Japanese	JPNS
Kinesiology	KNES
Latin	LATN
Latin American Studies	LAST
Law and American Civilization	LWAC
Legal Studies	LEGL
Lesbian, Gay, Bisexual and Transgender Studies	LGBT
Management	MNGT
Marketing	MKTG
Mass Communication	MCOM
Mathematics	MATH
Metropolitan Studies	MTRO
Molecular Biology, Biochemistry and Bioinformatics	MBBB
Music Applied	MUSA
Music	MUSC
Music Education	MUED
Nursing	NURS
Occupational Therapy	OCTH
Philosophy	PHIL
Physical Education	PHEA
Physical Science	PHSC
Physics	PHYS
Political Science	POSC
Portuguese	PORT
Psychology	PSYC
Reading Education	REED
Religious Studies	RLST
Russian	RUSS
Secondary Education	SCED
Science Education	SCIE
Social Science	SOSC
Sociology	SOCI
Spanish	SPAN
Special Education	SPED
Theatre Arts	THEA
Women's Studies	WMST
Writing	WRIT

Sequential Courses

Courses whose numbers are separated by a hyphen are to be taken in sequence. When course numbers are separated by a comma, either term may be taken independently of the other. (See Prerequisites.)

Prerequisites

Prerequisites are requirements imposed by an academic department for certain courses within its curriculum. Such requirements may include, but are not limited to, other courses, a specific GPA or class standing (e.g., junior, senior). Prerequisites may also include successful completion of screened require-

ments, where applicable, or successful completion of a specific test or examination, either departmental or standardized, where applicable. Prerequisites may also include department or instructor permission in addition to, or in lieu of, specific course, testing, or class standing requirements.

Departments are responsible for enforcing prerequisites. Students are advised to read carefully course descriptions found in this catalog, and to make sure they have met any prerequisites before registering for courses. Students who remain in courses without having met prerequisites, with or without the permission of the instructor, do so at their own risk. Failure to meet prerequisites and withdraw from a course by the published deadline is not a basis for petitioning the Academic Standards Committee for an exception to academic policy.

Elective Courses

Courses that are not required toward the Core Curriculum or a major program of study are electives. Students may complete elective courses to attain the 120 units needed to graduate. However, before attempting electives, students should consult their advisers and, for more information, the course instructors and department chairpersons.

Unit Value of Courses

The term unit value of each course is indicated in the parentheses following the title.

Time of Offering

All required courses are usually offered at least once a year. Elective courses in each department are offered on a regular rotation so that each is available at least once every three years. All courses are offered subject to sufficient enrollment.

ACCOUNTING (ACCT)

Lower Division

ACCT 201 ACCOUNTING PRINCIPLES I (3) Accounting is the decision-making process of a business, including the effects of accounting events on business financial statements; planning and decision-making tools in the operating cycle; process of recording and communicating information.

ACCT 202 ACCOUNTING PRINCIPLES II (3) Accounting is the decision-making process of a business, including analysis of the operating cycle and cash management and controls; evaluating business performance through financial statement analysis; spreadsheet applications and team learning activities. Prerequisite: ACCT 201 or ACCT 211 with a grade equivalent of 2.00 or higher.

ACCT 211 HONORS ACCOUNTING PRINCIPLES I (3) This course is similar to ACCT 201 except that it emphasizes more conceptual approaches to accounting and requires completion of a research paper, case studies and practice sets. It also requires a considerable amount of computer-based instruction. Prerequisites: SAT scores 550 or above, Verbal; 600 or above, Math. Honors College course.

ACCT 212 HONORS ACCOUNTING PRINCIPLES II (3) This course is similar to ACCT 202 except that it emphasizes more conceptual approaches to accounting and requires completion of a research paper, case studies and practice sets. It also requires a considerable amount of computer-based instruction. Prerequisites: SAT scores 550 or above, Verbal; 600 or above, Math, and ACCT 211 with a grade equivalent of 2.00 or higher. Honors College course.

Upper Division

ACCT 300 ACCOUNTING INFORMATION SYSTEMS (3) Accounting system concepts and technologies, transaction processing systems and the control of accounting information. Projects include the use of commercial accounting software. Prerequisite: ACCT 202 or ACCT 212 with a grade equivalent of 2.00 or higher.

ACCT 301 INTERMEDIATE ACCOUNTING I (3) GAAP accounting theory; analysis of financial statements; revenue recognition methods; accounting for changes and errors and for changes in prices; financial statement analysis. Prerequisite: ACCT 202 or ACCT 212 with a grade equivalent of 2.00 or higher.

ACCT 302 INTERMEDIATE ACCOUNTING II (3) Analysis of assets (cash, receivables, inventories, fixed assets and intangibles) and liabilities. Concepts of present value analysis. Prerequisite: ACCT 301 with a grade equivalent of 2.00 or higher.

ACCT 303 INTERMEDIATE ACCOUNTING III (3) Analysis of equity. Reporting of earnings per share. Accounting for investments, leases, post-employment benefits and income taxes. Prerequisite: ACCT 302 with a grade equivalent of 2.00 or higher and ACCT major only.

ACCT 321 ADVANCED ACCOUNTING I (3) Partnership accounting, multinational accounting, accounting for non-business organizations, and business combinations and consolidations. Prerequisites: ACCT 303 with a grade equivalent of 2.00 or higher and ACCT major only.

ACCT 341 COST ACCOUNTING I (3) Components of manufacturing cost under the job order and processing cost system will be discussed. Elements of standard cost accounting, variance analysis and direct cost will be presented. Prerequisite: ACCT 202 or ACCT 212 with a grade equivalent of 2.00 or higher.

ACCT 342 COST ACCOUNTING II (3) Through case analyses, ABC costing, standard costs and advanced cost concepts are applied to solve business problems. Prerequisite: ACCT 341 with a grade equivalent of 2.00 or higher.

ACCT 361 TAX ACCOUNTING I (3) Covers federal income tax laws governing gross income, deductions, calculation of taxable income tax rates. Emphasis is placed on the effect of these laws on the income of individual taxpayers. Prerequisite: ACCT 202 or ACCT 212 with a grade equivalent of 2.00 or higher.

ACCT 362 TAX ACCOUNTING II (3) This course covers federal income tax laws dealing with partnerships, corporations, special tax areas and state of Maryland income tax laws. Prerequisite: ACCT 361 with a grade equivalent of 2.00 or higher.

ACCT 401 AUDITING (3) The professional code of conduct and SOX compliance, introduction to auditing theory and risks, internal controls, and standards for reporting. Prerequisite: ACCT 303, COMM 131, and upper-level writing requirements with a grade equivalent of 2.00 or higher; ACCT major and senior status.

ACCT 402 AUDITING II (3) Auditing procedures, working in small groups and developing oral and written communications skills for public accounting. Prerequisite: ACCT 401 with a grade equivalent of 2.00 or higher; ACCT major and senior status.

ACCT 470 - 479 SPECIAL TOPICS IN ACCOUNTING (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current accounting practice. May be repeated for credit provided a different topic is covered. Prerequisite: consent of instructor.

ACCT 495 INDEPENDENT RESEARCH IN ACCOUNTING (3) Directed research on specific problems in a functional area of accounting. May be repeated for a maximum total of 6 units. Prerequisite: consent of instructor.

ACCT 497 ACCOUNTING INTERNSHIP (3) Students are required to work in assigned projects in actual accounting environments. Priority will be given to seniors. Open to highly qualified juniors. Graded S/U. Prerequisites: consent of department chair; senior status. Cannot be substituted for BUSX 460, or taken in the same term as BUSX 460. Will not count as part of the 120-unit Accounting Program, but may be counted toward the 150-unit CPA requirement.

AFRICAN AND AFRICAN AMERICAN STUDIES (AFST)

Lower Division

AFST 201 MAIN THEMES IN AFRICAN AND AFRICAN AMERICAN STUDIES (3) Interdisciplinary introduction to African American Studies. Explores a number of themes, such as religion/spirituality, family, education, identity, literature, politics and economics.

Upper Division

AFST 411 TOPICS IN AFRICAN AND AFRICAN AMERICAN STUDIES (3) Extensive study of a specific topic chosen from a variety of disciplines in African American Studies. Content varies. May be repeated for a maximum of 6 units when identified by a different subtitle. Prerequisites: AFST 201 and a 300-level course fulfilling the African and African American Studies minor, or consent of the program director and the instructor.

ALLIED HEALTH (AHLT)

AHLT 200.102 BASIC RESPIRATORY CARE (4) Introduces fundamental principles of respiratory care; covers patient assessment, medical gas therapy, respiratory pharmacology, sterilization, and microbiology. Includes laboratory practice with equipment necessary to develop basic techniques. 4 lecture hours a week, 3 hours laboratory a week. (Offered Fall) Prerequisite: Admission to the program. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.103 THERAPEUTICS AND PATHOLOGY (3) Provides a knowledge base of the pathology of the respiratory system; emphasizes various treatment modalities. Prerequisites: RESP 102; RESP 104 taken concurrently. Lab fee: \$50.00 Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.104 CLINICAL PRACTICUM I (3) Enables students to learn and perform under close supervision the skills taught in lecture and the laboratory. Emphasizes patient assessment, oxygen delivery systems, and bronchial hygiene techniques. 8 hours of clinical and 3 hours of lab each week. Prerequisites: RESP 102; Corequisite: RESP 103. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.200 CLINICAL PRACTICUM II (2) Provides continued practice in the skills necessary to practice respiratory care in the general care setting; provides an introduction to critical care concepts and practice. Prerequisites: RESP 103 and RESP 104. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.201 SPECIALIZED ASSESSMENT OF OXYGENATION AND VENTILATION (3) Introduces cardiopulmonary anatomy and physiology and the diagnostic procedures necessary in the assessment of oxygenation, ventilation, and cardiac function. Corequisites: RESP 201, RESP 202 and RESP 203 must be taken concurrently. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.202 PRINCIPLES OF VENTILATION MANAGEMENT (4) Provides a theoretical and mechanical basis of the principles and practices of ventilator support; also covers pressure and volume ventilation. Prerequisites: RESP 103, RESP 104, RESP 200. Corequisites: RESP 201 and RESP 202. RESP 201 and RESP 203 taken concurrently. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.203 CLINICAL PRACTICUM III (5) Introduces the coronary, medical and surgical intensive care units; provides practice with the equipment necessary to develop advanced technical skills. 15 hours of clinical and 3 hours of lab each week. Prerequisites: RESP 102, RESP 103, RESP 104 and RESP 200; Corequisites: RESP 201 and RESP 202. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.204 ADVANCED PRINCIPLES AND PRACTICES OF RESPIRATORY CARE (4) Introduces respiratory care specialty areas to include: pulmonary function testing, arterial blood gas monitoring equipment, respiratory pathology and cardiac drugs. 4 lecture hours a week. Offered in the Spring. Prerequisites: RESP 201, RESP 202 and RESP 203; RESP 205 and RESP 206 must be taken concurrently. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.205 RESPIRATORY CARE SPECIALISTS (3) Explores a variety of topics, to include neonatology, pulmonary rehabilitation, home care, diagnostic techniques, polysomnography, and hyperbaric medicine. Prerequisites: RESP 201, RESP 202 and RESP 203; RESP 204 and RESP 206 must be taken concurrently. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

AHLT 200.206 CLINICAL PRACTICUM IV (5) Provides the student with experience in a variety of advanced clinical settings; covers pulmonary function, cardiopulmonary rehabilitation, home care, pediatric, and neonatal care. 15 hours of clinical and 3 hours of lab each week. Prerequisites: RESP 201, RESP 202 and RESP 203; Corequisites: RESP 204 and RESP 205. Note: Not open to students other than those enrolled in the combined allied health/respiratory therapy program.

Upper Division

AHLT 310 MANAGEMENT FOR THE ALLIED HEALTH PROFESSIONAL (3) Overview of issues and skills involved in effectively managing the health care professional. The course will focus on the development of leadership and management skills of the health care supervisor.

AHLT 311 HUMAN RESOURCE MANAGEMENT FOR ALLIED HEALTH PROFESSIONALS (3) Human resource management in health, focus on recruitment, development, performance feedback and conflict resolution.

AHLT 313 [513] CLINICAL PROGRAM PLANNING AND EVALUATION (3) Overview of the clinical program planning and evaluation process. Development of clinical health programs based on community/medical needs or needs of health care systems.

AHLT 315 [515] FINANCIAL MANAGEMENT FOR THE ALLIED HEALTH PROFESSIONAL (3) Overview of the financial methods and applications used in health care settings. Focus on understanding balance sheets, cost analysis, and budgeting for allied health within health care systems. Prerequisite: Admission to the Allied Health program or permission of instructor.

AHLT 320 UNDERSTANDING EVIDENCE-BASED PRACTICE (3) Critical search, interpretation and analysis of literature to support best practices in clinical health care. Prerequisite: Admission to the Allied Health program or permission of instructor.

AHLT 370 SPECIAL TOPICS IN ALLIED HEALTH (1-3) The study of special topics related to practice in allied health fields.

AHLT 405 SYSTEMIC DISEASE PROCESSES AND INTERVENTIONS IN RESPIRATORY CARE (3) Respiratory therapy assessment of etiology and clinical manifestations, management and interventions, and the course and prognosis for systemic disease processes.

AHLT 407 NEONATAL AND PEDIATRIC RESPIRATORY CARE (3) Respiratory therapy assessment and management of disease processes specific to neonatal and pediatric populations, including pathogenesis, clinical manifestations, ventilator management and patient course/prognosis.

AHLT 409 SLEEP AND REHAB SERVICES IN RESPIRATORY CARE (3) Continuum of respiratory care following hospital discharge, including services related to pulmonary and cardiac rehabilitation, sleep disorders and home care.

AHLT 411 ADVANCED CARDIOPULMONARY DISEASE AND PATHOPHYSIOLOGY (3) Etiology, clinical manifestations, assessments and management of respiratory and pulmonary diseases.

AHLT 413 PHARMACOLOGY AND THERAPEUTICS (3) Advanced respiratory care through the selection of pharmacologic treatments based on clinical applications in the community, best practices, and evidence-based medicine. Prerequisites: Admission to AHLT program, BIOL 213/214 or equivalent, CHEM 105 or equivalent, or instructor consent.

AHLT 440 TECHNICAL AND PROFESSIONAL ISSUES IN ALLIED HEALTH (3) Identification and analysis of current issues facing the allied health disciplines, including reimbursement policy, scope of practice, changing educational criteria, credentialing, professional encroachment, medical errors and interdisciplinary teams. Prerequisite: HHLT 320.

AHLT 445 RESEARCH METHODS IN ALLIED HEALTH (3) Basic concepts for understanding and conducting research related to allied health professions. Study of experimental and quasi-experimental designs, qualitative and quantitative methodologies, literature search and critique, basic statistical procedures for data analysis and research ethics. Prerequisite: HHLT 320.

AHLT 495-496 INDEPENDENT STUDY IN ALLIED HEALTH (3) In-depth investigation or project completion on selected allied health topic. May be repeated for a maximum of 6 units provided different topics are covered. Prerequisite: permission of program director. Permit required.

AMERICAN STUDIES (AMST)

Lower Division

AMST 201 INTRODUCTION TO AMERICAN STUDIES (3) Interdisciplinary course interpreting American culture through historical documents, literature, film, music, art and popular expression. Topic varies.

Upper Division

AMST 491 DIRECTED READINGS IN AMERICAN STUDIES (3) Independent research in American Studies on a topic selected by the student in consultation with the instructor. Prerequisite: consent of American Studies coordinator.

AMST 497 INTERNSHIP IN MATERIAL CULTURE (3) Students will work with members of the curatorial staff at a local museum to learn various museum techniques, examine the collections, and understand the educational and scholarly uses of material culture. A daily log and 90 hours of participation are required. Prerequisite: consent of American Studies coordinator. Graded S/U.

ANTHROPOLOGY (ANTH)

Lower Division

ANTH 207 CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology; cultural theory, social structure, human ecology, language and culture, technology, religion, art and literature.

ANTH 208 HUMAN EVOLUTION AND PREHISTORY (3) The study of humans: their biological and cultural development through time.

ANTH 209 ANTHROPOLOGY OF AMERICAN CULTURE (3) Applies the anthropological perspective and methodology to the study of the institutions of American culture and the distinctive ways of life encompassed by it.

ANTH 210 HONORS CULTURAL ANTHROPOLOGY (3) Introduction to social and cultural anthropology; major social institutions such as politics, economics, religion and social structure viewed cross-culturally. Honors College course.

ANTH 211 HONORS ANTHROPOLOGY OF AMERICAN CULTURE (3) Applies the anthropological perspective and methodology to the study of the institutions of American culture and the distinctive ways of life encompassed by it. Honors College course.

Upper Division

ANTH 311 ARCHAEOLOGY OF MARYLAND (3) Prehistory of Maryland from initial settlement until the European contact. Prerequisite: ANTH 208.

ANTH 321 [521] GENDER IN CROSS-CULTURAL PERSPECTIVE (3) Materials from a variety of cultures will be used to illustrate and analyze the roles of women and men within

the major institutional aspects — the family, economics, politics and religion. Particular attention devoted to the similarities and differences in sex role patterns within and among the cultures. Prerequisite: SOCI 101 or ANTH 207.

ANTH 325 [525] MORAL PANICS (3) Anthropological theories and methods used to analyze moral panics; role of the global media in the culture of fear. Prerequisite: ANTH 207.

ANTH 331 ESKIMO ETHNOGRAPHY (3) Survey of the social and cultural worlds of the Inuit (Eskimo). Prerequisite: ANTH 207.

ANTH 341 INFORMATION AGE CULTURES (3) Anthropological study of institutions, organizations and dilemmas common to an "information age." Prerequisite: ANTH 207.

ANTH 346 [546] WEALTH, POWER AND POLITICS IN CROSS-CULTURAL PERSPECTIVE (3) Political systems and the distribution of power in egalitarian, ranked and stratified societies will be examined. Prerequisite: SOCI 101 or ANTH 207.

ANTH 351 DRUGS IN GLOBAL PERSPECTIVE (3) Examines from an anthropological perspective drug production and organization of supply worldwide; its impact on the peoples, economy, polity and cultures of involved countries; and the diversity of drug policies and national responses. Prerequisite: SOCI 101 or ANTH 207.

ANTH 353 LATINAS IN THE AMERICAS (3) Anthropological perspective stressing "emic" or insider view; structural constraints of class, gender and race; women's agency is used to understand the diverse experiences of Latin American women with colonization, independence, revolution, development and structural readjustment. Prerequisite: ANTH 207, ANTH 208, or WMST 231 or consent of instructor.

ANTH 357 INTRODUCTION TO FORENSIC CRIME ANALYSIS (3) Forensic sciences with a focus on crime scene processing; consideration from an anthropological and archaeological perspective; general coverage of death investigation, latent prints, trace evidence, firearm and toolmark identification, impression evidence, and forensic computer analysis. Prerequisites: CRMJ 254, ANTH 208 or SOCI 101; or open to majors in Forensic Chemistry.

ANTH 361 CONTROVERSIES IN ANTHROPOLOGY (3) Focuses on a number of significant controversial issues in cultural anthropology. Students will read divergent assessments on each issue under study. Films will be shown which further illuminate the topics. Topics addressed will cover a diverse range of areas, including sociobiology, cannibalism, incest, family organization, sexuality, warfare, competitive feasting, and spirit possession. Prerequisite: ANTH 207.

ANTH 364 [564] RELIGION, MAGIC AND WITCHCRAFT (3) The world view, beliefs and rituals of selected non-literate peoples considered with reference to religion as a universal category of human culture. Prerequisite: ANTH 207.

ANTH 365 [565] NORTH AMERICAN INDIANS (3) The traditional culture of native North Americans and their socio-cultural place in modern American society. Prerequisite: ANTH 207.

ANTH 366 [566] SOUTH AMERICAN INDIANS (3) Survey of the cultures of the native peoples of South America in Pre-Columbian times and the situation of contemporary tribal peoples of South America. Prerequisite: ANTH 207.

ANTH 367 [567] PEOPLES OF THE MIDDLE EAST (3) Survey of the Middle East as a cultural area with emphasis on culture change. Prerequisite: ANTH 207.

ANTH 368 [568] GLOBALIZATION IN CROSS-CULTURAL PERSPECTIVE (3) Analyzes various approaches to globalization and examines the consequences of globalization and development among selected contemporary populations, primarily in the Southern countries of the world. Prerequisite: ANTH 207 or SOCI 101.

ANTH 369 [569] TRADITION AND REVOLUTION IN LATIN AMERICAN SOCIETY (3) An anthropological perspective will be brought to bear on contemporary Latin American culture and society. The Pre-Columbian heritage, the traditional synthesis and the struggle to modernize and develop will be examined. Prerequisite: SOCI 101, ANTH 207 or ANTH 208.

ANTH 370 [530] TOPICS IN ANTHROPOLOGY (3) An examination of current topics in anthropology designed for non-majors as well as majors. May be repeated for a maximum of 6 units. Prerequisite: ANTH 207 or ANTH 208.

ANTH 380 ETHNOGRAPHIC FIELD METHODS (3) The history, theory and methods of ethnographic field research in anthropology. Current issues in anthropological fieldwork. Prerequisite: ANTH 207.

ANTH 381 [581] ARCHAEOLOGICAL METHODS AND THEORY (3) Methods of excavating and recording archaeological data. Investigation of problems of current research interest. Prerequisite: ANTH 208.

ANTH 382 [582] VISUAL ANTHROPOLOGY (3) Anthropological study of ethnographic media and representation of various cultures globally; theories and methods related to the production of various forms of visual anthropology. Prerequisite: ANTH 207.

ANTH 383 [583] NORTH AMERICAN ARCHAEOLOGY (3) Regional survey of the prehistory of native North American cultures. Prerequisite: ANTH 207 or ANTH 208.

ANTH 385/585 Environmental Archaeology (3) Analysis of pre-Columbian Native American environmental adaptations. Special focus on Ancestral Puebloans in the American Southwest. Prerequisite: ANTH 207 or ANTH 208.

ANTH 387 [587] NATIVE AMERICAN ARCHAEOASTRONOMY (3) Prehistoric roots of astronomy in the New World, emphasizing the American Southwest. Celestial motions, calendar development and case studies concerning solstice and equinox observations. Prerequisite: ANTH 207 or 208.

ANTH 388 [588] PEASANT CULTURES (3) Focuses on rural agricultural population of modern states, their traditional lifeways and the changes being wrought by modernization. Prerequisite: SOCI 101 or ANTH 207.

ANTH 391 ARCHAEOLOGICAL LAB METHODS (3) Artifact analyses from prehistoric site excavations; archaeological data analysis techniques. Prerequisite: ANTH 208.

ANTH 393 ARCHAEOLOGICAL FIELD SCHOOL (3) Fieldwork conducted in a prehistoric archaeological site in the Maryland area. May be repeated for a maximum of 6 units. Prerequisite: ANTH 208.

ANTH 401 [501] ANTHROPOLOGICAL THEORY (3) Survey of the theoretical contributions made by American, British and Continental anthropologists. This course also satisfies the university's second writing course requirement. Prerequisites: ENGL 102, ANTH 207, and 9 units of anthropology.

ANTH 457 ADVANCED FORENSIC CRIME INVESTIGATION (3) Advanced methods and techniques used to process and interpret the crime scene, collect and package evidence, and prepare and present evidence in legal contexts. Coverage of forensic entomology, latent print development techniques, impression evidence casting and recovery, chemical enhancement of bloodstains, and forensic archaeology. Prerequisite: ANTH 357. \$25 lab/class fee.

ANTH 470 [570] SPECIAL TOPICS IN ANTHROPOLOGY (1-3) An examination of current topics in anthropology designed for junior and senior majors. May be repeated for a maximum of 6 units. Prerequisites: ANTH 207 and 6 additional units of anthropology.

ANTH 491-492 [591-592] INTERNSHIP IN ANTHROPOLOGY I, II (3,3) Supervised experience in work setting which facilitates understanding of roles and relationships relevant to anthropological inquiry and application of anthropological knowledge. Although opportunities to do anthropologically oriented fieldwork in the community will usually be available, placement in agencies dedicated to anthropological inquiry may not always be possible. Students may elect to take one term for 3 units (491) or two terms for 3 units each (491-492), in one agency for both terms or in a different agency each term. No more than 3 units may be earned in a term without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisites: ANTH concentration; junior standing; and consent of internship coordinator.

ANTH 495 [595] INDEPENDENT RESEARCH (3) Supervised research and anthropological investigation leading to preparation of a research project or a supervised field experience. For senior students with a concentration in anthropology. May be repeated for a maximum of 6 units. Prerequisites: at least 12 units in ANTH and consent of department chair.

ANTH 498 READINGS IN ANTHROPOLOGY (Honors) (4) A survey of the relevant scholarly literature under the guidance of a faculty member who will direct the student's research. Prerequisite: consent of the departmental honors coordinator.

ANTH 499 HONORS THESIS IN ANTHROPOLOGY (4) Supervised research and anthropological investigation involving library and/or field experiences and culminating in a written report. Prerequisite: consent of the departmental honors coordinator.

ARABIC (ARAB)

Lower Division

ARAB 101 ARABIC ELEMENTS I (3) Introduction to standard modern Arabic. Emphasis on learning script and phonology to build vocabulary and syntactic structure of the language and communicative competence.

ARAB 102 ARABIC ELEMENTS II (3) Review and further study of elementary modern standard Arabic. Emphasis on learning script and phonology to build vocabulary and syntactic structure of the language and general communicative competence. Prerequisite: ARAB 101.

ARAB 201 ARABIC INTERMEDIATE I (3) Review of grammar and pronunciation; conversation; reading of cultural texts; oral and written exercises in language lab. Conducted in Arabic. Prerequisite: ARAB 102 or equivalent.

ARAB 202 ARABIC INTERMEDIATE II (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in Arabic. Prerequisite: ARAB 201 or equivalent.

ARAB 301 ARABIC COMPOSITION AND CONVERSATION I (3) Reading, conversation, and composition on topics of cultural and literary interest; review of grammar and syntax as needed. Conducted in Arabic. Prerequisite: ARAB 202 or equivalent.

ARAB 302 ARABIC COMPOSITION AND CONVERSATION II (3) Reading, conversation, and composition on topics of cultural and literary interest; review of grammar and syntax as needed. Conducted in Arabic. Prerequisite: ARAB 301 or equivalent.

ART + DESIGN (ART)

Lower Division

ART 100 USING VISUAL INFORMATION EFFECTIVELY (3) Accessing, analyzing and organizing visual information, including Internet research and Web page design. \$25 lab/class fee.

ART 101 DIGITAL TOOLS AND CONCEPTS (3) Introduction to digital tools, processes, issues, and concepts used by artists and designers working with digital media. Prerequisite: ART, ARTH, or ARED Major or Minor.

ART 102 DESIGN FOR NON-ART MAJORS (3) Creative process through two-dimensional art theory and concepts. Studio application, lectures, research problems. \$25 lab/class fee.

ART 103 2D PROCESS (3) Creative process, elements and principles of two-dimensional design and color theory through a variety of drawing processes. \$25 lab/class fee.

ART 104 3D PROCESS (3) Elements and principles of three-dimensional design: form and space problems involving various tools, materials and techniques. \$25 lab/class fee.

ART 106 DRAWING FOR NON-ART MAJORS (3) Creative process through drawing. Studio application, lectures, demonstrations and research problems. \$25 lab/class fee.

ART 107 CERAMICS FOR NON-ART MAJORS (3) Creative process through studio application of ceramics. Lectures, demonstrations and research problems. \$25 lab/class fee.

ART 109 SCULPTURE FOR NON-ART MAJORS (3) Creative process through sculpture. Studio application, lectures, demonstrations and research problems. \$25 lab/class fee.

ART 111 DRAWING AND THE APPRECIATION OF DRAWING I (3) Problems of expressive draftsmanship in a variety of media. Drawing from the costumed and nude figures, still life and landscape. \$25 lab/class fee.

ART 113 PAINTING FOR NON-ART MAJORS (3) Creative process through painting. Studio application, lectures, demonstrations and research problems. \$25 lab/class fee.

ART 115 AMERICAN TRADITIONS IN PAINTING (3) Diverse trends in American painting. Lecture, demonstration, studio experiences, museum visits, guest speakers.

ART 117 PRINTMAKING FOR NON-ART MAJORS (3) Creative process through printmaking. \$25 lab/class fee.

ART 118 JEWELRY FOR NON-ART MAJORS (3) Creative process through jewelry production. \$25 lab/class fee.

ART 126 FABRIC DESIGN FOR NON-ART MAJORS (3) Study of design elements and principles using various textile techniques, such as embroidery, applique, quilting, and dyeing. \$25 lab/class fee.

ART 146 HONORS DRAWING FOR NON-ART MAJORS (3) Creative process and communication through drawing. Studio application, lectures, demonstrations and research problems. Honors College course. \$25 lab/class fee.

ART 205 THE HUMAN FIGURE (3) Exploration of the human figure using two- and three-dimensional techniques; emphasis on the representational image. Prerequisite: ART 211. \$25 lab/class fee.

ART 211 DRAWING: OBSERVATION AND INVENTION (3) Continued exploration of drawing, with an emphasis on observationally based drawing and ideational drawing. The interplay between these two modes will be explored. Prerequisites: ART 101, ART 103, ART 104. \$25 lab/class fee. Art majors/minors only.

ART 212 VISUAL CONCEPTS (3) Introduction to conceptual issues in contemporary art and design. Multidisciplinary exploration of concept in artistic production; projects emphasizing the link between form and concept. Prerequisites: ART 101, ART 103, ART 104. Art majors/minors only.

ART 217 DIGITAL CONCEPTS: IMAGE AND SURFACE (3) Utilizing digital tools for the design of graphic surface and image. Prerequisite: ART 101 or 103. \$25 lab/class fee.

ART 218 METALS AND JEWELRY I (3) Introduction to metalsmithing and jewelry through lecture, demonstration, studio problems in the design/creation of three-dimensional objects: jewelry and small-scale functional objects. Methods of joining and forming metal and alternative materials. Prerequisites: ART 103 and ART 104 or consent of instructor. \$25 lab/class fee.

ART 219 DIGITAL CONCEPTS: STRUCTURE (3) Utilizing digital tools for the design of graphic structures and systems. Prerequisite: ART 101 or ART 217. Not open to students who successfully completed ART 321. \$25 lab/class fee.

ART 229 PAINTING I (3) Fundamentals of painting through lecture, demonstration and studio experience. Emphasis on color theory and applications: still life and landscape. Prerequisites: Completion of, or concurrent enrollment in, ART 211. \$25 lab/class fee.

ART 231 CERAMICS I (3) Creative investigation of ceramic materials. Studio work, lectures and discussion on ceramic design, techniques and materials. Prerequisites: ART 103 and ART 104. \$25 lab/class fee.

ART 232 CERAMIC SURFACE DECORATION (3) An introduction to ceramic surface decoration using a variety of media, processes and related aesthetic concerns. Prerequisites: ART 231 or ART 107. \$25 lab/class fee.

ART 233 PHOTO IMAGING: DIGITAL WORKFLOW FOR NON-ART MAJORS (3) Introduction to creative digital photographic workflow – the aesthetics, technology and history of Photographic Imaging – creative capture, archiving, optimizing, printing, presentation and exporting to the web.

Requirements: digital camera, laptop computer, Adobe Lightroom 2 software.

ART 234 PHOTO IMAGING: FILM (3) Technical and aesthetic elements of the analog photographic process. A manually adjustable 35mm film camera is required. Prerequisite: ART 103. \$25 lab/class fee.

ART 235 PHOTO IMAGING: CREATIVE WORKFLOW (3) Introduction to creative digital photographic workflow using professional level capture devices—the aesthetics, technology and history of Photographic Imaging—creative capture, archiving, optimizing, printing, presentation and exporting to the web. Requirements: digital camera, laptop computer, Adobe Lightroom 2 software, peripheral hard drive. Prerequisite: ART 103. \$25 lab/class fee.

ART 236 PHOTO IMAGING: LIGHT (3) An investigation into the manipulation of natural and artificial light for use in photo imaging capture and production. A manually adjustable digital SLR camera is required. Prerequisite: ART 235. \$25 lab/class fee.

ART 237 PHOTO IMAGING: ALTERNATIVE PROCESS (3) An investigation of alternative methods of photo image making, both analog and digital and the contemporary application of each technology. A manually adjustable film or digital SLR camera is required. Prerequisite: ART 234 or ART 235. \$25 lab/class fee.

ART 238 PHOTO IMAGING: MOTION (3) An investigation into the creation and exhibition of time-based arts. Included will be the exploration of video capture and editing, multimedia presentation and real-time delivery. Prerequisite: ART 235 or consent of instructor. Lab/Class fee will be assessed.

ART 241 SCULPTURE I (3) Lecture and studio problems in the aesthetic and technical considerations of contemporary sculpture. Prerequisite: ART 104. \$25 lab/class fee.

ART 245 INTRODUCTION TO PRINTMAKING (3) Basic intaglio and relief processes: collograph, dry point, linocut and monoprinting, with an overview of other printmaking media. Prerequisites: Completion of, or concurrent enrollment in, ART 211. \$25 lab/class fee.

ART 258 PHOTO IMAGING: DIGITAL I (3) Digital photographic image capture, manipulation and production. A manually adjustable digital SLR camera is required. Prerequisites: ART 217 and ART 235. \$25 lab/class fee.

Upper Division

ART 301 STAINED GLASS (3) Directed studio problems in stained glass: cutting, foiling, soldering, brass frame and patina. Prerequisite: ART 102 or ART 103 or consent of instructor. \$25 lab/class fee.

ART 307 MATERIALS: CONCEPT AND PROCESS (3) Examination of the properties and characteristics of material and methodology in the design and creation of objects through lecture, demonstration and directed studio problems. Prerequisites: ART 218 or ART 231.

ART 308 CERAMICS: THE RAKU PROCESS (3) The utilization of specific clays, glazes and firing techniques which relate to this both ancient, yet contemporary, ceramic process. \$25 lab/class fee.

ART 309 CERAMICS: THE POTTER'S WHEEL (3) Studio experience in wheel throwing with emphasis on utilitarian art forms. Lectures, discussion and demonstrations. Prerequisite: ART 231. \$25 lab/class fee.

ART 310 CERAMICS: HANDBUILDING (3) Studio experience utilizing a variety of handbuilding techniques: problems in both utilitarian and sculptural considerations. \$25 lab/class fee.

ART 311 WOOD: CONCEPT AND PROCESS (3) Lecture and directed studio problems in the fabrication and lamination of wood. Prerequisite: ART 104.

ART 312 CERAMICS: SPECIAL PROCESS (3) An exploration of a variety of techniques including lustres, low-fire glazes and underglazes, decals, Egyptian paste, mold making and slip casting. Prerequisite: ART 231 or written consent of instructor.

ART 313 ENAMELING: GLASS ON METAL (3) Lecture, demonstration, directed studio problems in vitreous enameling: application and firing methods, stenciling. Sgraffito, painted enamels, champlevé, basse-taille and alternatives approached. Emphasis in image development and color theory. Prerequisites: ART 103 and ART 104.

ART 317 GRAPHIC DESIGN I (3) Fundamentals of visual conceptualization, type and image integration, creative and innovative concept development. Not available to students who successfully completed ART 317 Design for Visual Communication. Prerequisites: ART 217 and ART 219.

ART 318 METALS AND JEWELRY II (3) Intermediate lecture, demonstration, directed studio problems in two-dimensional surface development, hollow fabrication and beginning stone setting. Prerequisite: ART 218 (Metals and Jewelry I) or ART 318 (Jewelry). \$25 lab/class fee.

ART 319 CASTING: MATERIALS AND PROCESS (3) Lecture, demonstration, directed studio problems in the casting process: traditional lost wax bronze casting, RTV mold making, casting new, alternative and experimental materials. Prerequisite: ART 218. \$25 lab/class fee.

ART 320 FIBERS: STRUCTURES I (3) Non-loom fiber construction including twining, coiling, crochet, felting, basketry. Functional and sculptural forms, historical and aesthetic considerations. Prerequisite: ART 104 or consent of instructor. \$25 lab/class fee.

ART 322 DIGITAL DESIGN: MOTION (3) Directed studio experience using a variety of digital graphics programs emphasizing motion graphics. Prerequisite: ART 217. \$25 lab/class fee.

ART 326 FIBERS: SURFACES I (3) Design problems executed with dye and ink on fabric using resist techniques, hand painting and printing. Prerequisite: ART 103 or consent of instructor. \$25 lab/class fee.

ART 327 DESIGN AND SOCIAL ENTREPRENEURSHIP (3) Examination of the cross-disciplinary social design movement. Using the design process, students identify and address social issues in studio work. Prerequisites: ART 101, ART 103, ART 104, ART 211, ART 212, ARTH 221, ARTH 222, junior standing and completion of first-level foundations. ART majors only. \$25 lab/class fee.

ART 328 FIBERS: STRUCTURES II (3) Basics of hand weaving on the loom. Aesthetic and historical aspects of the media. Prerequisite: ART 103 or consent of instructor. \$25 lab/class fee.

ART 329 PAINTING II (3) Continued studio experience utilizing a variety of techniques and media: still life, landscape and the figure. Prerequisite: ART 229. \$25 lab/class fee.

ART 331 WATERCOLOR I (3) Fundamentals explored through lecture, demonstration and studio experience: still life, landscape and the figure. Prerequisite: Completion of, or concurrent enrollment in, ART 211.

ART 334 PHOTO IMAGING: CONCEPTS I (3) The aesthetic of black-and-white image making using advanced analog and electronic imaging technology. Prerequisites: ART 236, ART 238 and ART 258. Lab/Class fee will be assessed.

ART 335 PHOTO IMAGING: CONCEPTS II (3) The aesthetic of color image making using advanced analog and electronic imaging technology. Prerequisite: ART 236, ART 238 and ART 258. Lab/Class fee will be assessed.

ART 336 PAINTING III (3) Continued development of skills and technical expertise. Emphasis on independent problems and personal direction. Prerequisite: ART 329. \$25 lab/class fee.

ART 337 FIBERS: SURFACES II (3) Contemporary design and color studies in piecing, applique, quilting, and embroidery by hand and machine. Aesthetic, historical and cultural considerations. Prerequisite: ART 103 or consent of instructor. \$25 lab/class fee.

ART 339 METAL: CONCEPT AND PROCESS (3) Lecture and directed studio problems in metal fabrication and lost wax casting. Prerequisite: ART 104.

ART 340 MODELING: CONCEPT AND PROCESS (3) Lecture and directed studio problems in clay modeling emphasizing the human figure and moldmaking. Prerequisite: ART 104.

ART 342 CARVING: CONCEPT AND PROCESS (3) Lecture and directed studio problems in stone, wood and other media. Prerequisite: ART 104.

ART 345 NEW DIRECTIONS IN PRINTMAKING (3) Utilizing technology to link printmaking to digital, photo, Xerox and hand-drawn images. Prerequisites: ART 217 or consent of instructor.

ART 346 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART I (3) Development of skills and technical expertise in 2-D, 3-D, 4-D computer based and time based. Emphasis on individual expression, uniqueness and personal direction. Prerequisite: ART 329. \$25 lab/class fee.

ART 347 SCREEN PROCESS I (3) Multicolor projects include paper, stencil, drawing fluid, filler blockout, crayon resist, direct photo emulsion using water-based inks. Prerequisite: Completion of, or concurrent enrollment in, ART 211.

ART 348 ARTIST PRINT (3) Continued studio experience in printmaking for the advanced student, with emphasis on personal direction. Prerequisite: ART 245.

ART 349 RELIEF PROCESS I (3) Traditional and experimental techniques in printmaking: woodcut, collagraph, subtractive relief process using oil and water-based materials. Prerequisite: Completion of, or concurrent enrollment in, ART 211, or consent of instructor.

ART 350 ETCHING AND INTAGLIO PROCESSES (3) Etching, engraving, aquatint, lift ground, wood intaglio, and beginning color printing. Prerequisite: Completion of, or concurrent enrollment in, ART 211, or consent of instructor.

ART 351 WRITING ABOUT ART (3) Expository writing about the visual arts, including critiques, articles, press releases and other formats. Emphasis on effective writing with aesthetic insight. Prerequisites: ENGL 102 or 190; ARTH 221 or 222 or consent of instructor.

ART 353 LITHOGRAPHIC PROCESS I (3) Personal expression through printing from litho stones and plates. Prerequisite: Completion of, or concurrent enrollment in, ART 211, or consent of instructor.

ART 355 TYPOGRAPHY I (3) Theory, concepts and aesthetics of type. Prerequisite: ART 217 and ART 219.

ART 356 [556] ARTIST BOOKS (3) Exploration of book making and the book as an art form. Individual projects highlighting aspects of artist books, discussion and critiques. Prerequisite: ART 211.

ART 357 PHOTO IMAGING: FORMATS (3) Field experience in photographic imaging technology. Prerequisite: ART 236, ART 238 and ART 258. May be repeated for up to 6 units.

ART 358 PHOTO IMAGING: DIGITAL II (3) Advanced digital photographic image capture, manipulation and production. A manually adjustable digital SLR camera is required. Prerequisite: ART 258.

ART 360 DIGITAL ART: 2D (3) Introductory experience in producing two-dimensional art images on the computer. Includes lecture, demonstration and lab work. Not open to students who have successfully completed ART 460. Prerequisite: ART 217.

ART 361 DIGITAL OBJECT DESIGN (3) Ideas and technologies for developing 3-D models. Prerequisite: ART 217.

ART 362 DIGITAL ART: 3D (3) Studio experience in producing three-dimensional art images on the computer. Prerequisite: ART 217.

ART 363 INTERACTIVE MEDIA: THEORY AND APPLICATION (3) Focus on interactive design and media theory through research, studio practice and discussion. Utilizes software applications with emphasis on conceptual process, image processing and usability. Prerequisite: ART 365.

ART 365 DESIGN FOR THE WWW (3) Authoring techniques as related to interactivity, information design and digital imaging. Prerequisite: ART 217.

ART 366 CONCEPT MODEL MAKING (3) Making 3-D material models out of a range of materials using precision fabrication techniques to depict innovative design ideas for

products. Prerequisite: ART 368 or consent of instructor. \$25 lab/class fee.

ART 367 THEORY AND APPLICATION OF MATERIALS AND PROCESSES FOR INDUSTRIAL DESIGN (3) Theory, analysis and application of how materials and processes are chosen for the design and fabrication of products. Prerequisite: ART 368 or consent of instructor.

ART 370 SPECIAL TOPICS IN ART (3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: 18 units of art courses.

ART 372 ADVANCED DRAWING I (3) Continued studio experience in drawing for advanced students. Emphasis on independent problems and personal direction. Prerequisites: ART 211 and ART 229.

ART 373 ILLUSTRATION PRINCIPLES FOR DESIGNERS AND ILLUSTRATORS (3) Drawing and painting techniques to develop technical assurance with emphasis on observation, composition and imagination. Prerequisite: ART 211 or consent of instructor. \$25 lab/class fee.

ART 377 EXHIBIT DESIGN (3) Theory, concepts, planning, graphics, spatial aesthetics and model construction for various professional exhibits. Management, design and installation of art exhibits. Prerequisites: ART 103 and ART 104. \$25 lab/class fee.

ART 380 INFORMATION AND INTERFACE DESIGN (3) Introduction to information architecture and user interface design for interactive media applied art and design applications. Design projects with a focus on current interactive media design concept and theory. Prerequisite: Consent of instructor. \$25 lab/class fee.

ART 400 [500] CERAMIC RAW MATERIALS (3) Lecture and laboratory investigation of ceramic materials as they apply to glazes, clay slips and clay bodies. Tests and problems in ceramic raw materials. Prerequisites: ART 309, ART 310 or equivalent. \$25 lab/class fee.

ART 402 LIFE DRAWING AND ANATOMY I (3) The study of anatomical structure of the human figure for art students. Drawing from the nude and draped model. Prerequisite: ART 211. \$25 lab/class fee.

ART 407 [508] CERAMICS: CLAY SCULPTURE (3) Studio experience utilizing a variety of ceramic techniques. Assigned problems in sculptural directions for students experienced in handbuilding and the potter's wheel. Prerequisite: ART 310 or consent of instructor. \$25 lab/class fee.

ART 409 CERAMICS: THE VESSEL (3) Studio experience utilizing a variety of ceramic techniques. Problems in utilization directions based on the vessel. Prerequisite: ART 310 or consent of instructor. \$25 lab/class fee.

ART 412 LIFE DRAWING AND ANATOMY II (3) Continued study of anatomical structure of the human figure for art students. Emphasis on musculature. Drawing from the nude and draped model. Prerequisite: ART 402. \$25 lab/class fee.

ART 413 ELECTROFORMING AND ENAMELING (3) Lecture, demonstration, directed studio problems in the electroforming process, continued investigation of vitreous enameling three-dimensional form, new, alternative and experimental techniques. Prerequisite: ART 313 or consent of instructor.

ART 414 [514] ADVANCED STUDIO (2-3) Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. May be repeated for a maximum of 6 units provided a different topic is covered.

ART 415 [515] ADVANCED STUDIO (2-3) Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. May be repeated for a maximum of 6 units provided a different topic is covered.

ART 416 [516] ADVANCED STUDIO (2-3) Independent work for advanced students in field of special interest. Prerequisites: must have exhausted other courses in particular field or written consent of instructor. Student must make arrangements in advance of registration with instructor of choice. May be repeated for a maximum of 6 units provided a different topic is covered.

ART 417 GRAPHIC DESIGN II (3) Communication graphics synthesizing formal, conceptual and technical skills. Emphasis on creative concept development using type and image. Prerequisites: ART 317 and ART 355. Must have completed graphic design screening. \$25 lab/class fee.

ART 419 METALS AND JEWELRY III (3) Advanced lecture, demonstration, directed studio problems in hollow forming techniques including hydraulic die forming, hinge making, innovative design and intermediate stone setting. Prerequisite: ART 318.

ART 422 DESIGNING FOR PRODUCTION (3) Experience designing and manufacturing multiples. Historical and contemporary object production and production methodologies. Various aspects of business, pricing, market analysis. Prerequisite: ART 318 and ART 319.

ART 431 [531] WATERCOLOR II (3) Intermediate studio experience: landscape, still life, figure and photographic imagery. Prerequisite: ART 331. \$25 lab/class fee.

ART 435 PHOTO IMAGING: PORTFOLIO (3) Advanced research into the aesthetic of photo imaging portfolio organization, construction and representation through the use of print and electronic imaging technology. Prerequisites: ART 334, ART 335 and ART 357. May be repeated for up to 9 units.

ART 436 PAINTING IV (3) Continued studio experience for advanced students with emphasis on personal direction. May be repeated for up to 9 units. Prerequisite: ART 336. \$25 lab/class fee.

ART 438 HOLLOWWARE AND FORGING (3) Advanced lecture, demonstration and directed studio problems in hollowware and flatware focusing on raising, seaming, fabrication and forging techniques for silver and non-ferrous metals. Prerequisite: ART 319.

ART 441 ADVANCED SCULPTURE I (3) Lecture and directed studio problems in advanced sculpture media and concepts. Prerequisite: any 300-level sculpture course. \$25 lab/class fee.

ART 443 ADVANCED SCULPTURE II (3) Continued lecture and directed studio problems in advanced sculptural media and concepts. Prerequisite: ART 441 or ART 414-16.

ART 445 EXPERIMENTAL DIRECTIONS (3) Lecture and directed studio problems: recent sculptural trends, concepts and technologies, including installation, performance, environments, computers, etc. Prerequisite: ART 241 or consent of instructor.

ART 446 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART II (3) Continued studio experience for advanced students with emphasis on personal direction. Prerequisite: ART 346.

ART 447 [547] SCREEN PROCESS II (3) Advanced color projects using direct photo emulsion emphasizing integration of hand drawn images with photo and computer-generated images with non-toxic inks. Prerequisite: ART 347 or consent of instructor.

ART 449 [549] RELIEF PROCESS II (3) Traditional and experimental processes. Advanced color assignments using oil and water-based inks. Prerequisite: ART 349 or consent of instructor.

ART 450 [550] INTAGLIO PROCESS II (3) Multiple plate color and simultaneous color/intaglio/relief techniques and collagraph using experimental materials. Prerequisite: ART 350. \$25 lab/class fee.

ART 453 [553] LITHOGRAPHIC PROCESS II (3) Personal expression; advanced printing including stone-plate and photo plate. Multiple color printing. Prerequisite: ART 353.

ART 456 TYPOGRAPHY II (3) Advanced research and exploration of type solutions. Prerequisites: ART 355 and ART 417. \$25 lab/class fee.

ART 457 GRAPHIC DESIGN III (3) Problems in graphic communication on the Macintosh, emphasizing individual portfolio development. Prerequisite: ART 417.

ART 459 DIGITAL PHOTOGRAPHY II (3) Advanced digital photographic image capture, manipulation and production. Prerequisite: ART 359. \$25 lab/class fee.

ART 460 DIGITAL ART II (3) Intermediate experience in producing art and illustration on the computer. Prerequisite: ART 360. \$25 lab/class fee.

ART 461 DIGITAL OBJECT DESIGN II (3) Intermediate and advanced lecture, demonstration, studio problems in digital 3D modeling and rendering. Introduction to computer aided machining and rapid prototyping. Prerequisite: ART 361. May be repeated for a maximum of 6 units.

ART 462 DIGITAL ILLUSTRATION (3) Studio experience in producing illustration on the computer. Prerequisite: ART 360 and ART 373. \$25 lab/class fee.

ART 463 INTERACTIVE MEDIA: EXPERIMENTAL (3) Experimental processes in interactive media. Emphasis on developing conceptual art that explores interactive media in relation to contemporary practices. Prerequisite: ART 363. \$25 lab/class fee.

ART 465 GRAPHIC DESIGN: SOCIAL ISSUES (3) Examination and production of graphic design as an agent of social and political expression. Prerequisites: ART 317 and ART 355. \$25 lab/class fee.

ART 466 DESIGN FOR THE WWW II (3) Advanced web authoring techniques and research as related to interactivity, information design and web usability. Prerequisite: ART 355 and ART 365. \$25 lab/class fee.

ART 471 PROGRAMMING FOR DESIGNERS (3) Introduction to programming for design applications. Script language projects with a focus on current art and design concept and theory. Prerequisite: ART 365. \$25 lab/class fee.

ART 472 ADVANCED DRAWING II (3) Continued studio experience in drawing for advanced students. Emphasis on conceptual approaches, independent problems and personal direction. May be repeated for a maximum of 6 units. Prerequisite: ART 372. \$25 lab/class fee.

ART 473 [573] ILLUSTRATION CONCEPTS FOR DESIGNERS AND ILLUSTRATORS (3) Developing contextual understanding of imagery in design through problem solving skills and visual/verbal vocabulary. Prerequisite: ART 373. \$25 lab/class fee.

ART 474 ADVANCED ILLUSTRATION (3) Advanced studio experience utilizing a variety of contemporary and experimental media, emphasizing creative exploration and building a professional portfolio. Prerequisite: ART 473. \$25 lab/class fee.

ART 475 SIMULATION DESIGN (3) Introduction to the concept and theory of simulation design including applied projects designing simulation objects, virtual environments and scripted content. Prerequisite: ART 365. \$25 lab/class fee.

ART 476 3D ANIMATION I (3) Exploration of 3D animation techniques and process' including character/narrative development, 3D environments and creative process. Lab application related to modeling for animation, visual effects, interactive training/simulation and game design. Prerequisite: ART 362 or ART 460. \$25 lab/class fee.

ART 477 3D ANIMATION II (3) Advanced studio exploration of 3D animation techniques and process' including character/narrative development, 3D environments and creative process. Lab application related to modeling for animation, visual effects, interactive training/simulation and game design. Prerequisite: ART 476. \$25 lab/class fee.

ART 478 GAME DESIGN I (3) Exploration of game development techniques and process including terminology, history, genres/platforms, future development of gaming and design techniques. Lab application related to design, modeling, animation and interactive training/simulation. Prerequisite: ART 476. \$25 lab/class fee.

ART 480 INFORMATION + INTERFACE DESIGN II (3) Advanced projects in information architecture, user interface design and usability for interactive media design applications. Prerequisite: Consent of instructor. \$25 lab/class fee.

ART 483 PACKAGE DESIGN (3) Designing packages with understanding of marketing, social, ethical and environmental impact. Prerequisites: ART 317 and ART 355.

ART 490 INTERNSHIP IN ART (2-3) A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Prerequisite: consent of instructor.

ART 491 INTERNSHIP IN ART (2-3) A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Prerequisite: consent of instructor.

ART 492 INTERNSHIP IN ART (2-3) A non-paid work experience with cooperating businesses and organizations. A daily log and 100 hours of participation are required. Prerequisite: consent of instructor.

ART 494 [594] TRAVEL AND STUDY ABROAD (3-6) Countries and topics to be selected by the department and instructors sponsoring the program. For information, contact the Department of Art early in the term preceding the term of travel study. Prerequisites: consent of instructor and interview. May be repeated for up to 6 units.

ART 496 GRAPHIC DESIGN: PORTFOLIO (3) Directed studio. Critiques and professional development culminating in a presentation/portfolio. Prerequisite: senior standing or consent of instructor.

ART 497 SENIOR PROJECT (3) Directed studio. Critiques culminating in a presentation/portfolio. Prerequisite: consent of instructor.

ART 499 SENIOR HONORS THESIS IN ART (4) Honors in studio art. An exhibition of work resulting from Independent Study and Honors studio courses, accompanied by a supporting paper defining the philosophy and purpose of the project, under the direction of a thesis adviser. Prerequisite: approval of adviser and admittance to department honors program.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

ART EDUCATION (ARED)

Upper Division

ARED 371 ART AND THE CHILD (3) Major considerations of art education appropriate to the work of the elementary teacher; experiences with art materials. \$25 lab/class fee.

ARED 373 ART FOR EARLY CHILDHOOD EDUCATION (2) Lectures, demonstrations and workshops based on special needs as students experience art in nursery schools, day care centers, kindergartens and the primary grades. Prerequisites: concurrent registration for Block I, ECED 341. \$25 lab/class fee.

ARED 381 MEDIA AND TECHNIQUES FOR ART TEACHERS: ELEMENTARY (3) Introduction to art education. Exploration of media and processes; planning and instructional strategies. Taken concurrently with ARED 383. \$25 lab/class fee.

ARED 383 MEDIA AND TECHNIQUES FOR ART TEACHERS: SECONDARY (3) Introduction to studio activities, planning and instructional strategies. Taken concurrently with ARED 381. \$25 lab/class fee.

ARED 463 [563] AUTHOR-ILLUSTRATOR: INTEGRATION OF VISUAL AND LANGUAGE ARTS AT THE ELEMENTARY LEVEL (3) Children's fiction is examined as illustration and text to develop strategies for enhancing reading and writing skills applicable within art education programs at the elementary level. Prerequisite: minimum 2.75 overall GPA and a 3.00 GPA in major; consent of Art Education Program adviser. \$25 lab/class fee.

ARED 464 [564] AUTHOR-ILLUSTRATOR: INTEGRATION OF VISUAL AND LANGUAGE ARTS AT THE SECONDARY LEVEL (3) Children's non-fiction is examined as illustration and text to develop strategies for enhancing reading and writing skills in art education programs at the middle and high school levels. Prerequisite: consent of instructor. \$25 lab/class fee.

ARED 465 ADVANCED ART EDUCATION (3) Art education problems at all levels; materials and skills in relation to classroom needs. Prerequisite: ARED 371 or equivalent.

ARED 467 FIELD EXPERIENCES IN ART EDUCATION: ELEMENTARY (2) Analysis of instruction in selected elementary teaching situations; preparation and teaching of units in elementary schools. Taken concurrently with ARED 468, ARED 475 and ARED 479.

ARED 468 FIELD EXPERIENCES IN ART EDUCATION: SECONDARY (2) Analysis of instruction in selected secondary teaching situations; preparation and teaching of units in secondary schools. Taken concurrently with ARED 467, ARED 475 and ARED 479.

ARED 475 METHODS OF TEACHING ART: ELEMENTARY (3) Theoretical and practical aspects of teaching art: selection, design and implementation. Taken concurrently with ARED 467, ARED 468 and ARED 479.

ARED 479 METHODS OF TEACHING ART: SECONDARY (3) Theoretical, practical, philosophical and historical aspects of art education: content and methods of planning and instruction. Taken concurrently with ARED 467, ARED 468 and ARED 475.

ARED 481 STUDENT TEACHING IN ELEMENTARY EDUCATION—ART (6) Practical experiences in observation, participation and student teaching in a public elementary school under the guidance of a cooperating teacher and a university supervisor. Prerequisites: all art foundation requirements, all ARED courses, PSYC 101, PSYC 201 and SCED 319 (or SCED 341). Taken concurrently with ARED 483 and ARED 485. Graded S/U.

ARED 483 STUDENT TEACHING IN SECONDARY EDUCATION—ART (6) Practical experiences in observation, participation and student teaching in public secondary school under the guidance of a cooperating teacher and a university supervisor. Prerequisites: all art foundation requirements, all ARED courses, PSYC 101, PSYC 201 and SCED 319 (or SCED 341). Graded S/U.

ARED 485 PRO-SEMINAR IN THE TEACHING OF ART (3) A professional seminar for Art Education majors. Discussion of problems in the current teaching experience. Prerequisite: permission of art education faculty. Taken concurrently with student teaching.

ART HISTORY (ARTH)

Lower Division

ARTH 105 ART IN THE CULTURE (3) Forms of art in relation to world culture.

ARTH 107 THEMES, DREAMS AND VISIONS (3) Artists' ideas, subjects and motifs across time and place.

ARTH 108 INTRODUCTION TO NON-WESTERN ART (3) Non-Western arts of the Americas, Africa, Oceania, Islam, India, China, Japan.

ARTH 109 ART AND THE HUMAN BODY (3) Depictions of the human body in western art.

ARTH 113 MYTHS AND STORIES IN AMERICAN ART (3) Myths, stories, folk tales and narratives depicted through American art.

ARTH 207 HONORS SEMINAR IN ART HISTORY (3) Specific historical period/movement or artist with presentations, critiques, directed readings and research paper. Honors College course. Repeatable for a maximum of 6 units, provided a different topic is covered.

ARTH 208 HONORS SEMINAR IN NON-WESTERN ART HISTORY (3) Specific historical, period/movement or artist within the non-Western tradition with presentations, critiques, directed readings and research paper. Honors College course. Repeatable for a maximum of 6 units, provided a different topic is covered.

ARTH 221 SURVEY OF WESTERN ART I (3) Survey of the art and architecture of the Western world from prehistory through the 14th-century CE.

ARTH 222 SURVEY OF WESTERN ART II (3) Survey of the art and architecture of the Western world from the 14th century through the 21st century.

Upper Division

ARTH 300 INTRODUCTION TO MUSEUM STUDIES (3) Introduction to the history and methods of museum work. Prerequisites: ARTH 221, ARTH 222 or junior standing.

ARTH 301 ORIGINS OF WESTERN ART (3) Historical survey concentrating in Paleolithic, Egyptian, Mesopotamian, and Aegean art and architecture. Prerequisite: ARTH 221 or junior standing.

ARTH 302 MUSEUM AND COMMUNITY (3) The role of museums as cultural and educational resources within the public sphere with the respect to the needs of a community. Prerequisites: ARTH 221, ARTH 222 or junior standing.

ARTH 303 MYTHS AND LEGENDS IN GREEK ART (3) Survey of Greek iconography, pictorial strategies and representations of Greek myths and legends. Prerequisite: ARTH 221 or junior standing.

ARTH 305 IMAGES OF WOMEN IN ANCIENT EGYPTIAN, GREEK AND ROMAN ART (3) Survey of images of women in ancient Egyptian, Greek and Roman Art. Prerequisite: ARTH 221 or junior standing.

ARTH 306 ART AND ARCHITECTURE OF THE CLASSICAL WORLD (3) History of the art and architecture of Ancient Greece and the Roman Empire. Not open to those students who successfully completed ARTH 303 and/or ARTH 305. Prerequisite: ARTH 221 or junior standing.

ARTH 307 MEDIEVAL ART (3) History of the art and architecture of the Romanesque and Gothic periods. Prerequisite: ARTH 221 or junior standing.

ARTH 309 ITALIAN RENAISSANCE ART AND ARCHITECTURE (3) History of the architecture, painting and sculpture of the Italian Renaissance. Prerequisite: ARTH 222 or junior standing.

ARTH 311 NORTHERN RENAISSANCE ART AND ARCHITECTURE (3) History of the architecture, painting and sculpture of France, Germany and Flanders. Prerequisite: ARTH 222 or junior standing.

ARTH 313 BAROQUE ART AND ARCHITECTURE (3) History of the art and architecture of the 17th century in Italy, France, Spain, Holland and Flanders. Prerequisite: ARTH 222 or junior standing.

ARTH 323 MODERN ART I (3) History of the painting and sculpture of Europe from the Rococo to Post-Impressionism. Prerequisite: ARTH 222 or junior standing.

ARTH 324 MODERN ART II (3) History of 20th-century art concentrating on painting and sculpture from Europe and the United States. Prerequisite: ARTH 222 or junior standing.

ARTH 325 HISTORY OF MODERN ARCHITECTURE (3) History of European and American architecture of the 20th and 21st centuries. Prerequisites: ARTH 222 or junior standing.

ARTH 326 HISTORY OF INTERIORS (3) A history of interiors from antiquity to the present. Prerequisite: ARTH 222 or junior standing.

ARTH 327 HISTORY OF MODERN DESIGN (3) Twentieth century graphic, furniture, industrial, product, textile and domestic design. Prerequisite: ARTH 222 or junior standing.

ARTH 328 ART, CULTURE AND POLITICS (3) An examination of modern culture. Prerequisite: ARTH 222 or junior standing.

ARTH 330 EAST ASIAN ART AND ARCHITECTURE (3) A cross-cultural analysis of Chinese, Japanese and Korean art and architecture. Prerequisite: ARTH 108 or junior standing.

ARTH 331 THE ART OF CHINA (3) History of the painting, sculpture, craft and architecture of China and peripheral regions. Prerequisites: ARTH 108, or junior standing.

ARTH 333 THE ART OF JAPAN (3) History of the painting, sculpture and architecture of Japan. Prerequisites: ARTH 108 or junior standing.

ARTH 335 AFRICAN-AMERICAN ART (3) African-American art and artists in the context of American art. Prerequisites: ARTH 222 or junior standing.

ARTH 337 ART AND ARCHITECTURE OF THE UNITED STATES I: COLONIAL TO 1900 (3) History of American architecture, art and crafts from the colonial period to 1900. Prerequisite: ARTH 222 or junior standing.

ARTH 338 ART AND ARCHITECTURE OF THE U.S. II: 1900 TO PRESENT (3) History of the architecture, art and crafts of the United States from 1900 to the present. Prerequisites: ARTH 222 or junior standing.

ARTH 339 LATIN AMERICAN ART: 1800 TO PRESENT (3) History of Latin American art, architecture and craft, from 1800 to present. Prerequisite: ARTH 222 or junior standing.

ARTH 341 WOMEN IN ART (3) Images of women and images made by women in western cultures of the 20th and 21st centuries. Prerequisite: ARTH 222 or junior standing.

ARTH 351 HISTORY OF PHOTOGRAPHY (3) World photography from the early 19th century to the present. Prerequisite: ARTH 222 or junior standing.

ARTH 352 HISTORY OF NEW MEDIA (3) A study of new media forms of art ranging from installation to digital photography to virtual reality. Prerequisite: ARTH 222 or junior standing.

ARTH 370-379 SPECIAL TOPICS IN ART HISTORY (3) In-depth study of a selected period, theme or artist. May be repeated for a maximum of 6 units when different topics are covered. Prerequisites: ARTH 221, ARTH 222 or junior standing.

ARTH 391 RESEARCH METHODS IN ART HISTORY (3) Bibliographic research and procedures. History of scholars and writing in the field. Prerequisites: ARTH 221, ARTH 222 and two upper-division art history courses.

ARTH 403 CARE AND HANDLING OF OBJECTS (3) The care and handling of artifacts and works of art of a wide variety of materials, covering the basic principles about artifact deterioration and strategies for proper handling, storage, and exhibition. Prerequisite: ARTH 300 or ARTH 302.

ARTH 404 MUSEUM EDUCATION (3) The history, theory and practice of museum education as a discipline in conjunction with an educational outreach project that students design, prepare and implement. Prerequisite: ARTH 300 or ARTH 302.

ARTH 405 EXHIBITION DESIGN HISTORY AND THEORY (3) An examination of the history and theory of exhibition design. Prerequisite: ARTH 300 or ARTH 302.

ARTH 406 MUSEUM MANAGEMENT (3) An examination of the organization, structure and ethical issues of managing museums. Prerequisite: ARTH 300 or ARTH 302.

ARTH 407 COLLECTIONS MANAGEMENT (3) The registration and movement of museum collections through database design, records management, photo documentation and exhibition proposals. Prerequisite: ARTH 300 or ARTH 302.

ARTH 408 CURATORIAL VISION AND PLANNING (3) The planning, research, funding and controversies involved in curatorial work through case studies, grant writing and virtual design. Prerequisite: ARTH 300 or ARTH 302.

ARTH 409 [609] MARKETING AND PUBLIC RELATIONS FOR CULTURAL INSTITUTIONS (3) Examination of the principles of marketing and public relations for cultural institutions. Prerequisite: ARTH 300 or ARTH 302 or consent of instructor.

ARTH 410 [610] DEVELOPMENT AND GRANT WRITING FOR CULTURAL INSTITUTIONS (3) Examination of the methods and techniques of fundraising for cultural institutions. Prerequisite: ARTH 300 or ARTH 302 or consent of instructor.

ARTH 485 [585] SEMINAR IN ART HISTORY (3) Intensive analysis of a single artist, a defined historical period or a stylistic development in art. Directed reading, discussions and museum tours. Variable content. May be repeated under a different topic for a maximum of 9 units. Prerequisites: ARTH 221, ARTH 222 and completion of two upper-level art history courses or consent of instructor.

ARTH 494 STUDY ABROAD (3-9) Travel and study abroad. Various topics in the history of art.

ARTH 495/96/97 INDEPENDENT STUDY IN ART HISTORY (3,3,3) Advanced research and examination of a topic in art history. Prerequisites: ARTH 221, ARTH 222 and at least one 300-level art history course, and consent of instructor.

ARTH 498 INTERNSHIP IN ART HISTORY (3) A non-paid work experience in cooperating arts organizations, institutions and businesses. 100 hours and a written assignment related to the internship. May be repeated for a maximum of 9 units. Prerequisites: consent of instructor and interview.

ARTH 499 SENIOR HONORS THESIS IN ART HISTORY (4) Thesis under the direction of an adviser. Prerequisite: admission to the Department of Art honors program.

ASIAN STUDIES (ASST)

Lower Division

ASST 270 SPECIAL TOPICS IN ASIAN STUDIES (1-4) An examination of topics in Asian Studies at the lower level. The content of the course will vary and depend upon faculty and student interest and program needs. May be repeated for a maximum of 6 units provided a different topic is covered each time. Prerequisite: Consent of instructor.

Upper Division

ASST 470 ADVANCED TOPICS IN ASIAN STUDIES (1-4) An examination of topics in Asian Studies at the upper level. The content of the course will vary and depend upon faculty and student interest and program needs. May be repeated for a maximum of 6 units provided a different topic is covered each time. Prerequisite: Consent of instructor.

ASST 490 DIRECTED READINGS IN ASIAN STUDIES (1-3) Directed readings in Asian Studies selected by the student in consultation with the instructor. Readings may focus on one topic across several nations, or may focus more intensely on one nation or time period. May be repeated for up to 6 units if a different topic is covered each time. Prerequisites: Consent of the instructor and the director of Asian Studies, and 9 units of coursework on the Asian Studies program (excluding language study).

ASST 492 INDEPENDENT STUDY IN ASIAN STUDIES (1-3) Supervised independent study in Asian Studies on one topic, culminating in one research paper or project. Topics selected by the student in consultation with the instructor. May be repeated for a maximum of 6 units if a different topic is covered each time. Prerequisites: Consent of the instructor and the director of Asian Studies, 9 units of coursework in Asian Studies (excluding language study).

ASST 494 INTERNSHIP IN ASIAN STUDIES (1-3) This field-based practicum course integrates theory and best practice off-campus experience to familiarize students with institutions involved with Asian Studies, including museums, government, think tanks and business organizations. May be repeated for a maximum of 12 units. Prerequisites: 18 units of Asian Studies courses, a GPA of 2.5 or greater, consent of instructor and director of Asian Studies, junior/senior standing.

ASTRONOMY (ASTR)

Lower Division

ASTR 161 GENERAL ASTRONOMY I (4) Observational astronomy, telescopes, Earth as a planet, the moon, solar system, sun, general properties of stars. Development of enough basic physics to understand these topics as a non-technical level. Not open to students who have successfully taken PHSC 161. Three lecture hours and one two-hour laboratory period. High school algebra suggested. \$25 lab/class fee.

ASTR 162 GENERAL ASTRONOMY II (4) Non-calculus based course for non-science majors that examines stars, stellar systems, galaxies, cosmology, and possibly other topics including life elsewhere in the universe. Emphasizing determination of the distance scale and modern trends in astronomy. Prerequisite: ASTR 161 or acceptable substitute. Not open to students who have successfully completed PHSC 361 or ASTR 361. \$25 lab/class fee.

Upper Division

ASTR 301 COSMIC ORIGINS (3) Origin and evolution of the universe, stars and planets; the rise of life on earth; social, technological and ethical issues raised by the scientific search for extraterrestrial life and its possible discovery on other worlds.

ASTR 302 HONORS COSMIC ORIGINS (3) Origin and evolution of the universe, stars and planets; the rise of life on earth; social, technological and ethical issues raised by the scientific search for extraterrestrial life and its possible discovery on other worlds. Honors College course.

ASTR 303 ASTROPHYSICAL TECHNIQUES (3) Observational astronomy using the department's telescope and NASA archival data, emphasizing equipment operating principles, scientific methods, signal statistics, data reduction. Includes imaging and photometry with coupled charge devices in addition to spectroscopy, space observations, radio astronomy. Prerequisites: ASTR 331, PHYS 341.

ASTR 331 INTRODUCTION TO STELLAR ASTROPHYSICS (3) Applications of physics in astronomy, spectroscopy, stellar interiors and evolution, the interstellar medium. Prerequisite: ASTR 161; PHYS 212 or PHYS 242 may be taken concurrently.

ASTR 371 PLANETARY ASTRONOMY (3) Non calculus course for science majors and minors focusing on methods of scientific inquiry as well as specific topics. Planetary formation both around our sun and around other stars, planetary interiors and surface processes, and atmospheres. Primitive surfaces, cratering, volcanism, tectonism, and origin and evolution of planetary atmospheres. The course may include an observational segment (e.g., sketching the planets through a telescope) and field trips to local sites of geological interest. Prerequisites: ASTR 161 or GEOL 121 or GEOL 123.

ASTR 432 GALAXIES AND COSMOLOGY (3) Stellar populations and the general properties of galaxies, including the Milky Way; galaxy formation and evolution; active galaxies; dark matter and dark energy; current topics in the study of the early universe; special and general relativity. Prerequisites: ASTR 162, ASTR 331, PHYS 307 and PHYS 311.

ASTR 470-479 SELECTED TOPICS IN CONTEMPORARY ASTROPHYSICS (3) Variable content including the origin of the elements and radio, microwave, and UV instruments and sources. Prerequisite: ASTR 331.

ASTR 495 CAPSTONE PROJECT IN ASTROPHYSICS (3) Individual project in observational or theoretical astrophysics. Prerequisite: senior standing in Astrophysics Track or consent of instructor.

ASTR 499 HONORS THESIS IN ASTRONOMY (1-4) Writing of an honors thesis based on independent research done under the direction of a staff member. May be repeated for a maximum of 6 units. Prerequisites: Consent of instructor and open only to advanced honors candidates.

AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY (SPPA)

Lower Division

SPPA 101 INTRODUCTION TO HUMAN COMMUNICATION DISORDERS (3) Introduction to variations in speech, language and hearing processes. Students will learn the scope of clinical practice and related professions within the field.

SPPA 200 ANATOMY AND PHYSIOLOGY OF THE AUDITORY AND VOCAL MECHANISM (3) Anatomical structures involved in the communication processes of speech, language and hearing. Analysis of the functioning of these structures. Lectures and laboratory sessions will be required. Prerequisites: BIOL 213, major status and/or consent of department.

SPPA 210 PHONETICS OF AMERICAN ENGLISH (3) Analysis of speech sounds of American English and the use of phonetic symbols to record them. Emphasizes ear training, phonetic transcription and language recordings. Prerequisites: Major status and/or consent of the department.

SPPA 215 LANGUAGE DEVELOPMENT IN CHILDREN (3) Analysis of normal speech and language development, including the phonetic, semantic and syntactic elements. Prerequisites: SPPA major status and/or consent of the department.

Upper Division

SPPA 302 ARTICULATION AND PHONOLOGICAL DISORDERS (3) Developmental, linguistic and physiological aspects of the English sound system. Assessment, analysis and treatment of sound system disorders in children. Prerequisites: SPPA 210, SPPA 215, major status and/or consent of department.

SPPA 303 HEARING SCIENCE (3) Introduction to study of acoustics and psychoacoustics. Utilization of models and instrumentation. Prerequisites: BIOL 190 or 201, major status and/or consent of department.

SPPA 304 LANGUAGE DISORDERS IN CHILDREN (3) Study of developmental and neurologically based disorders of language in children. Assessment, analysis and treatment of language disorders. Prerequisites: SPPA 215, major status and/or consent of department.

SPPA 306 NEUROLOGICAL AND FUNCTIONAL DISORDERS OF SPEECH, LANGUAGE AND VOICE (3) Etiology, differential diagnosis and therapeutic management in the area of organic and functional voice problems, cleft lip and palate, adult aphasia, cerebral palsy and mental retardation. Prerequisites: SPPA 302, SPPA 304, major status, and/or consent of department.

SPPA 310 INTRODUCTION TO STUTTERING (3) Introduction to the etiology, diagnosis, and treatment of stuttering across the lifespan. Focus on clinical applications, research, and theory. Prerequisites: SPPA 101, SPPA 215, SPPA 302, major status and/or consent of department.

SPPA 313 SPEECH SCIENCE (3) Biological, linguistic and acoustic aspects of speech processes. Strategies for the scientific study of speech and speech disorders including models and instrumentation. Prerequisites: SPPA 210, SPPA 200, major status and/or consent of the department.

SPPA 321 INTRODUCTION TO AUDIOLOGY (3) Anatomy, physiology and pathologies of the hearing mechanism. Instrumentation and techniques for the identification and management of hearing disorders inclusive of pure-tone and speech audiometrics and screening methods. Prerequisites: SPPA 303, major status and/or consent of department.

SPPA 325 [525] INTRODUCTION TO AURAL REHABILITATION (3) Information on options available for managing children and adults who are deaf or hard of hearing. Early intervention, communication strategies, amplification options and psychosocial issues. Prerequisites: SPPA 321, major status and/or consent of department.

SPPA 341 CLINICAL AUDIOLOGY (3) Basic audiometry; audiogram interpretation; basic principles of audiological habilitation, including school hearing conservation. Prerequisites: SPPA 321, major status and/or consent of department.

SPPA 350 LANGUAGE DEVELOPMENT AND DISORDERS IN EDUCATIONAL SETTINGS (3) Review of neurological, structural, cognitive and perceptual bases of normal and disordered language and their relationship to language, literacy and learning in children. Prerequisites: PSYC 101/102; not open to SPPA majors.

SPPA 416 CLINICAL OBSERVATIONS AND TECHNIQUES (3) Methods and materials in clinical practice. Planning and implementation of treatment protocols. 25 hours of supervised observation in a variety of clinical settings. Prerequisites: SPPA 302, 304, 321, major status and/or consent of department.

SPPA 417 RESEARCH WRITING IN COMMUNICATION DISORDERS (3) Develops writing skills in disciplines of speech-language pathology and audiology. Prerequisites: ENGL 102 or ENGL 190; SPPA 304, SPPA 321 and/or consent of department.

SPPA 470-479 SPECIAL TOPICS SEMINAR IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3) Investigation of particular topics in the fields of speech and language pathology and audiology. The topic will vary each term the course is offered. May be repeated for credit provided a different topic is covered. Prerequisite: varies with topic.

SPPA 487 CLINICAL INTERNSHIP (3) Clinical practice in therapeutic procedures with various types of speech, language and/or hearing disorders in the Towson University Speech Language and Hearing Center. Students must attend weekly class. Prerequisites: Minimum 3.50 GPA in prerequisite major courses, 25 documented hours of observation, SPPA 416, completed communication screening, or consent of department. May be taken concurrently with SPPA 417.

SPPA 496 INDEPENDENT STUDY IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (1-4) Independent study in selected areas of speech-language pathology and audiology. May be repeated for a maximum of 6 units. Prerequisites: junior/senior status, faculty/mentor agreement and/or consent of department.

SPPA 497 DIRECTED READINGS IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (1-4) Directed readings in selected areas of speech pathology and audiology. May be repeated for a maximum of 6 units. Prerequisites: junior/senior status, faculty/mentor agreement and/or consent of department.

SPPA 498 PROCTORING IN SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY (3) Students serve as teaching apprentices or proctors in a course which they have already completed in the department. May be repeated for a maximum of 6 units. Prerequisites: Grade equivalent of 3.00 GPA or higher in course for which students will proctor and/or consent of the department.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

BIOLOGY (BIOL)

The following courses may involve the use of vertebrate animals in class demonstrations or experiments. Such use is considered a requirement for successful completion of the courses. Students should consult instructors if they have questions or concerns about animal use in a particular course.

Lower Division

BIOL 100 HUMANISTIC BOTANY (3) Selected botanical topics of interest to the non-science major. Topics will include poisonous plants, medicinal plants, plant hallucinogens, tree-ring dating, botanical genetics, bonsai and commercial uses of major plant groups. Not for Biology major/minor credit. No credit will be given to those who successfully completed BIOL 205.

BIOL 103 HUMAN BIOLOGY (3) Basic principles of human body processes in normal and certain abnormal conditions for non-science majors. The emphasis will be on physiology with sufficient anatomy for its understanding. Not for Biology major/minor credit. Not open to those who successfully completed BIOL 213, BIOL 214 or BIOL 325.

BIOL 105 ENVIRONMENTAL BIOLOGY (3) Introduction of the relationships between humans and the environment. Fundamentals of ecology, hydrology, demography, energy and nutrient cycling will be covered, as well as the human impact on the use and management of the Earth's land, water and air resources. An emphasis is placed on five key themes: Human Population; Sustainability; Global Perspective; Urban World; and Values and Knowledge. Not for Biology major/minor credit.

BIOL 115 BIOLOGY: THE SCIENCE OF LIFE (4) A broad-based, investigative course designed to introduce important issues in the biological sciences to the non-scientist. Major topics include human genetics, evolution, ecology and environmental issues. Three hours of lecture and two hours of laboratory per week. Not for students intending to pursue additional course work in Biology or for students from the College of Health Professions. Not for credit toward Biology major or minor. Not open to those who successfully completed BIOL 110, BIOL 112 or BIOL 201. \$25 lab/class fee.

BIOL 117 HONORS BIOLOGY: THE SCIENCE OF LIFE (4) A broad-based, investigative course designed to introduce important issues in the biological sciences to the non-scientist. Major topics include human genetics, evolution, ecology and environmental issues. Three hours of lecture and two hours of

laboratory per week. Not for students intending to pursue additional coursework in Biology nor for students from the College of Health Professions who require BIOL 213/214 and/or BIOL 315. Not for credit toward Biology major or minor. This course will be equated with BIOL 115 for use as a prerequisite. Not open to those who successfully completed BIOL 110, BIOL 112, BIOL 201. Honors College course. Prerequisite: Admission to the Honors College.

BIOL 190 INTRODUCTORY BIOLOGY FOR THE HEALTH PROFESSIONS (4) Inquiry-based course intended to strengthen reasoning skills and provide a firm foundation in basic principles of biology: process of scientific investigation, cells, macromolecules, metabolism, DNA, genetics, evolution and ecology. Intended for College of Health Professions majors who will take additional Biology courses. Not for Biology major/minor credit. Not open to those who successfully completed BIOL 115 or BIOL 201. \$25 lab/class fee.

BIOL 192 HONORS INTRODUCTORY BIOLOGY FOR THE HEALTH PROFESSIONS (4) Basic principles of biology including process of scientific investigation, cells, macromolecules, metabolism, DNA, genetics, evolution and ecology. Intended for College of Health Professions majors who will take additional biology courses. Not for biology major/minor credit. Not open to those who successfully completed BIOL 201.

BIOL 201 BIOLOGY I: CELLULAR BIOLOGY AND GENETICS (4) An introduction to biology, including biologically important molecules, cell and tissue structure, respiration, photosynthesis, mitosis, meiosis and genetics. Average of three laboratory hours per week. \$25 lab/class fee.

BIOL 202 BIOLOGY II: INTRODUCTION TO ECOLOGY AND EVOLUTION (4) Population dynamics, community patterns and processes, natural selection, population genetics and behavioral ecology; emphasis on developing testable hypotheses and quantitative analyses of biological data. Prerequisite: BIOL 115, BIOL 190 or BIOL 201, or high school General Biology. \$25 lab/class fee.

BIOL 203 HONORS BIOLOGY I: CELLULAR BIOLOGY AND GENETICS (4) An introduction to biology, including biologically important molecules, cell and tissue structure, respiration, photosynthesis, mitosis, meiosis and genetics. Average of three laboratory hours per week. Prerequisites: CHEM 110 (may be taken concurrently) or one year high school chemistry. Honors College course.

BIOL 204 EDUCATIONAL AND CAREER PLANNING FOR THE BIOLOGIST (1) Exploration of undergraduate educational opportunities, graduate and professional education, career options, and career preparation in the biological sciences. Prerequisite: sophomore standing (30 units completed). Online, seven-week course.

BIOL 205 GENERAL BOTANY (4) Plant structure, development, reproduction, and diversity of life forms by interrelating hormones, physiological processes and environmental relationships with respect to the whole plant. Emphasis on flowering plants. Average of three laboratory or discussion hours per week. Prerequisite: BIOL 201. \$25 lab/class fee.

BIOL 207 GENERAL ZOOLOGY (4) Major animal phyla. A comparative approach to the structure, function, development and ecology of the animal kingdom. Average of three laboratory hours per week. Prerequisite: BIOL 202. \$25 lab/class fee.

BIOL 208 BIODIVERSITY (3) Phylogenetics and the evolution of major groups of organisms: brief survey of representatives of the five kingdoms; development and the evolution of form; case studies on form and function; the biodiversity crisis. Three lecture hours per week. Prerequisites: BIOL 201 and BIOL 202.

BIOL 213 HUMAN ANATOMY AND PHYSIOLOGY I (4) Cell biology, histology, skeletal, muscular and nervous systems. Average of three laboratory hours per week. To receive Biology major credit, BIOL 214 must also be completed. Prerequisite: BIOL 110, BIOL 190 or BIOL 201 with a grade of C or better. \$25 lab/class fee.

BIOL 214 HUMAN ANATOMY AND PHYSIOLOGY II (4) Cardiovascular, respiratory, digestive, excretory, endocrine and reproductive systems. Average of three laboratory hours per week. To receive Biology major credit, BIOL 213 must also be completed. Students who successfully completed

BIOL 325 may not take this course without departmental approval. Prerequisites: BIOL 110, BIOL 190 or BIOL 201; and BIOL 213 with a grade of C or better. \$25 lab/class fee.

BIOL 215 FOUNDATIONS OF MICROBIOLOGY (4) Pathogenesis of bacteria and viruses, their interactions with the human body, and methods of treatment and prevention. Three hours of laboratory per week. Prerequisite: One term of introductory biology. Transfer equivalence course; course is not offered at Towson University. Recommended for Health Science majors. Not for Biology major or minor credit.

Upper Division

BIOL 301 FIELD NATURAL SCIENCE (4) Physical and biological components of various environments and their interrelationships with each other and man. Emphasis on field observation. Average of three laboratory hours per week. Not for credit toward Biology major, minor or M.S. degree in biology. Prerequisite: BIOL 115 or BIOL 202.

BIOL 302 [512] INSTRUMENTAL METHODS FOR BIOLOGISTS Principles of electronics, data management, analytical techniques, radioisotope applications and physiological monitoring methods. Average of four laboratory hours per week. Prerequisites: BIOL 205 or BIOL 207; PHYS 203 or PHYS 212 or PHYS 242; CHEM 111 and CHEM 210 or CHEM 211 or consent of instructor.

BIOL 303 [509] LIFE SCIENCES (3) Living organisms in the environment, emphasizing modes of scientific inquiry and the utilization of living organisms in the classroom. Prerequisites: BIOL 110 or BIOL 115. Not for credit toward Biology major, minor or M.S. degree in Biology.

BIOL 304 NATURAL HISTORY INTERPRETATION AND PUBLIC ENVIRONMENTAL EDUCATION (3) Overview of public education in the biological sciences at local organizations such as zoos, parks and aquaria. Emphasis is placed on basic ecological concepts and how these concepts are presented to the general public, especially those of school age. Field experience at a local nature center outside of class time is required. Biology majors choosing the secondary school biology and general science teaching concentration or the organismal biology and ecology concentration may enroll for biology major credit. Prerequisite: consent of instructor.

BIOL 305 [505] ELECTRON MICROSCOPY (4) Theory, preparation and application of the electron microscope, including light microscopy. Average of three laboratory hours per week. Prerequisites: 12 units of Biology, PHYS 211, PHYS 212 recommended, and consent of instructor.

BIOL 306 HUMAN ECOLOGY AND SUSTAINABILITY (3) Relationships and sustainability of human society and natural ecosystems. Relevant scientific, socioeconomic and ethical issues will be examined in such current events as climate change, energy policy and urban planning. Cannot be taken for Biology major credit. Prerequisite: BIOL 105, BIOL 115, BIOL 190 or BIOL 202, or CHEM 104.

BIOL 307 [507] INTRODUCTION TO PALEONTOLOGY (4) Examination of major forms of life with the emphasis on appearances, diversification and extinctions during the different geologic periods. Prerequisite: minimum 10 units in biology.

BIOL 309 PRINCIPLES OF GENETICS (4) Problem-based genetics: Mendelian genetics, genetic linkage and mapping, nucleic acid structure, replication and function, protein synthesis and the genetic code, gene expression and regulation, mutation, repair and recombination, recombinant DNA technology and population genetics. Prerequisite: BIOL 201.

BIOL 310 [510] CONSERVATION BIOLOGY (4) Application of ecological theory to conservation of biological diversity. Exploration of past and present processes leading to and maintaining diversity and how such processes are impacted by human disturbance. Average of three laboratory hours per week. Prerequisites: BIOL 110, 112, 115, 190, 201 or 202 and 10 units of biology, geography or physical science course work.

BIOL 313 BIOLOGY OF AGING (3) Age-related changes in the human body at the cellular through organ system levels, emphasizing changes in structure and function that

alter the ability to maintain homeostasis or a high quality life. Not for credit toward Biology major, minor or M.S. program. Prerequisite: BIOL 103 or BIOL 213/214.

BIOL 315 [515] MEDICAL MICROBIOLOGY (4) Pathogenesis of bacterial, viral, rickettsial and fungal diseases with emphasis on medically important bacteria and microbiological techniques. Recommended for students pursuing a career in medical sciences. Prerequisites: BIOL 190 or BIOL 201; CHEM 110 or CHEM 105. Either this course or BIOL 318, but not both, may count toward Biology major or M.S. degree in Biology. \$50 lab/class fee.

BIOL 318 [518] MICROBIOLOGY (4) Biology of microorganisms with emphasis on bacteria. Microbial morphology, physiology and genetics, and the role of microorganisms in natural processes and disease. Laboratory includes methods of observing, isolating and identifying bacteria. Average of three laboratory hours per week. Either this course or BIOL 315, but not both, may count toward Biology major or M.S. degree in Biology. Prerequisite: BIOL 201 and CHEM 111.

BIOL 321 BIOLOGY OF WOMEN (3) Anatomy and physiology, evolution of reproduction, health-related issues, gestation, lactation and child care; the role of women in the work force and sciences, including health issues; contribution of women to global initiatives, including ecofeminism. Not for credit toward Biology major, minor or M.S. program. Prerequisite: Two courses, one of which must be a lab.

BIOL 322 BIOTECHNOLOGY AND SOCIETY (3) Use of biotechnology in medicine, agriculture and ecology; applications, ethics and future implications. Not for credit toward Biology major, minor or M.S. degree in Biology. Prerequisite: BIOL 115, BIOL 190 or BIOL 201.

BIOL 323 GENES, EVOLUTION AND MORALITY (3) Biological basis of morality and how those principles can be applied for a better understanding of historical events, current issues facing society, and future perspectives. Not for credit toward Biology major, minor or M.S. degree in Biology. Prerequisite: BIOL 115 or BIOL 202.

BIOL 325 ANIMAL PHYSIOLOGY (4) Animal structure and function from the molecular to organismic levels. Emphasis on comparative strategies and adaptations of various animal groups in their respective environments; response of integrated systems to changes in the physical and chemical environment; environmental physiology. Will not count toward Biology major credit for those who successfully completed BIOL 213-214. Prerequisites: BIOL 207 or BIOL 208, CHEM 111. \$50 lab/class fee.

BIOL 327 DANGEROUS DISEASES (3) Microorganisms and their roles in diseases. Human impact on the environment relating to emerging disease; biotechnological techniques; ethical issues. Not for credit toward Biology major, minor or M.S. in Biology. Prerequisite: BIOL 115, BIOL 190 or BIOL 201.

BIOL 333 HUMANS, SCIENCE AND THE CHESAPEAKE BAY (3) Conflicts between human use of the Chesapeake Bay watershed, Bay water quality and effects on Bay natural resources. Emphasis on understanding the dynamics of this ecosystem and the role science plays in political decisions affecting the Bay. Prerequisite: BIOL 105, BIOL 115, BIOL 190, BIOL 201 or BIOL 202.

BIOL 347 MARINE BIOLOGY (3) Major features of the marine environment, emphasizing biological aspects and specific adaptations of marine organisms. Prerequisite: BIOL 205 or BIOL 207 or BIOL 208.

BIOL 353 [553] INVERTEBRATE ZOOLOGY (4) Aquatic and terrestrial species of phyla from the Protozoa through the Echinodermata with special emphasis on local forms. Economic, ecological and taxonomic considerations. Average of three laboratory hours per week. Prerequisite: BIOL 207 or BIOL 208. \$50 lab/class fee.

BIOL 360 [560] HISTOLOGY (4) Tissues of the vertebrate body. Prerequisite: BIOL 325 or BIOL 214. \$50 lab/class fee.

BIOL 367 [568] ENDOCRINOLOGY (3) Endocrine mechanisms regulating homeostasis and functional integrity of animals with emphasis on mammals. Prerequisites: BIOL 214 or BIOL 325, and CHEM 111.

BIOL 371 [571] ANIMAL BEHAVIOR (4) Introduction to modern study of behavior including the development and control of behavior as well as the evolution and adaptive value of behavior. Two hours of recitation per week. Prerequisite: BIOL 207 or BIOL 208. BIOL 202 also strongly recommended.

BIOL 372 ANIMAL BEHAVIOR LABORATORY (1) Observational and experimental investigations of the development, control and adaptive value of animal behavior in both laboratory and field. Average of three laboratory hours per week. Prerequisite: BIOL 371 (may be taken concurrently).

BIOL 381 BIOLOGICAL LITERATURE (3) Familiarization with the literature of biology through the preparation of papers requiring a knowledge of techniques for exploring the literature. Three one-hour lectures per week. Not for major or minor credit or M.S. degree in Biology. Prerequisites: ENGL 102 or 190, and at least 10 units of biology.

BIOL 382 ENVIRONMENTAL EDUCATION AND SERVICE LEARNING IN THE TROPICS (3) Designed for majors in science or education with an interest in environmental education; course work will take place in Costa Rica; emphasis on tropical forest ecology concepts applicable to K-12 environmental education and management of tropical natural resources. Cross-listed as ENV 382. Prerequisites: minimum junior status and consent of the instructor.

BIOL 389 CURRENT DEVELOPMENTS IN BIOLOGY (1-4) Current directions of research in a major area of the biological sciences. Sufficient background will be given for the appreciation of the significance of these developments. May not be repeated for major credit when offered under a different topic. Prerequisites: BIOL 205 or BIOL 207 or BIOL 208 and consent of the instructor.

BIOL 402 GENERAL ECOLOGY (4) Effects of the abiotic environment on distribution and abundance of organisms; organization of biological communities; ecosystems and global change; application of ecological principles to natural resource management. Some daylong trips required. Prerequisites: BIOL 202; and BIOL 205 or BIOL 207 or BIOL 208. \$50 lab/class fee.

BIOL 403 [503] ADVANCED GENETICS (3) Emphasis on the molecular basis of gene action. Discussion of current work and methods related to the problem of gene structure, function and mutation, including the translation and regulation of genetic information. Prerequisite: BIOL 309.

BIOL 404 [504] ECOLOGICAL TECHNIQUES (3) Lectures and readings on investigative techniques employed by ecologists in the various specialty fields. An individual investigation, laboratory or field, using appropriate equipment is required. Prerequisite: BIOL 402 or its equivalent.

BIOL 405 MOLECULAR ECOLOGY (4) Examination of applications of modern molecular techniques in ecology, evolution, behavior and conservation biology. Emphasis will be on how application of these techniques provides greater insight in these areas of study. Average of two discussion hours per week. Prerequisite: BIOL 309.

BIOL 406 LIMNOLOGY (4) Ecology of streams and lakes: physical, chemical and biological factors that affect communities of freshwater organisms; laboratory and field experience in methods used to analyze aquatic systems. Prerequisite: BIOL 205 or BIOL 207 or BIOL 208; CHEM 111. \$50 lab/class fee.

BIOL 408 [508] CELL BIOLOGY (4) The molecular and morphological organization of the cell in relationship to cellular activities with emphasis on eukaryotic cells. Average of three laboratory or discussion hours per week. Prerequisite: BIOL 309.

BIOL 409 MOLECULAR BIOLOGY (4) Molecular basis of genetic inheritance and gene expression. DNA and RNA structure, DNA replication, sources and mechanisms of mutation and repair. Genome structure and organization in viruses, prokaryotes and eukaryotes. Prerequisite: BIOL 309.

BIOL 410 MOLECULAR BIOLOGY LABORATORY (2) Modern molecular genetic research techniques. The theoretical and practical considerations of the organisms and enzymes used in molecular biology, gene cloning strategies, DNA sequencing and analysis, analysis of genome structure and

gene expression, gene subcloning and transgenic organisms. Prerequisite: BIOL 409 (may be taken concurrently). \$50 lab/class fee.

BIOL 413 [513] EVOLUTION (3) Concepts of biological evolution, the history of the development of these concepts, and current topics in evolutionary biology. Prerequisites: BIOL 202 and BIOL 205 or 207 or BIOL 208.

BIOL 415 BIOTECHNOLOGY (3) Application of molecular biology in the areas of agriculture, medicine and ecology/environmental biology. Government regulations, ethical implications and patent issues will also be addressed. Prerequisite: BIOL 309.

BIOL 421 [521] IMMUNOLOGY (4) Cells and organs of the immune system, antibody-antigen interactions, immunoglobulin gene organization, B-cell maturation and activation, Major Histocompatibility Complex, cytokines, complement, inflammation, hypersensitivity, vaccines, autoimmunity, immunodeficiencies with recitation section for problem solving and demonstrations. Prerequisite: BIOL 315 or 309; BIOL 408 or BIOL 409 recommended.

BIOL 422 [522] ADVANCED IMMUNOLOGY (2) An advanced study of current topics in immunology, including humoral and cell-mediated immunity, histocompatibility, hypersensitivity, autoimmunity, tumor immunology, immunologic disorders, and the use of mono-clonal antibodies as a research tool. Prerequisite: BIOL 421 or its equivalent or consent of instructor.

BIOL 425 [525] DISSECTION OF THE UPPER EXTREMITY (2) Gross anatomical dissection of the human upper extremity, including the muscles, nerves and blood vessels which supply the appendage. Special emphasis will be placed on development of techniques which assure careful and accurate dissection. Will be offered only in the Minimester. Prerequisites: BIOL 213 and consent of instructor. \$50 lab/class fee.

BIOL 427 NEUROMUSCULAR MECHANISMS OF THE UPPER BODY (2) Gross anatomy of the human upper extremity and cranial nerves. Upper extremity emphasis includes muscle action, innervation and major spinal cord pathways. Olfactory, optic, auditory and vestibular functions of cranial nerves are stressed. One lecture and two laboratory periods per week. Prerequisites: BIOL 190 or BIOL 201, BIOL 325 or BIOL 213. \$50 lab/class fee.

BIOL 428 [528] VIROLOGY (3) Cell and molecular biology of viruses. General virology, including pathogenesis and mortality, interaction with the immune system, and more thorough analysis of some medically relevant viruses. Prerequisite: BIOL 408 (may be taken concurrently) or BIOL 409 or BIOL 410 or BIOL 315.

BIOL 431 [530] HORTICULTURE (4) Plant culture and application to developing desirable plantings on home grounds or in public places with examples of appropriate types of plants for specific situations. Average of three laboratory hours per week. Prerequisite: BIOL 205 or BIOL 208.

BIOL 432 [532] VASCULAR PLANT TAXONOMY (4) A study of the history and principles of vascular plant systematics with laboratory time devoted to collection and identification of plants in the local flora. An average of three laboratory hours per week. Prerequisites: BIOL 205 or BIOL 208, BIOL 331 or consent of instructor.

BIOL 435 [535] PLANT ECOLOGY (4) Environmental factors and processes which control plant distribution, plant communities and vegetational biomes of North America. An average of three laboratory hours per week with two required three-day weekend field trips and a Saturday field trip emphasizing examples from Maryland and the mid-Atlantic states. Prerequisites: BIOL 202 and BIOL 205 or BIOL 208. \$50 lab/class fee.

BIOL 436 [536] PLANT PHYSIOLOGY (3) Life functions of plants as related to structure at all levels: cells, organs and the complete organism. Consideration of the interaction of environmental and genetic factors on plant metabolism. Prerequisites: BIOL 205 or BIOL 208 and CHEM 111; CHEM 330 recommended.

BIOL 446 TROPICAL ECOLOGY AND CONSERVATION (3) Evolution and ecology of tropical ecosystems. Mechanisms that maintain tropical diversity, species interactions,

anthropogenic impacts and conservation strategies. Prerequisites: BIOL 202; either BIOL 205, BIOL 207, BIOL 208 or consent of instructor.

BIOL 447 TROPICAL FIELD ECOLOGY (4) Field course set in the tropical rainforest. Includes exploration of different tropical ecosystems and training in techniques to carry out independent field research projects. Prerequisites: BIOL 202 and BIOL 207, 208 or consent of instructor.

BIOL 452 WETLAND ECOLOGY (4) Wetland ecology and wetland management, with special focus on wetlands of the mid-Atlantic region. Emphasis is on biological, physical, chemical, and ecological aspects of wetlands. Course also deals with valuation, classification, delineation and management of wetlands for biotic resources and water management. Average of three laboratory hours per week. Two to three mandatory Saturday field trips. Prerequisites: BIOL 202; and BIOL 205 or BIOL 207 or BIOL 208.

BIOL 455 FISH BIOLOGY (4) Evolutionary history, functional biology, ecology and conservation of fishes. Weekend field trips required. Prerequisites: BIOL 207 or BIOL 208 and CHEM 111; BIOL 325 recommended. \$50 lab/class fee.

BIOL 456 [556] ORNITHOLOGY (4) Evolutionary history, morphology, physiology, behavior and ecology of birds. One day-long weekend field trip and several early morning weekday field trips required. Prerequisites: BIOL 202 and BIOL 207 or BIOL 208 or consent of instructor. \$50 lab/class fee.

BIOL 458 [558] MAMMALOLOGY (4) Evolution, comparative morphology, systematics and distribution of mammals. Representative life histories are considered. Average of three laboratory hours per week. Prerequisite: BIOL 207 or BIOL 208. \$50 lab/class fee.

BIOL 461 [561] ENTOMOLOGY (4) Laboratory and field course in insects. Identification and recognition of the more common families and orders and a study of their structure, behavior, ecology, economic importance and control. Average of three laboratory hours per week. Prerequisite: BIOL 207 or BIOL 208. \$50 lab/class fee for BIOL 561.

BIOL 463 [563] DEVELOPMENTAL BIOLOGY (4) Embryonic development of animals, including differentiation, morphogenesis, pattern formation and organogenesis. Emphasis on cellular and molecular mechanisms governing these processes. Average of three laboratory hours per week. Prerequisites: BIOL 309 and either BIOL 214 or BIOL 325.

BIOL 467 [567] HERPETOLOGY (4) Systematic survey of the modern reptiles and amphibians. Emphasis is placed on the evolution of morphological and behavioral traits which have enabled the reptiles and amphibians to successfully exploit their individual habitats. Laboratory includes systematic classification, student seminars and field work. Average of three laboratory hours per week. Prerequisite: BIOL 207 or BIOL 208. \$50 lab/class fee.

BIOL 470 ADVANCED PHYSIOLOGY (4) Physiological topics discussed at the molecular, cellular, organ, organ system, and whole organism levels. Emphasis on integrating knowledge gained in prerequisite physiology courses and recent discoveries. Laboratory component will emphasize the scientific method, data interpretation, and quantitative skills. Topics may include: osmoregulation, gas exchange, nutrient delivery and use, thermoregulation, locomotion and regulation via the neural and endocrine systems. Not open to those who have successfully completed BIOL 465 or BIOL 469. Prerequisites: BIOL 214 or BIOL 325, CHEM 111 [CHEM 332 and BIOL 207 or BIOL 208 recommended].

BIOL 481 [581] DIRECTED READING IN BIOLOGY (1-3) Independent reading in an area selected by the student in consultation with the instructor. May not be applied toward the Biology major, Biology minor, or M.S. degree in Biology. May be repeated for a maximum of 3 units. Prerequisite: a minimum of 10 units in biology and written consent of instructor.

BIOL 483 WORKSHOP IN BIOLOGY (2) Intensive study of a specific topic or technique in the biological sciences. Topic varies with instructor. May be repeated for credit once

provided a different topic is covered. Prerequisites: one biology course and consent of instructor.

BIOL 484 SEMINAR IN ECOLOGY, EVOLUTION AND BEHAVIOR

(1) Discussion and analysis of current research in ecology, conservation biology, environmental science, evolution and animal behavior. May be repeated for a maximum of 2 units. Prerequisites: 12 units in biology, including BIOL 202 and at least one of the following: BIOL 310, BIOL 347, BIOL 371, BIOL 402, BIOL 411, BIOL 413, BIOL 435 or permission of instructor.

BIOL 485 [585] SEMINAR IN APPLIED BIOTECHNOLOGY (1) Current research articles in cell biology and microbiology are reviewed. May be repeated for a maximum of 2 units. Prerequisites: 12 units in biology, including one of the following: BIOL 309, BIOL 315, BIOL 318, BIOL 408 or 409.

BIOL 486 BIOLOGY MAJORS SEMINAR (1) Specific topic examined at the molecular, cellular, organismic and ecological levels of organization. Students will be required to present an oral and written report on an aspect of the topic. Prerequisites: 10 units in biology or consent of instructor; BIOL 202, BIOL 205, and BIOL 207 or BIOL 208.

BIOL 491 INDEPENDENT RESEARCH IN BIOLOGY (1-3) Independent investigation of a problem under the supervision of a staff member culminating in a written presentation. May not be used toward Biology minor or M.S. degree in Biology. May be repeated for a maximum of 5 units. Prerequisite: prior written consent of instructor who will direct research; 15 units in biology recommended.

BIOL 493 INTERNSHIP IN BIOLOGY (3) Practical application of biology in businesses, industries, public and private agencies. Not for major or minor credit. Prerequisites: 2.75 GPA, junior or senior standing, a minimum of 11 units in biology completed at Towson University; major in Biology, and consent of the biology internship coordinator. Special permit and co-op fee required. May be repeated once for credit. Graded S/U.

BIOL 494 [594] TRAVEL STUDY (1-3) A detailed investigation of field-oriented problems in biology away from the Towson University campus. Locations and topics to be selected by the department and instructors sponsoring the program. May be repeated for a maximum of 3 units. Consent of instructor required.

BIOL 495 COURSE RESEARCH (1) Research related to a specific course successfully completed by the student by invitation or with the consent of the instructor. Not for credit toward the Biology major, minor or M.S. degree in Biology. Consent of instructor required. May be repeated once for research related to a different course successfully completed by the student.

BIOL 498 HONORS RESEARCH IN BIOLOGY (2) Individual research of an extensive nature under the direction of a faculty member, culminating in an honors thesis. Credit for BIOL 498 not awarded until BIOL 499 is successfully completed. May not be used toward a Biology minor or M.S. degree in Biology. Prerequisites: open only to advanced honors candidates and by consent of instructor.

BIOL 499 HONORS THESIS IN BIOLOGY (2) Writing of an honors thesis based on individual research done under the direction of a faculty member. May not be used toward a Biology minor or M.S. degree in Biology. Prerequisites: open only to advanced honors candidates and by consent of instructor.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

BUSINESS, COMMUNICATION AND LIBERAL ARTS (BCLA)

Upper Division

BCLA 421 INTEGRATING MANAGEMENT SKILLS (BCLA CAPSTONE) (3) Business, Communication and Liberal Arts Capstone course integrating the student's major with principles of entrepreneurship and business management. Prerequisite: all other courses in the minor.

BUSINESS EXCELLENCE (BUSX)

Lower Division

BUSX 201 FOUNDATIONS OF BUSINESS (3) An integrated view of business organizations: study of the structure and organization of businesses, common business processes, and the interrelationships among business functions. Prerequisites: Pre-business or business major, ENGL 102 or equivalent.

Upper Division

BUSX 301 BUSINESS CORNERSTONE (3) Foundation course for developing knowledge, skills and attitudes (KSAs); problem-solving, self-assessment, teamwork and communication for future courses and careers. Required of all Accounting, E-Business and Business students. Not open to students who have successfully completed CBEC 301. Prerequisites: Junior status, completion of College of Business lower-level required courses with a grade equivalent of 2.00 or higher, a passing score on the computer proficiency exam, and the Advanced Composition requirement (may be taken concurrently).

BUSX 460 PROFESSIONAL EXPERIENCE (3) Application of business knowledge, skills and attitudes (KSAs) through professional responsibilities in employment, internship, or comparable experience. Prerequisites: senior status, completion of 18 CBE upper-level units including BUSX 301, MNGT 361, MKTG 341/342 and FIN 331. Special permit required.

CHEMICAL DEPENDENCY COUNSELING EDUCATION (CDCE)

Upper Division

CDCE 402 [502] HEALTH AND SOCIAL WELFARE PROMOTION: HEALTH COMMUNICATION (3) Analysis of health message design, health behavior and communication theory emphasizing the persuasion process to improve health and other social conditions of living. Application of theoretical principles augmented with specific skills to design, implement and evaluate health messages. Prerequisite: HLTH 101 or equivalent.

CDCE 403 [503] COGNITIVE BEHAVIORAL TREATMENT OF ADDICTIONS (3) Issues of substance abuse, referrals, clinical assessments and developing cognitive behavioral counseling strategies for successful intervention. Prerequisite: 6 lower-level units in chemical dependency counseling.

CDCE 405 [505] PROFESSIONAL STANDARDS AND ETHICAL RESPONSIBILITIES (3) Professional and ethical standards and guidelines that underlie professional practice in chemical dependency and other related counseling fields. Prerequisite: 6 lower-level units in chemical dependency counseling.

CDCE 470-475 [570-575] SPECIAL TOPICS IN CHEMICAL DEPENDENCY COUNSELING AND EDUCATION (3) Contemporary issues related to chemical dependency counseling, rehabilitation and/or education. May be repeated for a maximum of 6 units. Prerequisite: a minimum of 6 lower-level units in chemical dependency counseling or education.

CDCE 491-492 DIRECTED READINGS IN CHEMICAL DEPENDENCY COUNSELING AND EDUCATION (1-3) Focused reading of literature in the chemical dependency counseling, rehabilitation and/or education/drug prevention disciplines. Prerequisites: a minimum of 12 units in chemical dependency counseling or prevention and consent of program director/department chair; must have junior or senior status.

CDCE 493 SERVICE LEARNING (3) Focus on a particular content area/problem/issue in the field of chemical dependency counseling and education via literature search and active participation in an agency/treatment setting. Prerequisites: a minimum of 12 units in chemical dependency counseling or prevention and consent of program director/department chair.

CDCE 496 CHEMICAL DEPENDENCY COUNSELING AND REHABILITATION INTERNSHIP (6) Supervised, practical experience in a chemical dependency agency, program or

other appropriate community health setting. Emphasizing counseling and rehabilitation. Graded S/U. Majors only; special permit required. Prerequisite: completion of at least 24 upper-level units in required course work with a grade of 2.00 or better, including CDCE 405.

CDCE 497 CHEMICAL DEPENDENCY EDUCATION AND PREVENTION INTERNSHIP (6) Supervised, practical experience in a chemical dependency agency, program or other appropriate community health setting where students will apply knowledge and skills they have acquired via their academic experience. Graded S/U. Majors only, special permit required. Prerequisites: completion of at least 24 upper-level units in required course work with a grade of 2.00 or better, including CDCE 405 and HLTH 315.

CHEMISTRY (CHEM)

Lower Division

CHEM 100 CHEMISTRY AND CURRENT PROBLEMS (3) Chemistry concepts and their application to current topics such as environment, energy, food and health-related chemistry. Three lecture demonstration hours.

CHEM 103 FOUNDATIONS OF CHEMISTRY (3) Development of reasoning and quantitative skills for problem solving. Introduction to atomic structure, chemical reactions, chemical nomenclature, formulas, symbols and equations, basic skills for laboratory work. Three lecture hours. Not for credit toward Chemistry major or minor. S/U grading.

CHEM 104 INTRODUCTION TO ENVIRONMENTAL CHEMISTRY (4) Principles of chemistry that are relevant to environmental issues, including water quality, nutrient pollution, air pollution and specific classes of environmental contaminants. Three lecture hours and three laboratory hours. Prerequisite: three years of high school mathematics. \$25 lab/class fee.

CHEM 105 CHEMISTRY FOR ALLIED HEALTH PROFESSIONS I (4) An introduction to the concepts of general chemistry, including states of matter, atomic structure and periodic table, molecular structure, chemical reactions, intermolecular forces, solutions, buffers and pH, and radioactivity. Laboratory includes data handling and chemical and instrumental techniques. This course may not be used as a prerequisite for the Chemistry major program. Three lecture hours and one three-hour laboratory. Prerequisite: MATH 115 or MATH 119 (either may be taken concurrently). \$25 lab/class fee.

CHEM 106 CHEMISTRY FOR ALLIED HEALTH PROFESSIONS II (4) An introduction to organic chemistry and biochemistry using a functional group approach; physical and chemical properties and typical reactions of organic compounds; composition and properties of lipids, carbohydrates, proteins and nucleic acids; and the role of enzymes, vitamins and hormones. The laboratory introduces students to simple techniques of synthesis and analysis, including chromatographic and chemical methods. Three lecture hours and one three-hour laboratory. Prerequisite: CHEM 105 or CHEM 115. \$25 lab/class fee.

CHEM 110 GENERAL CHEMISTRY I (4) Atomic and molecular structure; theories of bonding, stoichiometry; chemical reactions; states of matter; solutions. Laboratory work involves experiments dealing with the determination of physical properties of matter, molecular weights of compounds, stoichiometry, atomic and molecular structure, and common types of reactions. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 115, 119, 211 or 273 (may be taken concurrently). Science and math majors/minors only. Lab/class fee will be assessed.

CHEM 111 GENERAL CHEMISTRY II (4) Chemical thermodynamics, equilibrium, kinetics, solutions; acids, bases and their aqueous equilibria; solubility product; oxidation-reduction and electrochemistry; elements of coordination and nuclear chemistry; chemistry of some important metallic and nonmetallic elements. Laboratory includes preparation and quantitative analysis of a coordination compound; semimicro qualitative analysis of selected cations and anions. Three lecture hours and one three-hour laboratory period. Offered each term. Not recommended for non-science majors. Prerequisite: CHEM 110. \$25 lab/class fee.

CHEM 115 HONORS CHEMISTRY FOR ALLIED HEALTH PROFESSIONALS I (4) An introduction to the concepts of general chemistry, including states of matter, atomic structure and periodic table, molecular structure, chemical reactions, intermolecular forces, solutions, buffers and pH and radio activity. Laboratory includes data handling and chemical and instrumental techniques. This course may not be used as a prerequisite for the Chemistry major program. Three lecture hours and one three-hour laboratory. Prerequisite: MATH 115 or MATH 119 (either may be taken concurrently). Honors College course. \$25 lab/class fee.

CHEM 210 INTRODUCTION TO ANALYTICAL CHEMISTRY (5) Theory and practice of chemometrics, gravimetry, titrimetry, chromatography, electrochemistry, and spectrophotometry. Three lecture hours, one laboratory lecture hour and three laboratory hours. Prerequisite: CHEM 111. \$50 lab/class fee.

Upper Division

CHEM 301 PROFESSIONAL ETHICS FOR SCIENTISTS (3) Integrity of scientific literature and the responsibilities of scientists to associates and the public. Discussion of principles and case studies emphasizing the physical sciences. Does not count toward Chemistry major or minor. Prerequisites: three courses in ASTR, BIOL, CHEM, ENVS, GEOL, PHYS or PHSC, and at least two courses with laboratory; ENGL 102.

CHEM 310 INSTRUMENTATION IN ANALYTICAL CHEMISTRY (5) Theory and practice of spectroscopic, chromatographic and electrochemical instruments, their design and modification to solve practical problems. Two lecture hours and four laboratory hours. Prerequisites: CHEM 210 and CHEM 345. \$50 lab/class fee.

CHEM 323 INORGANIC CHEMISTRY (4) Atomic structure; valence-bond, molecular orbital and crystal-field theories of bonding; structure and bonding in ionic and metallic solids; chemistry of main-group and transition-metal compounds; acid-base theories; organometallic compounds; syntheses and characterizations of main-group and transition-metal compounds. Three lecture hours and three laboratory hours. Prerequisite: CHEM 111.

CHEM 330 ESSENTIALS OF ORGANIC CHEMISTRY (5) A one-term course in organic chemistry for non-chemistry majors taught on a conceptual basis. Emphasis will be on principles, mechanisms and modern techniques. Laboratory will include synthesis and identification of organic compounds. Three lecture hours, one recitation hour and one three-hour lab period. Prerequisite: CHEM 111.

CHEM 331 ORGANIC CHEMISTRY I (5) Structure, stereochemistry, reactions and their mechanisms, preparation and properties of alkanes, alkenes, alkynes, aromatic compounds, alkyl halides and alcohols. Laboratory techniques include purification, spectroscopic (IR, NMR) and chromatographic (GLPC) methods of identification, and synthesis. Three lecture hours, one hour of laboratory lecture and one three-hour lab period. Prerequisite: CHEM 111. \$50 lab/class fee.

CHEM 332 ORGANIC CHEMISTRY II (5) Structure, reactions and their mechanisms, preparation and properties of alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines, carbohydrates, etc. Laboratory emphasizes synthetic techniques and modern qualitative organic analysis using chemical reactions and IR, UV and NMR. Three lecture hours, one hour of laboratory lecture and one three-hour lab period. Prerequisite: CHEM 331. \$50 lab/class fee.

CHEM 345 PRINCIPLES OF PHYSICAL CHEMISTRY (3) Empirical derivations of the unifying physical principles of chemistry. Emphasis on applications including environmental chemistry and biochemistry. Prerequisites: CHEM 111, MATH 211 or MATH 273, PHYS 211 or PHYS 241.

CHEM 346 THEORETICAL FOUNDATIONS OF PHYSICAL CHEMISTRY (3) Theoretical principles unifying the vast body of chemical observations. Extensive use of differential and integral calculus in developing mathematical models describing the behavior of chemical systems. Prerequisites: CHEM 345, MATH 274, PHYS 212 or PHYS 242.

CHEM 351 BIOCHEMISTRY I (3) An overview of the chemistry of proteins, nucleic acids, carbohydrates and lipids. Basic enzyme catalysis and kinetics, biochemical genetics, membrane structure, bioenergetics and analytical methods. General principles of metabolism applied to several major pathways. Three lecture hours. Prerequisite: CHEM 330 or CHEM 332.

CHEM 356 BIOCHEMISTRY LABORATORY (2) Physical methods in biochemistry including spectrophotometry, centrifugation and ultra-centrifugation, electrophoresis and chromatography. Isolation and purification of proteins and nucleic acids. Enzyme kinetics and the binding of small molecules to macromolecules. One lecture hour and three laboratory hours. Prerequisites: CHEM 210 and CHEM 351 (may be taken concurrently).

CHEM 357 BIOCHEMISTRY II (3) Carbohydrate and lipid metabolism and their regulation, overview of amino acid and nucleotide metabolism, membrane structure and function, DNA-protein interactions and regulation of gene expression, and other topics in biochemistry. Prerequisite: CHEM 351.

CHEM 361 [562] CHEMICAL AND BACTERIOLOGICAL STUDIES ON WATER POLLUTION (3) Deals mainly with water pollution: causes, effects and cures. Considers details of water. Concerns standards of water purity and variables involved. Demonstration of analytical methods to be given. Case studies and applications are viable approaches to this topic. Three lecture hours. Prerequisites: BIOL 110 or 115 and CHEM 111.

CHEM 365 [566] POLYMER CHEMISTRY (3) Course will cover the following aspects of polymers: structure, physical properties, methods of preparation, rheology, mechanical properties, degradation and stabilization, application and fabrication, and related contemporary topics. Carbon chain and heterochain polymers will be discussed, and spectroscopic methods of analysis (IR, UV and NMR) will be presented. Three lecture hours. Prerequisite: CHEM 332.

CHEM 372 INTERMEDIATE LABORATORY I (2) Introductory experiments in physical and analytical chemistry applying spectroscopic, calorimetric and electrochemical techniques to characterize properties of materials and chemical systems. Three laboratory hours. Prerequisites: CHEM 210 and CHEM 345 (may be taken concurrently).

CHEM 373 INTERMEDIATE LABORATORY II (1) A series of experiments in physical and analytical chemistry applying mass spectrometry, NMR spectroscopy, IR spectroscopy, and molecular modeling to problems in molecular structure, chemical composition, reaction kinetics and reaction equilibrium. Three laboratory hours. Prerequisites: CHEM 332 and CHEM 372.

CHEM 391-394 [501-504] SPECIAL PROBLEMS IN CHEMISTRY (1-3) A laboratory or library problem in chemistry to be selected by the student in consultation with the instructor. Students are required to submit a written report. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor.

CHEM 395-396 INTERNSHIP IN CHEMISTRY (1-3) Students will be given credit in this cooperative education program for approved experience in chemistry. A written final report will be submitted by students. Graded S/U. May be repeated for credit as CHEM 396 for a maximum of 6 units. Prerequisites: CHEM 332 and CHEM 210, and consent of instructor.

CHEM 401 [500] SEMINAR IN CHEMISTRY (1) An introduction to chemical literature. Attendance at all seminars and presentation of seminars to the department on topics selected by the Chemistry faculty or selected by the student and approved by the faculty. One and one-half hour seminar period. Prerequisites: CHEM 210, CHEM 332; corequisite: CHEM 345.

CHEM 450 ECOLOGICAL BIOCHEMISTRY (3) An exploration of the diversity of natural products involved in biochemical interactions between plants, animals (including insects, humans and other herbivores) and microbial flora. The course focuses on the ways that biochemical products have profound effects on the relationships of living systems in most ecological environments. Human interactions

with toxins, drugs of abuse, herbal medicines or similar compounds will be covered. Prerequisites: CHEM 330 or CHEM 331 and BIOL 201 or BIOL 202.

CHEM 461 ADVANCED LECTURE TOPICS (1-3) Advanced studies in one of the major topics in chemistry. Content will depend on the instructor. This course may be repeated for a maximum of 9 units of study in different topics. Prerequisites: CHEM 345, CHEM 332 and consent of instructor.

CHEM 462 ADVANCED LABORATORY TECHNIQUES (1-2) An advanced, focused laboratory in chemistry. Content will depend on the instructor. This course may be repeated for a maximum of 6 units as a laboratory experience with a different focus. Prerequisites: CHEM 332, CHEM 372 and consent of instructor.

CHEM 480 CHEMICAL TOXICOLOGY (3) Study of the fate, effects and mechanisms of action of toxicants; physical and biological factors affecting transport, transformation and toxicity of chemical stressors; emphasis on forensic and environmental applications. Prerequisites: CHEM 351, BIOL 201 or consent of instructor.

CHEM 491-494 INTRODUCTION TO RESEARCH IN CHEM (4) An original experimental or theoretical investigation to be conducted under the supervision of a faculty member. May be repeated as CHEM 492, etc. Formal written report and/or oral presentation required. Prerequisite: consent of instructor.

CHEM 499 HONORS THESIS IN CHEMISTRY (2) Writing of an honors thesis based on independent research done under the direction of a faculty member. Oral presentation of the work in a public seminar. Prerequisites: consent of instructor, and open only to students who have been approved as departmental honors candidates.

CHINESE (CHNS)

Lower Division

CHNS 101 ELEMENTARY MODERN CHINESE I (3) An introduction to standard modern Chinese (Mandarin). Emphasis is on reading and writing of Chinese. Pin Yin, the phonetic system of pronouncing Chinese words, is introduced. Text, sound tape and vocabulary cards. Not open to native or heritage speakers without consent of instructor.

CHNS 102 ELEMENTARY MODERN CHINESE II (3) An introduction to standard modern Chinese (Mandarin). Emphasis is on reading and writing of Chinese. Pin Yin, the phonetic system of pronouncing Chinese words, is introduced. Text, sound tape and vocabulary cards. Not open to native or heritage speakers without consent of instructor. Prerequisite: CHNS 101.

CHNS 201 CHINESE INTERMEDIATE I (3) Thorough review of elementary Chinese; vocabulary building; conversational fluency and prose composition; translation; reading and discussion of selected outside reading (newspapers, magazines, Chinese literature). Not open to native or heritage speakers without consent of instructor. Prerequisite: CHNS 102.

CHNS 202 CHINESE INTERMEDIATE II (3) Thorough review of elementary Chinese; vocabulary building; conversational fluency and prose composition; translation; reading and discussion of selected outside reading (newspapers, magazines, Chinese literature). Not open to native or heritage speakers without consent of instructor. Prerequisite: CHNS 201.

Upper Division

CHNS 301 CHINESE COMPOSITION AND CONVERSATION I (3) Intensive exercises in Chinese conversation and composition beyond the intermediate level. Conducted in Chinese. Prerequisite: CHNS 202 or equivalent.

CHNS 302 CHINESE COMPOSITION AND CONVERSATION II (3) Intensive exercises in Chinese conversation and composition beyond the intermediate level. Conducted in Chinese. Prerequisite: CHNS 301 or equivalent.

CHNS 311 CHINESE CULTURE AND CIVILIZATION (3) Value-system and way of life as embodied in the language,

history, arts and customs of China. Conducted in Chinese. Prerequisites: CHNS 202 or equivalent.

CHNS 370 SPECIAL TOPICS IN CHINESE (3) Specialized topics in language and culture. Content varies. May be repeated once for a total of 6 units provided a different topic is covered. Prerequisite: CHNS 202 or equivalent.

CHNS 491-492 DIRECTED READINGS IN CHINESE I-II (1-3, 1-3) Intensive reading under the supervision of a departmental adviser. Conducted in Chinese. Prerequisites: CHNS 301 or 302; consent of department chair.

CHNS 494 CHINESE STUDY ABROAD (3-16) The study of Chinese language, culture and/or literature at a university in China, Taiwan or Hong Kong. Available fall/spring/summer. (See department chair and Office of International Education.) Prerequisites: consent of the Department of Modern Languages program coordinator and department chair.

COMMUNICATION STUDIES (COMM)

Lower Division

COMM 131 FUNDAMENTALS OF SPEECH COMMUNICATION (3) Perspectives of rhetoric and public speaking, investigating contemporary American experiences, delivering and critiquing speeches.

COMM 132 HONORS FUNDAMENTALS OF SPEECH COMMUNICATION (3) Instruction in various kinds of public speaking (e.g., informative, persuasive, introductory and impromptu); doing research, developing ideas with evidence, preparing outlines, delivering and critiquing speeches with emphasis on rhetorical criticism and ethical issues in speech communication. Honors College course.

COMM 201 COMMUNICATION THEORY (3) Foundation for theories focusing specifically in relational, group, public and cultural communication contexts. Prerequisites: COMM 131/132 and ENGL 102/190. Not open to students who have successfully completed COMM 101.

COMM 215 INTERPERSONAL COMMUNICATION (3) Examination and application of core concepts, advanced theories and current research. Prerequisite: COMM 101/201 (may be taken concurrently).

COMM 231 NONVERBAL COMMUNICATION (3) Examination of the elements of nonverbal communication: environment, personal space, physical appearance, body movement, gestures, touching behavior, facial expression and vocal cues. Course will investigate the effects of these on interpersonal and public communication. Prerequisite: COMM 101/201. Not open to students who have successfully completed COMM 301.

COMM 249-250 SPEECH AND DEBATE PROGRAM I, II (1.5) Practical skill development and participation within Towson's Speech and Debate Program: preparation, practice and competition in debate and/or individual speaking events; researching controversial issues, preparing and delivering speeches, participating in on-campus and intercollegiate events. Repeatable for a maximum of 3 units. Prerequisite: Consent of instructor.

Upper Division

COMM 303 ADVANCED PUBLIC SPEAKING (3) Principles and application of evidence, composition, organization, analysis and criticism. Manuscript, persuasive and impromptu speaking. Prerequisite: COMM 131/132.

COMM 304 PERSUASION (3) Theory and practice of linguistic and symbolic persuasion; applications of rhetorical principles in social sciences and formal and informal communication; analysis of rhetoric through discussion. Prerequisites: Junior/senior standing or consent of instructor.

COMM 311 RHETORICAL THEORY AND CRITICISM (3) Foundation in the theories and practice of rhetorical studies. Emphasizing the historical development of rhetorical theories and ideas, from Antiquity to the Contemporary period, the application of theories to contemporary issues, and the scholarly process of studying rhetoric. Prerequisites: COMM 101/201, and COMM 215. Majors only. Not open to students who have successfully completed COMM 211.

COMM 315 BUSINESS AND PROFESSIONAL COMMUNICATION (3) Professional interview and other dyadic encounters, curriculum vitae preparation, and exploration of communication in business structures: agendas, briefings, meetings, conferences, and strategies of attributional and communicative techniques. Prerequisite: COMM 131/132.

COMM 331 ADVOCACY AND ARGUMENT (3) Essentials of argumentation; research, analysis, evidence, reasoning, case construction and refutation. Applications in fact, value and public policy settings. Prerequisites: COMM 101/201 and COMM 215. Majors/minors or instructor consent.

COMM 349-350 SPEECH AND DEBATE PROGRAM III, IV (1.5, 1.5) Practical skill development and participation within Towson's Speech and Debate Program: preparation, practice and competition in debate and/or individual speaking events, researching controversial issues, preparing and delivering speeches, participating in on-campus and intercollegiate events. Repeatable for a maximum of 6 units. Prerequisite: Consent of instructor.

COMM 377 INTERCULTURAL COMMUNICATION (3) Principles, research and applications of cross-cultural discourse. Prerequisites: COMM 101/COMM 201 and COMM 215. Not open to students who have successfully completed COMM 378.

COMM 418 [518] COMMUNICATION TRAINING AND DEVELOPMENT (3) Instructional strategies for implementing objectives, specifying and evaluating results. Prerequisites: COMM 131/132 and junior/senior standing.

COMM 419 [519] ORGANIZATIONAL COMMUNICATION (3) Theories and processes of decision making in organizations including classical, human resources, culture, systems and critical approaches. Emphasis on the role communication plays in assimilation, conflict, diversification and crisis management. Prerequisites: COMM 101/201 or MCOM 101, and junior/senior standing.

COMM 420 [520] COMMUNICATION IN THE LEGAL PROCESS (3) Focus on communication questions and skills by lawyers, judges, litigants and jurors in criminal and civil justice. Survey of research related to verbal and nonverbal aspects of communication as they apply to the legal concerns of interview, negotiation and litigation. Prerequisites: COMM 101 or COMM 201, and junior/senior standing.

COMM 422 [522] CONFERENCE AND MEETING MANAGEMENT (3) Communicative details in preparing for and conducting events. Prerequisites: COMM 101/201 and junior/senior standing.

COMM 440 COMMUNICATION AND GENDER (3) The creation of gender images through communication and the development of lines of argument regarding masculinity and femininity. Emphasizing both historical and contemporary theories of gender arguments in public discourse. Prerequisites: COMM 101/201 and COMM 215.

COMM 470 SPECIAL TOPICS IN COMMUNICATION (3) In-depth study of a selected area dependent on student and faculty interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: COMM 101 or MCOM 101.

COMM 480 COMMUNICATION RESEARCH (3) Descriptive methods, data analysis, critical and ethical evaluation of communication studies. Prerequisites: COMM 101/201 and COMM 215. Majors and seniors only.

COMM 490 INTERNSHIP IN COMMUNICATION STUDIES (1-6) Practical field experiences. Under faculty supervision, the student works as an intern with a working professional in some field of communication. Graded S/U. May be repeated for a maximum of 6 units. Prerequisite: Junior/senior standing. Minimum overall GPA of 2.75 and 3.00 in the major; completion of appropriate courses determined by the department.

COMM 495 INDEPENDENT STUDY IN COMMUNICATION STUDIES (1-6) Directed study through readings, projects, papers or seminars. May be repeated for a maximum of 6 units. Prerequisites: Junior/senior standing and consent of instructor.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

COMPUTER INFORMATION SYSTEMS (CIS)**Lower Division**

CIS 211 FUNDAMENTALS OF INFORMATION SYSTEMS AND TECHNOLOGY (3) An introduction to information systems and technology in today's organizations. Topics include hardware, software and communications fundamentals, systems development, information management, work-force considerations and related societal, legal and ethical issues. Pre- or Co-requisite: COSC 111.

CIS 212 INTRODUCTION TO BUSINESS PROGRAMMING (3) A study of computer programming for business applications using a language such as COBOL. Students will design, implement, test and document programs in application areas such as payroll, accounting, inventory and file maintenance. Not open to those who successfully completed COBOL programming. Prerequisite: COSC 111 or programming experience.

CIS 239 COMPUTER SYSTEMS ARCHITECTURE (3) Internal representation of data and instruction, memory organization, microprogramming, multi-level machines, microcomputers, supercomputers and parallel computers. Prerequisites: CIS 211, COSC 236 and MATH 263.

CIS 265 VISUAL BASIC PROGRAMMING (3) Concepts, tools and techniques of software development using an event-driven language that supports a graphical user interface and an object-oriented environment. Two lecture hours and two laboratory hours. Prerequisite: Programming experience required.

Upper Division

CIS 334 DATA ORGANIZATION (3) Information abstraction, representation and organization, including realization of data and the logic to manipulate it, concepts of levels of abstraction, and information organization, particularly within organization. Not open to students who successfully completed COSC 336. Prerequisite: COSC 237.

CIS 341 ADVANCED CONCEPTS OF INFORMATION SYSTEMS (3) Relationships among information systems, objectives and systems structure, covering human aspects, systems models and applications. Prerequisites: COSC 237 and COSC 111 or CIS 115.

CIS 350 TELECOMMUNICATIONS (3) Discusses telecommunications from the perspectives of technology, systems, and management. Prerequisites: CIS 239 and CIS 334, or ITEC 315 and ITEC 325.

CIS 377 INFORMATION SYSTEMS SECURITY (3) Information systems security threats, technologies and business requirements, emphasizing human and technological aspects of IT security problems. Not open to students who successfully completed CIS 477. Prerequisite: CIS 211.

CIS 379 SYSTEMS ANALYSIS AND DESIGN (3) Guides students through the stages of the evolution of data processing systems, including analyses of present information flow, system specifications, equipment selection and implementation of the system to provide an understanding of the skills and knowledge needed for effective use of data processing equipment in meeting information needs. Prerequisites: CIS 211 and COSC 237.

CIS 397 INTERNSHIP IN IS (3) Students work in a local computing facility under on-site and faculty supervision. May be repeated for a maximum of 6 units. Only 3 units can be applied toward the major. Graded S/U. Prerequisites: 6 units of upper-division COSC or CIS courses and consent of instructor.

CIS 425 DECISION SUPPORT SYSTEMS (3) Computer-based information systems for managerial decision-making. Includes mathematical modeling and decision support systems, systems architecture, DSS development tools, organization issues of decision support, multiparticipant DSS and integration with other information systems. Not open to students who successfully completed COSC 425. Prerequisites: CIS 379 and MATH 231.

CIS 433 SPECIAL TOPICS IN INFORMATION SYSTEMS (1-3) Studies in selected areas of information systems. May be repeated for a maximum of 3 units. Prerequisites: 9 units of information systems and consent of instructor.

CIS 435 HUMAN-COMPUTER INTERACTION (3) Covers effective, productive information systems, including interactive computer systems, input and output devices, screen layouts, ergonomics, usability testing, expert reviews, accessibility for people with impairments, universal design and organizational impacts. Not open to students who successfully completed COSC 435. Prerequisite: CIS 379.

CIS 440 SYSTEMS DEVELOPMENT FOR ELECTRONIC COMMERCE (3) Developing an organization's electronic commerce technical infrastructure, hardware and software specification issues, strategic development of computer-mediated business and tools, policy and societal impact issues as well as future directions in electronic commerce. Prerequisite: CIS 379.

CIS 445 UNIVERSAL USABILITY: DESIGNING COMPUTER INTERFACES FOR BLIND USERS (3) Designing computer interfaces for the needs of blind users. Prerequisite: CIS 379.

CIS 458 ORGANIZATIONAL DATABASE MANAGEMENT (3) The database environment in an organization. Database development, analysis, design, implementation and administration. Applications of database programs for organizational information processing. Students cannot earn credit for both COSC 457 and CIS 458. Prerequisites: CIS 334 and COSC 336.

CIS 475 ANALYSIS AND DESIGN FOR WEB SITES (3) Information architecture; conceptual design of the web page interface, HTML, Javascript, CSS, usability testing, implementation and management. Credit cannot be earned for both COSC 484 and this course. Prerequisite: CIS 379.

CIS 479 SOFTWARE PROJECT MANAGEMENT (3) Technical and behavioral aspects of project management: concepts, needs identification, software project manager, software teams, software project organizations, project communications, software project planning, scheduling, control, associated costs, using management software tools. Prerequisite: CIS 379.

CIS 495 INDEPENDENT STUDY IN INFORMATION SYSTEMS (3) Directed study in selected areas of computer information systems for which there is no regular course offered. The use of a proposal and well-defined objectives as well as a formal paper or project report are required. Prerequisites: senior standing in IS and consent of instructor.

COMPUTER SCIENCE (COSC)**Lower Division**

COSC 109 COMPUTERS AND CREATIVITY (3) Creative activities involving symbolic manipulation and computer graphics, animation, dynamic storytelling, computer music, visual effects, Web publishing, computer games, artwork and multimedia. Additional laboratory time required. \$25 lab/class fee.

COSC 111 INFORMATION AND TECHNOLOGY FOR BUSINESS (3) Retrieve, process, classify, sort and evaluate data and information. Problem-solving techniques, creative thinking skills, communication skills, team building and professional ethics. Laboratories covering the Internet, spreadsheets and databases. Additional laboratory time required. Students cannot earn credit for both this course and IDNM 101. \$25 lab/class fee.

COSC 112 HONORS INFORMATION AND TECHNOLOGY FOR BUSINESS (3) Introduction to the use of information technology to retrieve, filter, process, classify, sort and evaluate data and information in a business environment. Problem-solving, creative thinking, effective communication, team building and professional ethics within an information systems framework. Labs covering library information systems, the Internet, word processing, presentation software, spreadsheets and databases will be emphasized. Students cannot earn credit for both this course and IDNM 101. Honors College course.

COSC 119 USING INFORMATION EFFECTIVELY IN THE COMPUTING SCIENCES (3) Identifying, retrieving, filtering,

storing, processing, classifying, sorting, evaluating and presenting data and information in a technology and computing environment. Emphasis will be placed on problem-solving techniques with the computing field. Team-based case studies will be utilized and hands-on labs will be an important component of the course. Two hours lecture and one hour lecture in the lab.

COSC 175 GENERAL COMPUTER SCIENCE (4) Computer systems overview, algorithm development, data presentation, software design and testing methodologies, and brief overview of advanced topics.

COSC 210 INTRODUCTION TO DIGITAL SECURITY AND DIGITAL FORENSICS (3) This course is an introduction to digital security and digital forensics for computer science and non-computer science majors. Topics include the history and scope of digital crime, characteristics of various types of digital crime, the interrelationship of the fields of forensic science, behavioral science and computer science, and societal, legal and ethical issues related to digital security and forensics.

COSC 225 HONORS INTRODUCTION TO LEGO ROBOTICS (3) Basic mechanical, electronics and control issues in Robotics using the LEGO Mindstorms platform. Design, implement and program robotic systems of interdisciplinary nature. Honors College course only.

COSC 236 INTRODUCTION TO COMPUTER SCIENCE I (4) Introduction to structured problem solving, algorithm development and computer programming with a modern high-level structured programming language. Three lecture hours and two laboratory hours. Prerequisite: demonstrable programming knowledge and experience and MATH 119 or equivalent.

COSC 237 INTRODUCTION TO COMPUTER SCIENCE II (4) Introduction, data structures and their implementations, computer systems concepts, application of data structures in sort and search algorithms, and the software development process. Prerequisite: COSC 236. Corequisite: MATH 211 or MATH 273.

COSC 290 PRINCIPLES OF COMPUTER ORGANIZATION (4) Computer organization and architecture including computer arithmetic, digital logic, principles of assembly language, memory system organization, computer interfacing, and CISC/RISC architecture. Three hours per week of laboratory work required. (May not be taken for credit by students who have had both COSC 280 and COSC 338.) Prerequisites: COSC 236 and MATH 263.

Upper Division

COSC 310 ADVANCED PROGRAMMING (3) Advanced programming concepts within the context of a specific programming language for computer science and related majors. It does not count towards the major. The course may be repeated up to 6 units when a different programming language is offered. Programming languages offered may include C, C++, C#, Python, Ruby and others. Prerequisite: COSC 237.

COSC 311 DIGITAL TECHNOLOGIES IN SOCIETY (3) Foundations and impacts of computing and digital technologies, including history, applications and societal impacts. Prerequisites: junior status and two science courses or one math course and one science course.

COSC 314 [MATH 314] INTRODUCTION TO CRYPTOGRAPHY (3) A broad introduction to cryptography and its mathematical foundations, including applications to computer-network security services and mechanisms (confidentiality, integrity, authentication, electronic case and others) and to various protocols in distributed computation. Prerequisites: COSC 236, either MATH 263 or MATH 267, and junior standing or permission of the instructor.

COSC 321 COMPUTERIZATION AND ITS IMPACTS (3) Computer technology and its social and economic impacts on organizations and individuals. Prerequisites: junior/senior status and completion of two science courses or one math course and one science course.

COSC 336 DATA STRUCTURES AND ALGORITHM ANALYSIS (4) Discussion of data and type abstractions, a number of different data structures and the tradeoffs involved in the use of such data structures, the analysis of algorithms,

sort and search algorithms, and a discussion of file organization and file access methods. Prerequisite: COSC 237. Corequisite: MATH 274.

COSC 350 DATA COMMUNICATIONS AND NETWORKING (3) Networks, topologies, architectures and protocols, circuit and packet switching, TCP/IP suite, network management and security, and network programming. Prerequisites: either COSC 336 and COSC 290 or CIS 239 and CIS 334.

COSC 378 [MATH 378] SCIENTIFIC MODELING AND SIMULATION (3) Interdisciplinary introduction to scientific simulation. Mathematical modeling, numerical analysis and object-oriented computer programming. Not open to students who have successfully completed MATH 378. Prerequisites: MATH 274, COSC 236.

COSC 397 INTERNSHIP IN COMPUTER SCIENCE (3) Students work in local computing facility under on-site and faculty supervision. May be repeated for a maximum of 6 units. Only 3 units can be applied to the major. Graded S/U. Prerequisites: 6 units of upper-division computer science or computer information systems courses and consent of instructor.

COSC 412 SOFTWARE ENGINEERING (3) Methodology of designing and programming for a wide area of applications with a high degree of modifiability, efficiency, reliability and understanding. Prerequisites: CIS 334 or CIS 335 or COSC 336 and one 400-level COSC/CIS course.

COSC 417 INTRODUCTION TO THE THEORY OF COMPUTING (3) A general introduction to the theory of computation, including finite automata, compatibility, formal languages and their relation to automata, algorithms and algorithmic complexity. The major emphasis will be on developing formal descriptions of computers and computational processes, and practical implications of theoretical results. Prerequisite: COSC 336.

COSC 418 ETHICAL AND SOCIETAL CONCERNS OF COMPUTER SCIENTISTS (3) Ethical questions and societal concerns related to the widespread uses of computers and the resulting responsibilities of computer scientists. Prerequisites: two science courses or one math course and one science course.

COSC 431 SELECTED TOPICS IN COMPUTER SCIENCE (1-3) Independent studies in selected areas of computer science. A maximum of 4 units may be earned in selected topics. Prerequisite: consent of instructor and 9 units of computer science.

COSC 436 OBJECT-ORIENTED DESIGN AND PROGRAMMING (3) Introduction to object-oriented design and programming technology (OOD/OOP). Main phases in object-oriented design and techniques in object-oriented programming. Programming language design and implementation issues for object-oriented languages. Prerequisite: COSC 336.

COSC 439 OPERATING SYSTEMS (3) Operating systems as resource manager with emphasis on file processor, memory, and device management and processes. Design and implementation of a simulated multiprogramming operating system. Prerequisite: COSC 336.

COSC 440 OPERATING SYSTEMS SECURITY (3) An in-depth discussion of security concepts in operating systems. This course examines some of the security issues in current operating systems and discusses the existing tools and technologies for setting up a secure system. Prerequisite: COSC 439.

COSC 441 COMPUTER PERFORMANCE EVALUATION (3) Computer system performance evaluation methodologies, techniques and tools, including different types of monitors as a measurement tool, work-load characterization, important performance indices, analytic modeling with particular emphasis on the application of the operational queuing network modeling techniques to performance analysis, and technical aspects of computer selection. Prerequisite: MATH 274 and Pre or Corequisite: COSC 439.

COSC 450 NETWORK SECURITY (3) Network security principles and applications, including authentication applications. IP security, Web security, network management security, wireless security and system security. Prerequisites: COSC 314 or MATH 314, and COSC 350.

COSC 455 PROGRAMMING LANGUAGES: DESIGN AND IMPLEMENTATION (3) Underlying concepts in high-level programming languages and techniques for their implementation, a survey of a selected group of such languages along with a discussion of the interrelationship between programming and programming languages. Prerequisite: COSC 336.

COSC 457 DATABASE MANAGEMENT SYSTEMS (3) Data models and sublanguages; security and integrity problems; functions of the database administrator; implementation and use of a database management system; a comparison of widely used DBMS packages. Prerequisite: CIS 334 or COSC 336.

COSC 458 APPLICATION SOFTWARE SECURITY (3) A study of security concepts in developing software applications. This course discusses design principles for secure software development, and some of the security issues in current programming and scripting languages, database systems and Web servers. Prerequisite: COSC 455. Corequisite: COSC 457.

COSC 459 COMPUTER SIMULATION AND MODELING (3) Simulation models and languages, data collection and output analysis, random number generation and Monte Carlo integration, model verification and validation, variance reduction techniques, optimization, the implementation and use of simulation techniques in problem solving. Prerequisites: COSC 336 and MATH 330 or CIS 334 and MATH 231.

COSC 461 ARTIFICIAL INTELLIGENCE (3) A survey of the problems and techniques involved in producing or modeling intelligence in computers. Particular emphasis will be placed on representation of knowledge and basic paradigms of problem solving. Topics include game playing, theorem proving, natural language and learning systems. Prerequisite: COSC 336 or CIS 334.

COSC 465 ROBOTICS (3) Physical mechanisms of robotics, issues of modeling, planning control and programming. Principles underlying the design and analysis of robotic systems, with emphasis on the autonomous and behavior-based systems. Prerequisite: COSC 336.

COSC 471 COMPUTER GRAPHICS (3) An introduction to the field of computer-generated and/or displayed graphics data. Covers the topics of representation, transformations, curve and 3-D problems, graphics, hardware and programming considerations. Prerequisite: COSC 336 or CIS 334.

COSC 480 SENIOR SEMINAR (1) Prepares students to deal as professionals with the social and ethical issues in the computing sciences and make them aware of the broad applications of computers and the implications of these applications. Students majoring in Computer Science must take either this course or COSC 418, but not both. Prerequisite: senior standing in Computer Science.

COSC 481 CASE STUDIES IN COMPUTER SECURITY (3) An in-depth study of the practical aspects of computer security, including the study of common computer security vulnerabilities in a laboratory setting. Prerequisites: COSC 440 and COSC 450.

COSC 483 DESIGN AND ANALYSIS OF ALGORITHMS (3) Algorithm design methods, such as heuristics, backtrack programming, branch and bound, recursion, simulation, divide-and-conquer, balancing, and dynamic programming. Efficiency of algorithms—NP-complete problems. Prerequisite: COSC 336.

COSC 484 WEB-BASED PROGRAMMING (3) Development of information systems that incorporate applications executing on a client-server system with an emphasis on the client side of such systems. Technologies covered include HTTP protocol, dynamic HTML, JavaScript, PHP, database connectivity and emerging technologies. Selected server-side programming will also be covered. Prerequisite: CIS 334 or COSC 336.

COSC 493 DIRECTED READINGS IN COMPUTER SCIENCE (HONORS) (3) Individual readings and background research, under the direction of a faculty member, in preparation for writing an honors thesis (restricted to students in the departmental honors program). Prerequisite: admission to the departmental honors program.

COSC 495 INDEPENDENT STUDY IN COMPUTER SCIENCE (1-3) Directed study in selected areas of computer science for which there is no regular course offered. The use of a proposal and well-defined objectives as well as a formal paper or project report are required. Prerequisites: senior standing in Computer Science and consent of instructor.

COSC 499 HONORS THESIS IN COMPUTER SCIENCE (3-6) Writing of an honors thesis based on individual research (open only to advanced honors candidates). Prerequisite: permission of Departmental Honors Committee.

CRIMINAL JUSTICE (CRMJ)

CRMJ 201 INTRODUCTION TO CRIMINOLOGY (3) Overview of types of crime that occur in society; common explanations of crime; common misconceptions of crime; characteristics of offenders and victims; measurement of crime; social costs of crime and various social responses.

CRMJ 254 INTRODUCTION TO CRIMINAL JUSTICE (3) The history, present structure, functions and contemporary problems of the police, prosecution, courts, corrections system, probation and parole. In addition, a brief introduction to law as an element of social control.

CRMJ 307 ISSUES IN DOMESTIC VIOLENCE (3) Identification, treatment and prevention of home-based abuse or violence focusing on children, spouses/partners and elders. Prerequisite: CRMJ 254 or SOCI 101.

CRMJ 309 ISSUES IN CAMPUS VIOLENCE (3) Micro-level examination of issues of crime and violence, including prevention, treatment and punishment on the college campus. Prerequisite: CRMJ 254 or SOCI 101.

CRMJ 331 CRIMINAL JUSTICE AND FILM (3) Critical analysis of media portrayals of crime and the criminal justice system; consideration of related crime myths, wider images of justice and other consequences for society; primary emphasis on visual media. Prerequisite: CRMJ 254.

CRMJ 332 CONFLICT RESOLUTION AND CRIMINAL JUSTICE (3) Introduction to conflict analysis and resolution in the context of the criminal justice system; understanding, assessing and remedying the causes and dynamics of social conflicts particularly in the realm of law enforcement and corrections, such as hostage standoffs or prison riots. Prerequisite: CRMJ 254.

CRMJ 337 CONTROVERSIES IN CRIMINAL JUSTICE (3) Exploration of various contemporary issues and controversies in criminal justice philosophy, policy and practice from the counting and reporting of crime to the rights of citizens, the dilemmas of victims and the punishment of the perpetrator; implications of criminal justice policy upon the community. Prerequisite: CRMJ 254.

CRMJ 345 RACE AND CRIME (3) Structural and cultural dimensions of race-specific patterns of criminal offending and victimization. Focus on urban development, social construction of race, and the political economy of crime and social control in America. Prerequisite: SOCI 101.

CRMJ 348 WOMEN AND CRIME (3) Women as offenders, victims and workers in the criminal justice system. Theories of female criminality. Discrimination and sexism in juvenile and adult systems. Prerequisite: SOCI 101.

CRMJ 352 COMMUNITY CORRECTIONS (3) Probation and intermediate sanctions of boot camp, electronic monitoring, house arrest/detention. Casework management and sentencing. Parole and diversion programs. Prerequisite: CRMJ 254.

CRMJ 353 [553] THEORIES OF CRIME (3) Evolution of criminological theory; crime rates and trends; social profile of criminal offenders and victims; societal responses. Prerequisite: SOCI 101.

CRMJ 354 WRITING FOR CRIMINAL JUSTICE (3) The components of criminal justice system: police, courts, corrections. Theories of criminal justice applied to operations. Prerequisites: SOCI 101, ENGL 102 or ENGL 190.

CRMJ 355 [555] DELINQUENCY AND JUVENILE JUSTICE (3) Nature, distribution and causes of youth crime; youth gangs; the juvenile justice system. Prerequisite: SOCI 101.

CRMJ 356 [556] PRISONS IN AMERICA (3) Purposes of punishment, incarceration and death penalty; inmate subculture; administration and staff issues. Prerequisite: CRMJ 254.

CRMJ 358 INTERPERSONAL VIOLENCE (3) Face-to-face violent crime; perpetrators and victims; strategies for response. Prerequisite: SOCI 101.

CRMJ 368 RESEARCH METHODS IN CRIMINAL JUSTICE (3) Various steps in conducting research projects, from statement of the problem to final analysis of data, with focus on procedures used to study crime and criminal justice. Emphasis on research techniques and the ethical issues involved. Prerequisites: CRMJ 254, MATH 231, PSYC 212 or ECON 205.

CRMJ 370 [560] TOPICS IN CRIMINOLOGY (3) Current topics in criminology designed for non-majors as well as majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: SOCI 101.

CRMJ 375 [565] TOPICS IN CRIMINAL JUSTICE (3) Current topics in criminal justice designed for non-majors as well as majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: CRMJ 254.

CRMJ 384 CRIMINAL LAW (3) Basic concepts of substantive criminal law through the case method approach; role of common law in the development of criminal law; examination of elements and types of crime, criminal actions and defenses in relation to criminal law doctrines. Prerequisite: CRMJ 254.

CRMJ 385 POLICE ADMINISTRATION (3) Law enforcement and organization structure; management of departments, including deployment, recruitment, training, specialization, budget and research. Prerequisite: CRMJ 254.

CRMJ 387 ISSUES IN POLICING (3) Individual and system-related problems facing police personnel. Prerequisite: CRMJ 254.

CRMJ 393 ETHICS IN CRIMINAL JUSTICE (3) Analysis of the ethical dilemmas that confront law enforcement, criminal law and corrections professionals in the course of their daily work. Focus on both macro- and micro-level solutions. Prerequisite: CRMJ 254.

CRMJ 431 CRIMINAL JUSTICE OUTSIDE THE CLASSROOM (3) Integrates criminal justice issues related to reducing crime, reintegrating offenders or responding to criminal victimization with real-world projects designed by students in an external learning framework. Involves visiting and networking with community agencies in the criminal justice field. Prerequisites: CRMJ 254; SOCI or CRMJ 353.

CRMJ 470 [570] SPECIAL TOPICS IN CRIMINOLOGY (3) An examination of current topics in criminology designed for junior and senior majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: SOCI 101; and 6 additional units of CRMJ.

CRMJ 475 [575] SPECIAL TOPICS IN CRIMINAL JUSTICE (3) An examination of current topics in criminal justice designed for junior and senior majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: CRMJ 254; and 6 additional units of CRMJ.

CRMJ 485 [585] SEMINAR IN CRIMINAL JUSTICE (3) Capstone application of ideas, methods and facts learned in previous criminology and criminal justice courses. Prerequisites: CRMJ 254; CRMJ or SOCI 353; CRMJ 368 or SOCI 391; and senior standing; or consent of instructor.

CRMJ 491-492 [591-592] INTERNSHIP IN CRIMINAL JUSTICE I, II (3,3) Supervised experience in work setting which facilitates understanding of roles and relationships relevant to inquiry in criminal justice and criminology and application of knowledge in field. Students may elect to take one term for 3 units (491) or two terms for 3 units each (491-492), in one agency both terms or in a different agency each term. No more than 3 units may be earned in a term without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisites: SOAN majors only; CRMJ concentration; junior standing; and consent of internship coordinator.

CRMJ 495 [595] INDEPENDENT RESEARCH (3) Supervised research in criminology and criminal justice involving library and/or field experience and culminating in a written report. May be repeated for a maximum of 6 units. Prerequisites: CRMJ or SOCI 353; CRMJ 368 or SOCI 391; and consent of instructor.

CRMJ 497 SEMINAR IN CRIMINAL JUSTICE (HONORS) (3) Exploring and analyzing major areas in criminology and criminal justice. Prerequisite: Consent of CRMJ honors coordinator.

CRMJ 498 READINGS IN CRIMINAL JUSTICE (HONORS) (4) A survey of the relevant scholarly literature in criminology and criminal justice under the guidance of a faculty member who will direct the student's research. Prerequisite: Consent of CRMJ honors coordinator.

CRMJ 499 HONORS THESIS IN CRIMINAL JUSTICE (4) Supervised research and investigation in criminology and criminal justice involving library and/or field experience and culminating in a written report. Prerequisite: Consent of CRMJ honors coordinator.

CULTURAL STUDIES (CLST)

Lower Division

CLST 201 INTRODUCTION TO CULTURAL STUDIES (3) Culture's effect on science, identity and behavior, and on what we hear, see, value and ignore.

CLST 202 HONORS INTRODUCTION TO CULTURAL STUDIES (3) Culture's effect on science, identity and behavior, and on what we hear, see, value and ignore. Honors College course.

Upper Division

CLST 300 METHODS OF CULTURAL INQUIRY (3) Multi-method approach to the critical investigation of complex formations of culture and interpretations of culture; topics include ethnography, literary theory, cultural historiography, and textual, spatial and semiotic analysis. Prerequisite: ENGL 102 or ENGL 190.

CLST 301 PERSPECTIVES IN GLOBAL CULTURE (3) Semiotic, linguistic, material and psychoanalytical approaches to cultural studies and criticism. Prerequisite: CLST 201.

CLST 303 IDENTITY AND CULTURE (3) Formation and development of class, racial, gender and sexual identity. Prerequisite: CLST 201.

CLST 305 TEXTUALITY AND CULTURE (3) Interaction of texts and culture. Topics include literacy, genres, semiotics, reader response, non-print media and textual analysis. Prerequisite: CLST 201.

CLST 307 VISUAL CULTURE (3) Explores how images are conditioned by cultural attitudes toward race, ethnicity, sex, sexual orientation and class. Prerequisite: CLST 201.

CLST 309 PERFORMING CULTURE (3) Various manifestations of performance and self in culture and society examined from a humanistic perspective through literature, film and other media. Prerequisite: CLST 201.

CLST 311 SCIENCE, TECHNOLOGY AND CULTURE (3) How science and technology interact with culture. Prerequisite: CLST 201.

CLST 370 TOPICS IN CULTURAL STUDIES (3) Topics will vary from term to term. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: CLST 201.

CLST 490 INDEPENDENT STUDY IN CULTURAL STUDIES (3) Directed reading and research in cultural studies under the supervision of one or more members of the Cultural Studies affiliated faculty, dealing with a specific topic or problem selected by the student in consultation with the instructor(s). Prerequisites: CLST 201; CLST 300; and two additional CLST core courses; consent of instructor and program director.

CLST 495 INTERNSHIP IN CULTURAL STUDIES (3) Placement in position in governmental, non-governmental, or nonprofit organization or business which will offer students the practical opportunity to apply skills in critical thinking, oral communication, cultural analysis and

research. Prerequisites: CLST 201, CLST 300, and at least two of the following courses: CLST 301, CLST 303, CLST 307 or CLST 311.

CLST 497 CAPSTONE PROJECT IN CULTURAL STUDIES (3) Research and writing of an extensive project that draws together all elements of the student's course of study in the major, to be directed by a Cultural Studies affiliated faculty member in a chosen area of specialization. Prerequisites: CLST 201; CLST 300; four of the following courses: CLST 301, 303, 305, 307, 309, 311 or 370; consent of instructor and program director.

DANCE (DANC)

Lower Division

DANC 101 THE ALEXANDER TECHNIQUE (3) An examination of the psychophysical pressures of contemporary American life and the application of the Alexander technique as a method to investigate the issues of mind/body disciplines and alleviate tension and stress. May be repeated for a maximum of 6 units.

DANC 105 MOVEMENT SKILLS FOR MEN (3) Using movement techniques to improve athletic and movement skills.

DANC 106 FUNDAMENTALS OF DANCE MOVEMENT FOR NON-MAJORS (3) Floor and standing work to develop upper/lower connectivity, increased rotation, efficient movement patterns and proper support for dance movement.

DANC 109 JAZZ DANCE I (2) American jazz dance as traced historically through movement from Afro-Caribbean and vaudeville forms to Broadway show styles from the 1920s through the 1950s. May be repeated for a maximum of 6 units.

DANC 111 TAP DANCE I (2) A beginning study of the technical fundamentals of tap dance. Includes basic one and two sound movements performed at the barre and simple rhythmic combinations in center. Also includes time steps and simple turns. May be repeated for a maximum of 6 units.

DANC 124 BALLET FOR NON-MAJORS (2) Classical ballet class with emphasis on placement and alignment of the body, turn-out, footwork, barre work, simple allegro movements, adagio and grande allegro movements required in the establishment of a basic technical foundation. May be repeated for a maximum of 6 units. Prerequisite: DANC 123, previous ballet training or consent of instructor.

DANC 125 INTRODUCTION TO DANCE: OVERVIEW (3) Western concert dance as a cultural phenomenon, methods of training, evolution of dance aesthetics and building a world view through movement.

DANC 126 MUSICAL CONCEPTS FOR DANCERS (3) An introduction to basic music skills and concepts of rhythm and its appropriate application to dance composition, movement, performance and education environments. Students will explore, perform, analyze, create, evaluate and respond to musical experiences for the purpose of developing musical skills and concepts. An awareness and understanding of varied genres of music will be developed as appropriate to the expectations of becoming a dance professional and/or a dance educator. Prerequisites: Pre-Dance status only, department consent required.

DANC 127 INTRODUCTION TO DANCE: AMERICAN EXPERIENCE (MODERN) (3) American concert modern dance as a cultural phenomenon, methods of training, evolution of dance aesthetics and building a world view through movement. Field experiences may be required.

DANC 128 MODERN DANCE FOR NON-MAJORS (2) Course work in modern dance technique as derived in part from principles of American founders of modern dance. May be repeated for a maximum of 6 units. Prerequisites: DANC 125 or DANC 127 or previous modern dance training, or consent of instructor.

DANC 200 OUR DANCE CORRIDOR: A BALTIMORE/WASHINGTON SAMPLER (3) Experiencing American culture through theatrical dance performances in Baltimore and the surrounding area. Field trips are required.

DANC 201 DEVELOPMENTAL MOVEMENT (3) Movement-based experiences in developmental stages of children; motor actions, personality development, spatial organization and emerging literacy. Prerequisite: PSYC 201.

DANC 209 JAZZ DANCE II (2) A continuation of Broadway show from the early 1960s to the present day. Includes study of contemporary jazz technique with emphasis on rock, funky, lyric and percussive movement. May be repeated for a maximum of 6 units. Prerequisite: DANC 109 or consent of instructor.

DANC 211 TAP II (2) A continued study of tap dance including complex rhythms, tempi, barre and center work. New movements include wings, trenches, riffs and advanced turns. May be repeated for a maximum of 6 units. Prerequisite: DANC 111.

DANC 216 SOPHOMORE CREW (1) Formal crew work, including experiential training in the set-up, operation and/or strike for the TU Dance Company mainstage production(s). Prerequisite: DANC 263.

DANC 220 USING INFORMATION EFFECTIVELY IN DANCE (3) Gathering, evaluating and communicating information from traditional and electronic sources germane to dance.

DANC 223-224 FOUNDATIONAL BALLET (2) Elementary classical ballet technique: classical form, static and dynamic alignment, rotation, weight shift, breath support, and level change with application to classical ballet vocabulary. May be repeated for a maximum of 6 units. Prerequisites: Dance majors only, department consent required.

DANC 227-228 FOUNDATIONAL MODERN (2) Study of elementary modern dance technique: level change, weight shift, dynamic alignment, breath support and expression, and application of modern dance vocabulary. May be repeated for a maximum of 6 units. Prerequisites: Dance majors only, department consent required.

DANC 235 DANCE COMPOSITION I (3) Introducing interdisciplinary relationships with movement invention: improvisation and personal exploration and performance form will help investigate personal idiosyncratic ways of moving with effort and body preference.

DANC 245 SCIENTIFIC BASIS FOR MOVEMENT I (3) Introduction to anatomical, physiological and biomechanical principles of human movement and applying these principles to body alignment and movement for dance. Majors only, department consent required. Not open to students who have successfully completed DANC 106.

DANC 251 METHODS OF TEACHING DANCE (3) A developmental approach to the teaching of creative movement and dance to children in grades K-12. Includes lesson and unit planning, observation, peer-teaching, assessment and reading and writing in the content area. Prerequisite: DANC 201.

DANC 263 DANCE DESIGN AND PRODUCTION (3) Costume, lighting, make-up, management, scenery, safety, sound and rigging techniques and practices. Not open to those who successfully completed THEA 263. Prerequisite: Dance major.

Upper Division

DANC 310 JAZZ DANCE III (2) A continued study of contemporary jazz technique with emphasis on performance of styles used on the concert stage, television and motion pictures. May be repeated for a maximum of 6 units. Prerequisite: DANC 209.

DANC 316 JUNIOR CREW (1) Informal crew work, including experiential training in the set-up, operation and/or strike for non-TU Dance Company dance department production(s). Prerequisite: DANC 216.

DANC 321 RESPONDING TO DANCE (3) Advanced writing course using a variety of dance eras, genres and cultures. Prerequisites: junior/senior standing; ENGL 102 or 190; DANC 125 and DANC 220.

DANC 323-324 LEVEL II BALLET (3) Continued study of classical ballet technique: emphasis on exploring and embodying a particular world view, including intermediate level enchainments, shifting weight; physically and

musically connecting movement sequences; sequencing combinations designed to develop both strength and flexibility. May be repeated for a maximum of 9 units. Prerequisites: Dance majors only, department consent required.

DANC 327-328 LEVEL II MODERN (3) Continued study of intermediate modern dance technique: emphasis on exploring and embodying a particular world view, including expanded movement vocabulary involving sequences of greater complexity—kinesthetically, spatially and musically. May be repeated for a maximum of 9 units. Prerequisites: Dance majors only, department consent required.

DANC 335 DANCE COMPOSITION II (2) Focuses on metaphor and memory embodiment with an introduction to compositional structures. Attention to showing artistic works that support craft concepts while interviewing choreographers and introducing risk-taking. Prerequisites: DANC 235; department consent required.

DANC 336 DANCE COMPOSITION III (2) Focus on content/intent/form: Metaphor and memory embodiment continues with activity on the construction/deconstruction/reconstruction of material in an atmosphere of risk taking and collaborative investigation. Prerequisites: DANC 335; Dance majors only; department consent required.

DANC 341 POINTE TECHNIQUE I (2) Basics of pointe (toe) work essential to students whose interest is in total comprehension of the elements necessary to the performance of classical ballet. Includes work to strengthen the ankles and insteps and acclimation of body weight and placement sur les pointes. May be repeated for a maximum of 6 units. Prerequisite: DANC 223-224.

DANC 342 POINTE TECHNIQUE II (2) Continuum of Pointe Technique I with emphasis on tempi, allegro combinations, enchainments au milieu, and barre supported adage. May be repeated for a maximum of 6 units. Prerequisite: DANC 341.

DANC 345 SCIENTIFIC BASIS FOR MOVEMENT II (3) Continued study of the anatomical, biomechanical, developmental and qualitative principles of human movement and applying these principles to increase movement function and expression for dance. Majors only, department consent required. Not open to students who have successfully completed DANC 421. Prerequisite: DANC 245.

DANC 351 TEACHING DANCE TECHNIQUE (3) Organization, sequencing and teaching techniques for studio dance classes in ballet, modern, jazz and tap dance.

DANC 370-379 SPECIAL TOPICS IN DANCE (1-3) Workshops and courses designed for study of special topics in dance not available in existing courses. Examples: Principles and Practices of Auditioning, Dance Repertory, Seminar in Dance Education, etc. Will be offered depending on student and faculty interest and availability. May be repeated for credit provided a different topic is covered. Prerequisite: Consent of department chair.

DANC 383 MODERN DANCE REPERTORY (3) Concentrated study of historical, current or new repertory in modern dance, culminating in (a) performance(s). May be repeated for a maximum of 9 units. Prerequisite: DANC 327-328 or consent of the instructor.

DANC 384 BALLET REPERTORY (3) Concentrated study of historical, current or new repertory in ballet, culminating in (a) performance(s). May be repeated for a maximum of 9 units. Prerequisite: DANC 323-324 or consent of instructor.

DANC 391 STUDENT TEACHING IN ELEMENTARY SCHOOL (6)

DANC 392 STUDENT TEACHING IN SECONDARY SCHOOL (6)

DANC 423-424 LEVEL III BALLET (3) Continued study of classical ballet technique: advanced level enchainments, standard classical divertissement and style distinctions including progression of technical complexities and approaches to contemporary ballet stylization. May be repeated for a maximum of 9 units. Prerequisite: Dance majors only, department consent required.

DANC 427-428 LEVEL III MODERN (3) Continued study of advanced modern dance technique utilizing complex

movement and sequences. Focus on interpretation and performances. May be repeated for a maximum of 9 units. Prerequisites: Dance majors only, department consent required.

DANC 436 DANCE COMPOSITION IV (2) Focuses on the creation and production of a collaborative work for the stage: attention to risk taking and combining movement with sound/text/light. Prerequisites: DANC 336; department consent required.

DANC 437 DANCE COMPOSITION V: FOR THE CAMERA (3) Focuses on the creation and production of an interdisciplinary and collaborative work specific to movement for the camera. Prerequisite: Department consent required.

DANC 451 DANCE EDUCATION AND PUBLIC POLICIES (3) Examination of strategies for dance arts advocacy and dance education policies in public school contexts with emphasis on project-based and field experiences. Prerequisites: DANC 251, Dance majors only, department consent required.

DANC 480 SENIOR PROJECT: SEMINAR (2) Preparation for producing a dance concert or lecture-demonstration: planning, programming, technical production, box office management, budgeting, publicity and documentation. Graded S/U. Prerequisites: DANC 316, DANC 263 and senior Dance major standing, department consent required.

DANC 481 DANCE COMPANY (3) Study and performance of advanced compositions including works by professional guest choreographers in ballet, modern and jazz/musical theatre style culminating in a performance. Course may be repeated for a maximum of 24 units. Prerequisite: audition.

DANC 491 SENIOR PROJECT: CONCERT/LECTURE DEMONSTRATION (3) Student-directed concert and/or lecture-demonstration production; publicly produced in the spring term of the senior year. Graded S/U. Prerequisites: DANC 480, Dance majors only, department consent required.

DANC 492 PRACTICUM IN DANCE TECHNIQUE (1-6) Student-directed studio course work in dance technique at a departmentally approved professional training school or program. May be repeated for a maximum of 6 units. Prerequisites: Dance majors only, department consent required.

DANC 493 PRO-SEMINAR IN TEACHING DANCE (1) Critical analysis of curriculum, instruction and assessment procedures related to the promotion of literacy with movement and dance education in the context of the student internship. Prerequisites: taken concurrently with DANC 391 and DANC 392; Dance majors only; department consent required. Graded S/U.

DANC 495 INDEPENDENT STUDY IN DANCE (1-3) Self-directed study of an academic or creative project designed to focus on a specialized area of dance. May be repeated for a maximum of 9 units. Prerequisite: approval of plan of study by instructor and department chair.

DEAF STUDIES (DFST)

Lower Division

DFST 101 INTRODUCTION TO DEAF CULTURE (3) Multidisciplinary introduction to concepts and issues in deaf culture and the deaf community.

DFST 104 AMERICAN SIGN LANGUAGE I (3) Emphasizes receptive and expressive conversational skills in American Sign Language. Class will be conducted in a silent classroom (no voices allowed).

DFST 105 AMERICAN SIGN LANGUAGE II (3) Continued skill development in expressive and receptive American Sign Language begun in ASL I. Prerequisites: DFST 104 with a grade of 3.00 (B) or higher and/or consent of department.

DFST 111 HONORS INTRODUCTION TO DEAF CULTURE (3) Multidisciplinary introduction to concepts and issues in the deaf community. Honors College course.

DFST 114 HONORS AMERICAN SIGN LANGUAGE I (3) Emphasizes receptive and expressive conversational skills in American Sign Language. Class will be conducted in a silent classroom (no voices allowed).

DFST 204 AMERICAN SIGN LANGUAGE III (3) Intermediate grammatical features of ASL, vocabulary, conversational skills, as well as information on the culture of the deaf community. Class will be conducted in ASL only. Prerequisite: DFST 105 with a grade of 3.00 (B) or higher, and/or consent of the department.

DFST 205 AMERICAN SIGN LANGUAGE IV (3) Advanced grammatical features of ASL, vocabulary, conversational skills and involvement with the deaf community. Class will be conducted in ASL only. Prerequisite: DFST 204 with a grade of 3.00 (B) or higher and/or consent of the department.

DFST 210 CAREER EXPLORATION IN DEAFNESS (3) Careers using signed languages and working with deaf people. Prerequisites: DFST 101, DFST 104.

DFST 220 INTRODUCTION TO INTERPRETING (3) Introduction to art and profession of interpreting for deaf and hard of hearing persons. Prerequisites: DFST 101, DFST 104.

Upper Division

DFST 304 AMERICAN SIGN LANGUAGE V (3) Advanced ASL vocabulary and conversational skills. Class will be conducted in ASL only. Prerequisites: DFST 205 with a grade of 3.00 (B) or higher and/or consent of the department.

DFST 308 FINGERSPELLING AND NUMBER USAGE (3) Development and refinement of expressive and receptive fingerspelling skills through the use of classroom activities, media resources and assignments. Prerequisite: DFST 204 with a grade of 3.00 (B) or higher, and/or consent of instructor or chairperson.

DFST 309 INTRODUCTION TO DEAFBLIND CULTURE AND COMMUNICATION (3) Orientation to the lives of people with both hearing and vision loss, including methods of communicating, techniques for guiding, assistive technology, culture and community. Prerequisites: DFST 101, DFST 104.

DFST 311 AUDITION: SCIENCE AND SOCIAL IMPACT (3) Acoustics, psychoacoustics, anatomy, physiology and pathologies of the hearing mechanism. Assessment of auditory function. Demographics and cultural considerations, management and social impact of deafness and hearing loss. Prerequisite: one course fulfilling. Not open to students who have taken SPPA 321.

DFST 318 SOCIAL SERVICES IN THE DEAF COMMUNITY (3) Examines a variety of social service delivery systems providing support to the deaf community. Off-campus service learning experiences required. Prerequisites: DFST 101, DFST 104.

DFST 345 DEAF CULTURE (3) Cultural perspectives on the lives of deaf and hard of hearing persons who use American Sign Language. Historical evolution of educational, legal, political and philosophical influences affecting the deaf community. Class will be taught in ASL. Prerequisites: DFST 101, DFST 205, major status and/or consent of department.

DFST 375 DEAF HISTORY (3) Examines the history of the creation and cultural construction of the deaf community in a transatlantic context. Class will be taught in ASL. Prerequisites: DFST 101, DFST 205. Majors only or permission of the department.

DFST 410 INTERNSHIP IN DEAF STUDIES (3) Supervised field experience with children and/or adults who are deaf or hard of hearing. One hour of class per week and 90+ hours of field experience. Prerequisites: DFST 404, DFST 345 and DFST 210; major GPA 2.50 or higher; ASLPI score of 2+ or higher; criminal background check completed within two years; and/or consent of the department.

DFST 425 DEAF LITERATURE (3) Explores the rich narrative traditions of deaf persons and their experiences in novels, stories, drama, poetry, folklore, humor and other forms of literature. Class will be taught in ASL. Prerequisites: DFST 101, DFST 205 and/or consent of department.

DFST 430 LINGUISTICS OF AMERICAN SIGN LANGUAGE (3) Analysis of the major structural features of American Sign Language: cherology, morphology, syntax, semantics and discourse. Class will be taught in ASL. Prerequisite: DFST 205.

DFST 435 DEVELOPMENT OF SIGNED LANGUAGE AND READING SKILLS FOR DEAF CHILDREN (3) Integrates signed language development and reading skills in the area of research and education for deaf children. Prerequisites: DFST 101, DFST 205.

DFST 494 SPECIAL TOPICS IN DEAF STUDIES (3) Special format elective course to be offered periodically for junior and senior DFST majors. Prerequisites: DFST 205, DFST 345 or DFST 375; or consent of instructor.

DFST 495 SERVICE LEARNING IN DEAF STUDIES (3) Service learning opportunity in a specific area of the student's interest approved by the sponsoring faculty member. 90-hour on-site experience in an agency serving deaf and hard-of-hearing individuals under the supervision of a qualified supervisor. Can be repeated for a maximum of 6 units. Prerequisites: DFST 101, DFST 205, DFST 210, DFST 318.

DFST 496 INDEPENDENT STUDY IN DEAF STUDIES (1-3) Independent study in selected areas of Deaf Studies. Prerequisites: DFST 101, DFST 345 or DFST 375; or consent of instructor.

DFST 497 DIRECTED READINGS IN DEAF STUDIES (3) Directed readings and research in specific topics in Deaf Studies. Prerequisites: DFST 101, DFST 205, DFST 345.

DFST 498 PROCTORING IN DEAF STUDIES (3) Students serve as teaching assistants or proctors in a course which they previously completed. Prerequisites: Grade of 3.00 or higher in course to be proctored and consent of department.

DEVELOPMENTAL MATHEMATICS (DVMT)

Lower Division

DVMT 101 DEVELOPMENTAL MATHEMATICS (4) A review of elementary and intermediate algebra including equations and inequalities, graphing linear equations, functions, polynomials and factoring, radicals, exponents and quadratic functions. Placement based on competency test scores. No credit toward graduation. Graded S/U. Prerequisite: departmental placement.

DVMT 110 INTERMEDIATE ALGEBRA (3) A review of intermediate algebra beginning with rational expressions, and covering systems of equations and inequalities, graphical solutions, radicals and exponents, and quadratic functions. Placement based on competency test scores. No credit toward graduation. Graded S/U. Prerequisite: department placement or DVMT 101.

DEVELOPMENTAL READING (DVRD)

Lower Division

DVRD 101 DEVELOPMENTAL READING II (3) Reviews the basic reading skills and stresses the development of intermediate reading skills important for effective college reading including inferential comprehension, critical reading and varied reading rates. No credit toward graduation. Graded S/U. Prerequisite: department placement.

E-BUSINESS AND TECHNOLOGY MANAGEMENT (EBTM)

Upper Division

EBTM 306 FUNDAMENTALS OF PROJECT MANAGEMENT AND BUSINESS DECISIONS (3) The contemporary business issues of using data to support decision making and using project management techniques to implement change. Specific tools include spreadsheet modeling, optimization, simulation, work breakdown structures, Gantt Charts, and network diagrams. Prerequisites: ECON 205 or MATH 231, Computer Proficiency Exam. Majors only. Sophomore standing.

EBTM 311 PRINCIPLES OF E-BUSINESS (3) Using resources on the Internet, including design of Web pages and conducting business on the Net. Not open to students who have successfully completed EBUS/ECOM/MNGT 311. Prerequisite: EBTM / MNGT 337 (may be taken concurrently). Majors only. Junior/senior standing.

EBTM 337 INFORMATION TECHNOLOGY Strategic, tactical and operational applications of information technology; management information systems, decision support systems, intelligent systems, strategic information systems and electronic commerce. Not open to students who have successfully completed MNGT 337. Prerequisites: COSC 111 or COSC/CIS 115 or pass the CBE computer proficiency examination; junior standing.

EBTM 365 PRINCIPLES OF OPERATIONS MANAGEMENT Strategies and techniques for service and manufacturing operations. Not open to students who have successfully completed MNGT 365. Prerequisites: Junior/Major standing and ECON 205 or MATH 231.

EBTM 367 E-BUSINESS INFRASTRUCTURE (3) Introduction to e-business infrastructure topics including business data communications and networking, e-business security and databases. Students are not only expected to master the technical aspects of those subjects through lectures and hands-on labs, but also expected to understand the business implications of those topics. Not open to students who have successfully completed EBUS/ECOM 367. Prerequisites: EBTM/MNGT 337, EBTM/EBUS 311. Majors only. Junior/senior standing.

EBTM 411 E-BUSINESS MARKETING (3) Retrieval, analysis and storage of information to support marketing decisions utilizing Internet and WWW. Not open to students who have successfully completed EBUS/ECOM/MKTG 411. Prerequisites: MKTG 341/342, EBTM/MNGT 337, EBTM/EBUS 311. Majors only. Junior/senior standing.

EBTM 419 SUPPLY-CHAIN MANAGEMENT (3) Basic concepts and strategies adopted in SCM. Primary focus is to develop a good understanding of strategic, tactical and operational issues of SCM and become familiar with the integration of various SCM entities. A number of essential techniques of SCM are presented as supplementary materials. Topics include: transportation management and network design, e-procurement, uncertainty management, supply chain coordination and integration, value of information (sharing), global SCM, customer value and SCM, information technology/standards in SCM. Not open to students who have successfully completed MNGT 419. Prerequisites: EBTM/MNGT 337 and EBTM/MNGT 365. Junior/Senior major standing.

EBTM 421 FINANCIAL ASPECTS OF E-BUSINESS (3) Strategic and tactical financial issues facing business including: wealth management, enterprise integration revenue models, e-procurement, payment and security systems, tax implications, e-banking and other financial services. Not open to students who have successfully completed EBUS 421. Prerequisites: FIN 331, EBTM/EBUS 311. Majors only. Junior/senior standing.

EBTM 423 SERVICE OPERATIONS MANAGEMENT (3) Concepts and techniques of service operations management, emphasizing problem-solving methods and exercises. Not open to students who have successfully completed MNGT 423. Prerequisite: ECON 306 or MNGT 363, junior major standing.

EBTM 431 ADVANCED E-BUSINESS (3) This course deals with newer Web-related technologies affecting the world of e-business approaches to Web usability, e-collaboration tools including wikis, widgets, blogs and social networking, content management, mobile technologies, web logging and performance management, and Web services. Not open to students who have successfully completed EBUS 431, ECOM 431 or MNGT 411. Prerequisites: EBTM/EBUS 367. Majors only. Junior/senior standing.

EBTM 443 PROJECT MANAGEMENT (3) Management of projects through the planning, scheduling, and controlling of organizational activities. Course includes project selection, scope development and management, cost estimation, scheduling, staffing, resource allocation, task tracking, task sequencing and control. Project management software will be used to support the course material. Not open to students who have successfully completed MNGT 443. Prerequisites: EBTM/ MNGT 365 (may be taken concurrently); major standing; junior/senior standing.

EBTM 446 BUSINESS INTELLIGENCE (3) Classifications of business decision problems and methods of analysis to

identify the best solutions using business records for business intelligence. Methods of managing large storage of business records and related information and the discovery of knowledge to support managerial decision-making. Prerequisites: Major standing, EBTM/MNGT 337, junior/senior standing.

EBTM 450 ADVANCED PROJECT MANAGEMENT (3) Advanced project management topics within human resource management, procurement management, contract administration, risk management, project leadership and communications management. Prerequisites: major standing, EBTM/MNGT 443, junior/senior standing.

EBTM 454 BUSINESS PROCESS MANAGEMENT (3) Business Process Management concepts, architecture, and specifications, introduction to modeling/design tools used to design and optimize business processes as well as performance measuring approaches for evaluating business process performance. Prerequisites: major standing, EBTM/MNGT 337, EBTM/MNGT 365, senior standing.

EBTM 461 TOTAL QUALITY MANAGEMENT (3) Understanding and implementing quality management in organizations. Topics include philosophy of quality, behavioral tools, statistical process control and implementation issues. Not open to students who have successfully completed MNGT 461. Prerequisites: EBTM/MNGT 365 and ECON 306, or MNGT 363. Majors only. Junior/senior standing.

EBTM 462 PROJECT QUALITY AND SIX SIGMA (3) Projects involving quality management and six sigma methodologies including quality improvement, process design, root cause analysis, quality measurement and continuous improvement. Prerequisites: major standing, EBTM/MNGT 443, junior/senior standing.

EBTM 469 CURRENT DEVELOPMENT IN E-BUSINESS (3) Advanced special topics course in e-Business. The course offers solid preparation in e-Business project management, international electronic business as well as variable content in e-Business. Not open to students who have successfully completed EBUS 469. Prerequisites: EBTM/EBUS 311, EBTM/EBUS 367, EBTM/EBUS 411, EBTM/EBUS 421. Majors only. Junior/senior standing.

EBTM 470 SPECIAL TOPICS IN E-BUSINESS (3) Course content varies with each topic. In-depth study of contemporary e-Business issues. May be repeated with a different topic for a maximum of 6 units. Not open to students who have successfully completed EBUS 470. Prerequisites: EBTM/EBUS 311 and consent of department. Majors only. Senior standing.

EBTM 475 SPECIAL TOPICS IN PMBA (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current project management and business analysis practices. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: EBTM/MNGT 443 and consent of department. Majors only. Senior standing.

EBTM 491 EBTM DIRECTED READINGS (3) Assigned readings in selected areas of e-Business and Technology Management (EBTM). A total of 6 units for any combination of directed readings, independent research, and internship is allowed in the EBTM area of study. Prerequisites: Consent of the instructor, a minimum of 3.00 cumulative GPA, and completion of all 200- and 300-level EBTM required courses.

EBTM 495 EBTM INDEPENDENT RESEARCH (3) Directed research in specific areas of e-Business and Technology Management (EBTM). A total of 6 units for any combination of directed readings, independent research and internship is allowed in the EBTM area of study. Prerequisites: Consent of the instructor, a minimum of 3.00 cumulative GPA, completion of all 200- and 300-level required courses and a special permit.

EBTM 497 EBTM INTERNSHIP (3) Students are required to work in government or industry for a minimum of 120 hours to gain practical experience in the application of EBTM concepts. All positions have been reviewed and approved by EBTM faculty. A total of 6 units for any combination of directed readings, independent research and internship is allowed in the EBTM area of study.

Prerequisites: a minimum 3.00 cumulative GPA and consent of the instructor.

EARLY CHILDHOOD EDUCATION (ECED)

Lower Division

ECED 103 INTRODUCTION TO EARLY CHILDHOOD EDUCATION (3) Key components and aspects of the early childhood profession; examination of current trends and issues. Initiates professional portfolio.

ECED 201 EARLY CHILDHOOD DEVELOPMENT AND INTERVENTION (3) An introduction to the theories and practice of child development from the prenatal period through the primary years. Emphasis on understanding of the physical, socio-emotional and cognitive/language development of young children. Implications for learning and interventions will be explored in class and through a series of observational experiences. Prerequisites: ECED 103 Introduction to Early Childhood Education. Not open to students who have completed ECED 101.

Upper Division

ECED 315 INFANCY AND TODDLERHOOD DEVELOPMENT AND INTERVENTION (3) Psychological, social and physiological growth and development of infants and toddlers. Introduces Individual Family Service plans and early Head Start. Prerequisite: 6 units in early childhood education.

ECED 321 FOUNDATION OF READING AND LANGUAGE ARTS (3) Theories, processes and acquisition of reading and language arts including cognitive, linguistic, social and physiological factors involved in oral and written language development. Prerequisites: permission of ECED, 6 units of early childhood education course work.

ECED 341 PREPRIMARY CURRICULUM (3) Historical development and contemporary best practices in curriculum and methods of teaching children under six years of age. Includes concurrent enrollment in ECED 343, ECED 360, ECED 417, ECED 461 and SCIE 371. Extensive internship. Prerequisites: admission to the Early Childhood Education Program, ECED 103, ECED 201, ECED 315, PSYC 201, SPED 301.

ECED 342 PRIMARY CURRICULUM (3) Emphasis is on the developmentally appropriate objectives, materials, activities and methods for teaching grades 1-3 language arts, social studies, mathematics and science. Includes concurrent enrollment ECED 344, ECED 361, ECED 417, ECED 429, MATH 321. Extensive internship. Prerequisites: admission to the Early Childhood Education Program and successful completion of the term #6 Preprimary curriculum sequence.

ECED 343 PRE-PRIMARY PRACTICUM (3) This field-based practicum course integrates the theory and best practice teaching pre-kindergarten and kindergarten children in a public school with supervision and guidance from the classroom mentor-teacher and university supervisor. 15 weeks, one day per week from 7:30 a.m. to 4:30 p.m. with additional evening hours. Prerequisites: ECED 201, SPED 301.

ECED 344 PRIMARY PRACTICUM (3) This field-based practicum course integrates the theory and best practice for primary aged children in grades 1, 2, or 3 in a public school with supervision and guidance from the classroom mentor-teacher and university supervisor. 15 weeks, one day per week from 7:30 a.m. to 4:30 p.m. with additional evening hours. Prerequisites: ECED 103, ECED 201, SPED 301, ECED 341.

ECED 351 INTERNSHIP: PRIMARY (6) Integration of theory and practice in public school grades 1-3 with guidance from the classroom mentor teacher and the university supervisor. Concurrent seminar session on campus to analyze, synthesize and reflect on the internship experience. Approximately seven weeks. Graded S/U. Prerequisites: meeting admission to internship, completing TIMS application internship application with the Center for Professional Practice (CPP), consent of department chair and CPP director.

ECED 352 INTERNSHIP III: PREPRIMARY (6) Integration of theory and practice in a public school preschool, pre-kindergarten or kindergarten setting with guidance from the classroom mentor teacher and university supervisor. Concurrent seminar session to analyze, synthesize and reflect on the internship experience. Approximately seven weeks. Graded S/U. Prerequisites: meeting admission to TIMS internship completing application with the Center for Professional Practice, consent of department chair and CPP director.

ECED 355 DIFFERENTIATED STUDENT TEACHING INTERNSHIP IN EARLY CHILDHOOD EDUCATION (1-8) Student teaching internship experiences different from those provided in ECED 351 and ECED 352 based upon the needs of individual students. [Note: This is not a substitute for ECED 351 or ECED 352.] Experiences may be in public and private settings such as day-care centers, parent-child or infant programs, hospitals, or early intervention programs for young children who are developmentally disabled or at-risk and their families. Graded S/U. May be taken for a maximum of 8 units. Prerequisite: approval of adviser, department chair and CPP director.

ECED 360 EARLY LITERACY: BEST PRACTICES AND MATERIALS (3) Study of emerging literacy process in children birth to age 5. Examination of strategies, materials and experiences for literacy development. Prerequisites: admission to the ECED major; ECED 321, taken concurrently with ECED 341.

ECED 361 TEACHING READING IN THE PRIMARY GRADES (1-3): BEST PRACTICES AND MATERIALS (3) Best practices, research and materials emphasizing developmentally appropriate active learning related to the process for beginning reading through grade three. Prerequisites: junior standing, admittance into the major, taken concurrently with all courses in Internship II with ECED 342, ECED 429, MATH 321.

ECED 403 THE CURRICULUM IN PRIMARY EDUCATION (3) The child, curriculum, content, methods and materials of teaching and program organization in the early primary school years. Emphasis is on the integrated curriculum of language arts, social studies, mathematics and science. Not open to students required to enroll in ECED 341 and ECED 342. Prerequisites: ECED 103 and ECED 201 or equivalents.

ECED 407 [507] INTERACTIVE TECHNOLOGY AND THE YOUNG CHILD (3) Emerging issues on interactive technology and early childhood education. Availability and use of interactive technology in schools. Prerequisite: ISTC 201, permission of ECED. \$25 lab/class fee.

ECED 411 [511] PARENTS AND TEACHERS: PARTNERS IN EARLY CHILDHOOD EDUCATION (3) The development of a rationale for improved parent-teacher relationships in early childhood education programs. The role of paraprofessionals, specialists and volunteers. Observation, participation in school work with parents, and building the parent and school team are covered in the course. Prerequisite: 6 units of early childhood education or equivalent course work.

ECED 417 ASSESSMENT IN EARLY CHILDHOOD EDUCATION (3) Developmentally appropriate methods of assessing young children, including methods for identifying disabilities using formal and informal assessment. Prerequisites: ECED 201; ECED 315; ECED 321; PSYC 201. Admitted to major. \$25 lab/class fee.

ECED 418 TEACHING THINKING SKILLS TO YOUNG CHILDREN (1) Focuses on current theories of teaching thinking skills with emphasis on methods, activities and questioning techniques appropriate in early childhood education. Infrequently offered. Prerequisites: ECED 341 and 342 or equivalent, concurrent with student teaching or consent of department chair.

ECED 421 INTERNSHIP SEMINAR IN EARLY CHILDHOOD EDUCATION (3) Research findings used as a basis for program planning in nursery school, kindergarten and primary grades; current trends and issues are considered. Prerequisites: admission into the major, student teaching and/or teaching experience in preschool or primary grades; junior standing. Taken concurrently with ECED 351/352.

ECED 422 WRITING TECHNIQUES FOR TEACHERS IN EARLY CHILDHOOD EDUCATION (3) Applied techniques of written communication for classroom teachers and professional educators. Focus on developing the ability to write thoughtful, well-organized letters, reports, critiques and other professional papers. Prerequisites: ENGL 102/190, ECED 103; ECED 201; SPED 301; permission from ECED; and 9 units of education course work.

ECED 429 PRINCIPLES AND PRACTICES OF READING AND LANGUAGE ARTS ASSESSMENT (3) Examination and practice using a range of literacy and reading assessments. Focus on relationship of assessment to instructional planning for diverse learners. Prerequisites: admission into major; taken concurrently with courses in Internship II.

ECED 460 DUAL LANGUAGE LEARNERS IN EARLY CHILDHOOD EDUCATION SETTINGS (3) Language development of bilingual children in comparison to monolingual children and the impact of bilingual language development in the early childhood classroom. Prerequisites: ECED 201 and SPED 301.

ECED 461 TEACHING THE INTEGRATED ARTS IN EARLY CHILDHOOD (3) The role and value of the arts in children's learning and development with a basis in current theory and research. Literacy learning, connections to technology, and relationships to standards and assessments are essential components. This course is designed in alignment with INTASC Principles and NAEYC's Core Standards. Prerequisite: Admission to ECED Program.

ECED 470-489 SPECIAL TOPICS IN EARLY CHILDHOOD EDUCATION: (Topics to be determined) (1-3) In-depth study of a selected topic in early childhood education. The specific requirements and prerequisites will vary with each course, and this will be designated by the department each time a topic is scheduled. Graduate credit only with the approval of the department graduate director. Each topic may be taken as a separate course, repeatable for different topics for a maximum of 6 units.

ECED 494 [594] TRAVEL AND STUDY: EARLY CHILDHOOD EDUCATION (1-6) A field study, including cultural tours in selected foreign countries, of current early childhood education programs, facilities and trends. Academic work includes lectures, observations and personal interactions. Participation in planned educational activities and a follow-up paper are required. May be repeated for a maximum of 6 units. Prerequisite: junior standing and consent of department chair. Consent of departmental graduate director required for graduate credit.

ECED 495 INDEPENDENT STUDY IN EDUCATION: EARLY CHILDHOOD EDUCATION (1-4) Independent study in selected areas of early childhood education. May be repeated for a maximum of 4 units. Prerequisites: ECED majors only, completed application form, permission of department chair and 3.00 GPA.

ECED 496 DIRECTED READING: EARLY CHILDHOOD EDUCATION (1-4) Independent reading in selected areas of early childhood education or related topics. May be repeated for a maximum of 4 units. Prerequisites: ECED majors only, completed application form, permission of department chair and 3.00 GPA.

EARLY CHILDHOOD EDUCATION/ SPECIAL EDUCATION (ECSE)

Upper Division

ECSE 316 INFANT AND TODDLER INTERNSHIP (2) Supervised clinical field experience with children from birth to 36 months with disabilities. Interns will spend 6 hours/week in the internship setting and meet with the university supervisor on a regular schedule. Must be taken concurrently with ECED 315. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 341 PREPRIMARY CURRICULUM AND INSTRUCTION IN THE INCLUSIVE CLASSROOM (3) Emphasizes historical development and contemporary practices in curriculum content and methods of teaching all children in the pre-primary inclusive classroom, while focusing on teachers as facilitators in developmentally appropriate environments. Must be taken concurrently with ECSE 343. Prerequisite:

Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 342 PRIMARY CURRICULUM AND INSTRUCTION IN THE INCLUSIVE CLASSROOM (3) Emphasizes developmentally appropriate objectives, materials, activities and methods used to teach in inclusive primary grades using integrated curriculum. Includes a service-learning component that serves as a teaching method, as well as a philosophy of education. Must be taken concurrently with ECSE 344. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 343 FIELD PLACEMENT IN THE PREPRIMARY INCLUSIVE CLASSROOM (2) Supervised clinical field experience in a pre-K or kindergarten inclusive classroom setting. Interns are required to participate one day/week. This course must be taken concurrently with ECSE 341. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 344 FIELD PLACEMENT IN THE PRIMARY INCLUSIVE CLASSROOM (2) This internship integrates the theory and best practices for primary aged children with and without exceptional learning needs in grades 1, 2 and 3 in professional development schools. It will require active participation in planning, organizing and implementing instruction for students from one to five days per week. Must be taken concurrently with ECSE 342. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 351 INTERNSHIP IN ECSE (12) This is the capstone experience and a full-time supervised internship. Interns demonstrate the knowledge, skills and dispositions necessary for successful teaching in early childhood and special education settings—birth through grade 3. Must be taken concurrently with ECSE 352. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 352 INTERNSHIP IN ECSE SEMINAR (3) Seminar held in conjunction with ECSE 351. Topics include theoretical and practical aspects of teaching, critical issues and topics, making the transition from professional pre-service intern to professional in-service teacher. Prerequisites: Open only to ECSE majors; compliance with admission standards; consent of department chair.

ECSE 413 INSTRUCTIONAL TECHNOLOGY FOR YOUNG CHILDREN (3) Designing instruction for young children with and without disabilities using instructional and assistive technology. Prerequisite: Open only to ECSE majors.

ECSE 425 ASSESSMENT FOR INFANT/PRIMARY (3) Assessment techniques; philosophical rationale; data analysis and interpretation; program planning. Prerequisite: Open only to ECSE majors.

ECSE 428 FAMILIES AS PARTNERS IN EARLY CHILDHOOD/SPECIAL EDUCATION (3) Communication skills, family relations, parent-professional collaboration. Prerequisite: Open only to ECSE majors.

ECSE 429 SOCIAL COMPETENCE IN EARLY EDUCATION (3) Examination of the factors associated with the development of social competence and emotional health in young children; strategies for promoting such development in early childhood settings. Prerequisite: Open only to ECSE majors.

ECONOMICS (ECON)

Lower Division

ECON 201 MICROECONOMIC PRINCIPLES (3) Economic reasoning of individual choice in household and market decisions; behavior of firms in competitive and noncompetitive markets, functioning of labor and capital markets, role of the entrepreneur and effects of government policies.

ECON 202 MACROECONOMIC PRINCIPLES (3) Inflation and unemployment—causes and remedies. Money and banking, government spending and taxation. International trade.

ECON 203 HONORS MICROECONOMIC PRINCIPLES (3) How private enterprise determines what is produced, prices, wages, profits. Supply and demand. Competition

and monopoly. Labor unions, income distribution. Farm policy. The role of government in our economy. Not open to students who successfully completed ECON 201. Honors College course.

ECON 204 HONORS MACROECONOMIC PRINCIPLES (3) Analysis of the aggregate dimensions of the American economy. An investigation of American culture by the study of the American economy. Topics include national income and employment, inflation, economic development, business cycles, international trade, government spending and taxation. Not open to students who successfully completed ECON 202. Honors College course.

ECON 205 STATISTICS FOR BUSINESS AND ECONOMICS I (3) Analysis and presentation of business and economic data; descriptive statistics and statistical inference; measures of central tendency and variability; probability theory; estimation; testing of hypothesis; linear regression analysis. Not open to students who successfully completed ECON 301. Prerequisite: MATH 109 or higher (except MATH 204).

Upper Division

ECON 303 AMERICAN ECONOMIC DEVELOPMENT (3) Description and analysis of growth and development of U.S. economy and its institutions from colonial times to 20th century. Emphasis on "new" economic history: explicit economic models and quantitative methods to analyze historical phenomena. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 305 SURVEY OF INTERNATIONAL ECONOMICS (3) A policy approach to international trade and international finance; international economic problems and issues facing the United States within the global economy. Not open to students who have successfully completed ECON 421. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 306 STATISTICS FOR BUSINESS AND ECONOMICS II (3) Regression models and regression analysis, ANOVA designs; extensive use of SPSS; non-parametric statistics; constrained optimization and linear programming; decision theory; cross-sectional and time-series analysis. Not open to students who have successfully completed MNGT 263/363. Prerequisites: ECON 201, ECON 202, and ECON 205 or MATH 231 or equivalent.

ECON 309 INTERMEDIATE PRICE THEORY (3) Determination of prices, output, wages, resource allocation. Theory of the firm. Theory of competition, monopolistic competition, oligopoly and monopoly. Prerequisites: ECON 201/203, ECON 202/204, and MATH 211 or MATH 273.

ECON 310 MACROECONOMIC THEORY (3) Impact of monetary and fiscal policy. The overall level of output, prices, employment, interest rates. Prerequisites: ECON 201/203, ECON 202/204, and MATH 211 or MATH 273.

ECON 313 MONEY AND BANKING (3) Organization and function of the money, credit and banking system of the United States, banking institutions, Federal Reserve System; the relation of money and credit to prices; foreign exchange. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 321 HISTORY OF ECONOMIC THOUGHT (3) Development of economic theory; 18th- and 19th-century classical schools. Modern economic literature on price, investment and employment. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 322 COMPARATIVE ECONOMIC SYSTEMS (3) Effects of alternative institutional arrangements on incentives and individual behavior affecting the allocation of resources. Differences between decentralized or market systems and centralized or government planning. Prerequisites: ECON 201/203 and ECON 202/204. Not open to students who have successfully completed ECON 323.

ECON 326 ECONOMIC DEVELOPMENT (3) Theory of economic growth. Problems and programs relating to least developed countries. Prerequisites: ECON 201/203 and ECON 202/204. Not open to students who have successfully completed ECON 325.

ECON 330 INDUSTRIAL ORGANIZATION (3) Competition, collusion, monopoly and oligopoly in regulated and unregulated markets. Economics of firm management,

market organization, sales practices and anti-trust laws. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 331 GOVERNMENT AND ECONOMIC LIFE (3) Economics and philosophy of markets and government and criteria for judging their success: end-state vs. process, utilitarian vs. individual rights. Applications focus on competition and antitrust; others include industrial policy, welfare economics and public choice. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 334 ECONOMICS OF POVERTY AND DISCRIMINATION (3) Study of the causes of poverty. How poverty and discrimination are interrelated. An analysis of existing and proposed programs to alleviate poverty and discrimination. Prerequisites: ECON 201/203 and ECON 202/204. Not open to students who have successfully completed ECON 333.

ECON 337 PUBLIC FINANCE (3) Non-market provision of goods and services at all levels of government: principles of public finance, specific public spending programs and taxes, allocation of resources and income distribution. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 339 HEALTH ECONOMICS (3) Analysis of the economic organization of the health care sector of the U.S. economy; alternative health care delivery systems and methods of financing health care services; current issues in health economics. Prerequisite: one upper-level economics course or consent of instructor.

ECON 341 [541] LABOR ECONOMICS AND LABOR RELATIONS (3) The determination of wages. Labor unions: history, structure, activities, effects. Government labor policy. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 351 URBAN ECONOMICS (3) Economic bases for the existence of metropolitan areas. The economy of the metropolitan area; its growth, income distribution, economic stability. Transportation and land use patterns. Social and other problems of metropolitan areas. Application of elementary price theory to the analysis and solution of urban issues. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 370 SPORTS ECONOMICS (3) Study of sports and the sports industry using economic models. Organized according to the fields of industrial organization, public finance and labor economics. Topics include league makeup, stadium financing, team location, competitive balance and incentive structures. Prerequisites: ECON 201/203 and ECON 202/204.

ECON 374 [574] ECONOMIC ISSUES OF GENDER (3) Explores the changing role of men and women in the United States and other economies with specific emphasis on issues such as differences in occupations and wages, theories of discrimination, the economics of the household, child care, divorce, poverty and the effect of government programs on families. Prerequisite: ECON 201/203.

ECON 375 ENVIRONMENTAL ECONOMICS (3) Applying tools of economic theory to issues focusing on natural resources and environmental policy. Topics include market failure, valuation of non-market goods, cost-benefit analysis and pollution. Prerequisite: ECON 201/203.

ECON 376 NATURAL RESOURCE ECONOMICS (3) Use of natural resources in the economy and related public policy issues emphasizing the role of property rights, markets, finance and market failures. Topics may include resource scarcity, energy, forests, marine resources, water supply, biodiversity, land use, outdoor recreation and international development. Prerequisite: ECON 201/203.

ECON 401 INTRODUCTION TO ECONOMETRICS (3) The problem of testing economic theories against empirical data; the formulation and estimation of regression models; the use of the method of multiple regression in testing the various hypotheses of economic theories; serial correlation; the problem of identification; application of simultaneous equation models; the use and construction of econometric models for forecasting and policy making. Prerequisites: ECON 201/203, ECON 202/204 and ECON 306.

ECON 409 MANAGERIAL ECONOMICS (3) Applications of microeconomic theory to business policies and decisions. The utilization of analytical and decision-making

tools derived mainly from economic theory, quantitative methods, finance and marketing theory. Topics considered include pricing practices and market structures, investment decision-making, and estimation of demand and cost of production. Prerequisites: ECON 309 and ECON 205 or MATH 231/233.

ECON 421 INTERNATIONAL ECONOMICS (3) International trade theory; theory of tariffs and other trade restrictions; trade and economic growth; economic integration and trading blocs; international capital and labor flows. Prerequisite: ECON 309.

ECON 423 INTERNATIONAL MONETARY THEORY AND POLICY (3) International issues in money and banking. Foreign exchange markets, exchange rates and adjustment in the balance of payments. International monetary theory and its application. Prerequisites: ECON 309 and ECON 310.

ECON 441 [540] PERSONNEL ECONOMICS (3) Use of economics to solve practical personnel problems with specific issues in training, turnover, hiring, incentives, fringe benefits, evaluation and legal constraints. Prerequisite: ECON 201/203.

ECON 451 INTRODUCTION TO MATHEMATICAL ECONOMICS (3) Intended primarily for students planning a graduate education in economics. A study of the fundamental mathematical methods widely used in economics: calculus and linear algebra. Emphasis is on optimization theory; economic examples are used throughout. Prerequisites: ECON 309, ECON 310, and MATH 211 or MATH 273.

ECON 470-479 TOPICS IN ECONOMICS (3) Economic analysis applied to a contemporary subject area in economics. Introduction of a new course for possible addition to the curriculum or a select topic given mutual faculty and student interest. May be repeated for 6 units provided a different topic is covered. Prerequisites: ECON 201/203 and ECON 202/204, junior standing, and two upper-level economics courses.

ECON 485 [585] SEMINAR ON ECONOMIC ISSUES (3) Research and writing of papers on an economic issue selected by the instructor. Prerequisites: ECON 309 and ECON 310.

ECON 493 [593] WORKSHOP ON ECONOMIC EDUCATION (3) Designed to help teachers and school administrators gain a better understanding of the economic working of the society in which we live. Prerequisite: consent of the instructor.

ECON 495 INDEPENDENT STUDY (1-3) Individual and supervised study in selected areas of economics. Prerequisites: Economics major, junior standing, 2.50 GPA, ECON 309 and consent of instructor.

ECON 497 INTERNSHIP IN ECONOMICS (1-3) Supervised work experience designed to promote an understanding of the economic system and the practical application of economic principles. Graded S/U. Prerequisites: Economics major, junior standing, 2.50 GPA, ECON 309, ECON 310 and consent of internship coordinator.

ECON 499 HONORS THESIS IN ECONOMICS (3) Independent research completed under the close supervision of a faculty thesis adviser. Prerequisites: ECON 495; 3.25 overall GPA; 3.50 GPA in ECON classes; and consent of faculty thesis adviser and honors coordinator.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

EDUCATION (EDUC)

Lower Division

EDUC 201 THE PARENTING PROCESS (3) An overview of the American parenting experience designed to give the learner information he or she will need to become an effective parent.

EDUC 203 TEACHING AND LEARNING IN A DIVERSE SOCIETY (3) Multicultural influences on education, processing self-awareness and awareness of others while exploring approaches to advocacy and social action with special attention to educational contexts. Includes field experience.

Upper Division

EDUC 301 WRITING AND COMMUNICATION SKILLS FOR TEACHERS (3) Practicum on development of written and oral communication skills needed in professional teaching situations. Focus will be on preparation of written materials which are appropriate for specific classroom and professional needs. Course content will be individualized to meet interests and needs of class members. Prerequisite: ENGL 102 or ENGL 190.

EDUC 407 [507] CONTEMPORARY ISSUES IN EDUCATION (3) Seminar approach to current issues in education. Prerequisite: student teaching or senior standing with consent of instructor. (No prerequisites when offered in day.)

EDUC 414 ASSESSMENT AND EVALUATION OF EDUCATIONAL PROGRAMS (3) Development and use of classroom assessment and evaluation techniques. Assessment: portfolios and student progress. Evaluation: formative, summative and performance based. Validity, reliability and useability of test results. Not open to those who successfully completed EDUC 414.

EDUC 417 [517] CHILDREN'S LITERATURE AND OTHER MATERIALS FOR READING AND LANGUAGE ARTS IN ELEMENTARY SCHOOL (3) Study of literature, texts and technology of reading and language arts instruction. Attention to authors, illustrators, awards, criteria for selection and importance in curricula. Prerequisites: two English courses.

EDUC 419 [519] STORYTELLING (3) The selection and presentation of stories for children. A study of sources for the storyteller in folklore, myth, legend, poetry and the writings of storytellers. Development of skills in storytelling. Prerequisite: EDUC 417 or consent of instructor.

EDUC 460 [560] TEACHING IN A MULTI-CULTURAL/MULTI-ETHNIC SOCIETY (3) Provides teacher education students with the background knowledge, understanding and techniques to deal effectively with children from diverse cultural and ethnic backgrounds. Prerequisite: 3 units in education or PSYC 201.

EDUC 470-471 [570-589] SPECIAL TOPICS IN EDUCATION: (Topic to be named) (1-3) In-depth study of a selected topic in education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time there is a topic scheduled. May be repeated for credit provided a different topic is covered.

EDUC 494 [594] TRAVEL AND STUDY EDUCATION: (Project to be named) (1-6) Study abroad of educational facilities, programs or practices, or selected projects in educational topics. By specific arrangement with program chair and sponsoring instructors.

EDUC 495 [595] INDEPENDENT STUDY IN EDUCATION: (Project to be named) (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: approval of appropriate program chair.

EDUC 496 [596] DIRECTED READINGS IN EDUCATION (1-4) Independent readings in selected areas of education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the department to major students. Prerequisite: approval of appropriate program chair.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

ELECTRONIC MEDIA AND FILM (EMF)

Lower Division

EMF 100 USING INFORMATION EFFECTIVELY IN ELECTRONIC MEDIA AND FILM (3) The pursuit, evaluation and selection of information in the study of electronic media and film and its effective and ethical organization and presentation.

EMF 120 CONCEPT AND STORY (3) Introduction to concept development and storytelling methods through a variety of writing assignments. Students will generate ideas and stories for projects in electronic media and film.

EMF 140 INTRODUCTION TO ELECTRONIC MEDIA AND FILM (3) Exploration of electronic media and film history, technology, aesthetics and culture from the perspective of the media professional.

EMF 205 WOMEN AND GENDER IN FILM AND MEDIA (3) Treatment of women and gender issues in film and media from silent movies to the Internet.

EMF 221 PRINCIPLES OF FILM AND MEDIA PRODUCTION (3) Basic techniques and principles of film, video and audio. \$25 lab/class fee.

EMF 222 FILM/VIDEO PRODUCTION (3) The art and technique of single camera media production with focus on learning and exploring applications for camera, lens, lighting, composition and editing. Not open to students who have successfully completed EMF 267 or EMF 271. Prerequisite: EMF 221. \$25 lab/class fee.

EMF 265 AUDIO PRODUCTION I (3) Theory and practice of audio production and its relationship to other aspects of media production. Prerequisite: EMF 221. \$25 lab/class fee.

EMF 275 PRINCIPLES OF FILM AND VIDEO EDITING (3) Theory, history and practice of post-production methods and aesthetics, emphasizing narrative continuity techniques. Prerequisite: EMF 222. \$25 lab/class fee.

Upper Division

EMF 311 HISTORY OF ELECTRONIC MEDIA (3) Economic, social, technical and artistic factors in the development of radio, television and other media from 1900 to the present. Prerequisites: EMF 140 and ENGL 102.

EMF 331 BROADCAST/CABLE PROGRAMMING (3) Programming principles, strategies and practices for the radio, television and cable industries. Analysis and evaluation of programs and program formats. Prerequisites: EMF 222 or EMF 265.

EMF 340 LIGHTING FOR FILM AND VIDEO (3) The theory and practice of lighting techniques for single camera film and video production. Prerequisites: EMF 222 and EMF 275. EMF 275 may be taken concurrently. \$50 lab/class fee.

EMF 351 TELEVISION STATION OPERATIONS (3) Theory and practice of station operations. Work is required at WMJF-TV, the university's television station. Prerequisite: EMF 222 or consent of instructor.

EMF 355 ELECTRONIC MEDIA AND FILM LAW AND REGULATION (3) Examination of the laws and rules that affect the film and electronic media industries and the regulatory framework through which they are applied. Prerequisite: EMF 140.

EMF 360 AUDIO DOCUMENTARY (3) Theory and practice of combining field recording, interviewing, audio mixing and editing to create short audio documentaries. Working closely with local groups, students will create audio documentaries about local and regional issues. Prerequisite: EMF 265. \$50 lab/class fee.

EMF 363 HISTORY OF FILM (3) Exploration of the social, artistic, economic and technical factors in the development of the motion picture from 1900 to the present. Prerequisite: ENGL 102.

EMF 364 AESTHETICS OF FILM AND ELECTRONIC MEDIA (3) Theory and aesthetics of film, radio, television and related media. Prerequisite: EMF 221.

EMF 365 AUDIO PRODUCTION II (3) Multi-track studio recording and mixing; digital recording and editing. Prerequisite: EMF 265. \$50 lab/class fee.

EMF 366 SOUND IN MEDIA (3) Introduction to sound design principles as applied to moving pictures and interactive systems. Examination of the relationship of music to image with an emphasis on the creative and technical

skills necessary to create and work with sound on sound track development for visual media. Prerequisite: EMF 265. \$50 lab/class fee.

EMF 367 NARRATIVE FILMMAKING: SYNC SOUND TECHNIQUES (3) 16mm filmmaking production methods and aesthetics emphasizing narrative and synchronous sound recording. This course requires an additional expense for film and film processing. The student should contact the department for details. Prerequisites: EMF 222 and EMF 275. May be taken concurrently with EMF 275. \$50 lab/class fee.

EMF 368 GENRE THEORY AND CRITICISM (3) Principles and aesthetics of different film genres. Prerequisite: EMF 363.

EMF 370 ELECTRONIC MEDIA NEWS PRODUCTION (3) Theory and practice of gathering, writing and producing news for television, radio, the Internet and other media using audio/video technology. Prerequisites: EMF 222 and EMF 265 or consent of instructor. \$50 lab/class fee.

EMF 371 LIVE MULTI-CAMERA PRODUCTION (3) The design, planning and completion of television studio productions. Possible options include television drama, comedy, documentary, performance and experimental programs. Prerequisite: EMF 222. \$50 lab/class fee.

EMF 373 ELECTRONIC FIELD PRODUCTION (3) Principles of electronic field production, exploring field camera operation, video editing and video producing techniques for commercial and non-commercial arenas. Prerequisites: EMF 140, EMF 222 and EMF 275, or consent of instructor. May be taken concurrently with EMF 275. \$50 lab/class fee.

EMF 375 BROADCAST PERFORMANCE (3) The process of communication through broadcast performance. The principles of broadcast communication will be applied to such functions as television and radio news announcing, commercial announcing, sports announcing and music announcing. Laboratory experiences provided. Prerequisite: EMF 265. \$50 lab/class fee.

EMF 377 BROADCAST/FILM WRITING (3) Training and practice in writing non-fiction, fiction and commercial/PSA scripts for the broadcast media and film. Prerequisites: ENGL 102 and EMF 120.

EMF 380 VISUAL EFFECTS I (3) Theory and practice of creating layered, time-based digital image and graphical manipulations with exercises in compositional and kinetic aesthetics. Prerequisite: EMF 222. \$50 lab/class fee.

EMF 385 RADIO, CULTURE AND SOCIETY (3) Examination and analysis of the ways in which the radio medium has influenced the nation's social and cultural environments since its beginning in the 1920s to the present. Topics include radio's role in community/public service, politics, war, race/ethnicity, gender, family and religion. Prerequisite: EMF 311.

EMF 387 DEVELOPING THE SCREENPLAY (3) Examination of the creative process of writing for film and TV. Emphasis on writing screenplay treatments, developing characters, exploring dramatic structure and addressing visual storytelling. Prerequisite: EMF 367 or EMF 373.

EMF 403 SPORTSCASTING (3) Theory and practical application of sportswriting, interviewing and play-by-play description. Prerequisite: junior/senior standing, EMF 222 and EMF 265 or consent of instructor.

EMF 405 SCREENWRITING (3) Narrative structure and mechanics; creation of a complete feature-length screenplay. Prerequisite: EMF 387.

EMF 421 RADIO STATION OPERATIONS (3) Lecture and practice in the advanced study of the internal workings of radio stations and the radio industry. May be repeated for a maximum of 6 units. Prerequisite: EMF 265 or consent of instructor.

EMF 430 THE MEDIA PRODUCER (3) Management and administration of film and video projects. Prerequisite: EMF 222.

EMF 437 CORPORATE VIDEO (3) Application of advanced production techniques to a client situation. Production

of a corporate video required. Prerequisite: EMF 367 or EMF 373. \$50 lab/class fee.

EMF 455 DIRECTING FOR FILM AND VIDEO (3) Fundamentals of screen directing, which includes script breakdown, scene blocking, communication with cast and crew, and the logistics of production. Prerequisite: EMF 367 or EMF 373. \$50 lab/class fee.

EMF 460 INTERNSHIP IN ELECTRONIC MEDIA AND FILM (1-6) Practical field experiences. Under faculty supervision, a student works as an intern with a professional in the field of electronic media and film. Graded S/U. May be repeated for a maximum of 12 units, but only 3 units will apply to the major; the other 9 units may be used as general electives. Prerequisites: junior/senior standing, cumulative GPA of 2.75 and 3.00 in the major; completion of appropriate courses determined by the department.

EMF 461 DOCUMENTARY FILM AND VIDEO (3) History, theory and criticism of documentaries. Production required. Prerequisites: EMF 275 and EMF 367 or EMF 373. \$50 lab/class fee.

EMF 462 EXPERIMENTAL FILM AND VIDEO (3) History, theory and criticism of avant-garde works. Production required. Prerequisite: EMF 275 and EMF 367 or EMF 373. \$50 lab/class fee.

EMF 463 TOPICS IN INTERNATIONAL CINEMA (3) Thematic, stylistic, historical, social and economic analysis of world cinema. May focus on a particular country, region or period. Course may be repeated for a maximum of 6 units when a different topic covered. Prerequisite: EMF 363 or consent of instructor.

EMF 470 PRODUCING ONLINE VIDEO (3) Creating and producing multi-episode television programs for online delivery. Prerequisites: EMF 275 or MCOM 258 and consent of instructor.

EMF 473 SEMINAR IN NARRATIVE FILMMAKING (3) Seminar in professional digital filmmaking techniques leading to completion of an original narrative film. Prerequisite: EMF 367 or EMF 373. \$50 lab/class fee.

EMF 475 FILM AND MEDIA ANALYSIS (3) Intensive study of an aspect of film, television or the Internet (such as genre, director, studio, producer, writer, designer) in terms of thematic and formal properties and their influence on art and culture. May be repeated for a maximum of 6 units when a different topic is covered. Prerequisite: EMF 221.

EMF 476 SPECIAL TOPICS IN ELECTRONIC MEDIA AND FILM (3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units when a different area is covered. Prerequisites: EMF 140 and EMF 221 and junior/senior standing.

EMF 481 TELEVISION NEWS (3) Advanced broadcast news, focusing on television news reporting, editing and production. Prerequisite: EMF 275 and EMF 373 or MCOM 381 and consent of instructor. \$50 lab/class fee.

EMF 485 SEMINAR IN DIGITAL STUDIES (3) History, theory and practice of digital media and culture, current technological trends and their origins. Prerequisite: EMF 311 or consent of instructor.

EMF 486 DANCE FOR THE CAMERA (3) An interdisciplinary class between EMF and DANC combining advanced media production skills and choreography to collaboratively produce a movement piece for the camera. Prerequisites: EMF 275; EMF 367 or EMF 373. \$50 lab/class fee.

EMF 487 VISUAL EFFECTS II (3) Creation and analysis of visual effects and digital media kinetics with exercises in virtual lighting and camera movement, compositing, animated titles, and synthesis of graphics and video. Prerequisite: EMF 380. \$50 lab/class fee.

EMF 495 DIRECTED STUDY IN ELECTRONIC MEDIA AND FILM (1-6) Directed research or project in a specific area of joint faculty/student interest. May be repeated for a maximum of 12 units, but only 3 units can count toward the major; the other 9 units may be used as general electives. Prerequisites: junior or senior standing, and approval of planned project by the instructor. Special permit required.

EMF 498 HONORS DIRECTED STUDY (3) Directed study in electronic media and film on a topic or project selected by the student in consultation with the instructor. May be repeated for a maximum of 6 units.

EMF 499 HONORS THESIS IN ELECTRONIC MEDIA AND FILM (3) Research and writing of a thesis or creative media project chosen by the student in consultation with the thesis adviser. Restricted to candidates for Honors in EMF. May be repeated for a maximum of 6 units. Prerequisites: consent of thesis adviser and admission to Departmental Honors Program.

ELEMENTARY EDUCATION (ELED)

Lower Division

ELED 201 SCHOOL AND AMERICAN SOCIETY (3) Philosophical, historical and contemporary issues of education as they relate to American schools and schooling. Critical analysis of the functions of schools through field-based observation and inquiry.

ELED 211 HONORS SCHOOL AND AMERICAN SOCIETY (3) Philosophical, historical and contemporary issues of education as they relate to American schools and schooling. Critical analysis of the function of schools through field-based observation and inquiry. Honors College course.

Upper Division

ELED 311 CHILD AND THE ELEMENTARY SCHOOL CURRICULUM AND ASSESSMENT (3) Curriculum methods and assessment strategies for the elementary school classroom. Prerequisite: successful completion of Level I and Level II of Elementary Education Professional Internships sequence. Corequisite: ELED 312.

ELED 312 PROFESSIONAL DEVELOPMENT SCHOOL INTERNSHIP I (3) Completion of an internship in an elementary school classroom for a minimum of 120 hours. Prerequisite: successful completion of Level I and Level II of the Elementary Education Professional Internship Sequence. Corequisite: ELED 311.

ELED 320 WRITING SKILLS FOR TEACHERS (3) Language skills for children with emphasis on writing instruction, the reading-writing connection and integration of the other language arts in the acquisition of effective written communication skills. Prerequisites: ENGL 102 and PSYC 201.

ELED 322 FOUNDATIONS OF READING AND OTHER LANGUAGE ARTS (3) Examination of theories, processes and acquisition of reading and language arts, including cognitive, linguistic, social and physiological factors involved in oral and written language development. Prerequisites: ENGL 102, PSYC 201 and sophomore status.

ELED 323 PRINCIPLES AND PRACTICES OF INSTRUCTION IN READING AND LANGUAGE ARTS (3) Principles for developing reading and language arts programs in the elementary classroom. Examination of current approaches, methodologies and strategies for instruction. Prerequisites: PSYC 201 and ELED 363.

ELED 324 INTEGRATING LITERACY IN K-12 CONTENT AREAS (3) Overview of process and acquisition of literacy, informal strategies for assessing literacy, and the range of instructional strategies and materials for integrating literacy into K-12 content area classrooms. Restricted to Music Education, Art Education, Dance Education or Physical Education majors. Prerequisite: special permit.

ELED 363 LANGUAGE AND LITERACY INTERNSHIP (3) Initial experiences in teaching and learning in specified settings. Focus on observing and analyzing teaching and learning within the context of the school and community. Prerequisite: PSYC 201. Lab/Class will be assessed.

ELED 365 TEACHING SOCIAL STUDIES IN THE ELEMENTARY SCHOOL (3) Methods and materials for elementary school social studies instruction. Attention given to multicultural and global perspectives. Prerequisite: ELED 311.

ELED 399 DIFFERENTIATED STUDENT TEACHING — ELEMENTARY (1-8) Student teaching experience in addition to those in ELED 468 or student teaching in special subject areas, according to needs and interests of the student. May be repeated for a maximum of 8 units. Graded S/U.

ELED 429 [529] PRINCIPLES AND PRACTICES OF ASSESSMENT IN READING AND LANGUAGE ARTS (3) Examination of and practice using a range of assessments for reading and language arts development, focusing on the relationship of assessment to instructional planning for diverse learners. Prerequisites: ELED 323.

ELED 457 [557] ENGLISH FOR THE NON-ENGLISH SPEAKING CHILD (3) Methods of teaching English to elementary school children whose native tongue is another language. Prerequisites: elementary language arts methods course or elementary teaching experiences or consent of instructor.

ELED 458 [558] PRACTICUM: ENGLISH FOR THE NON-ENGLISH SPEAKING CHILD (1-4) Supervised practical experience in teaching English to elementary school children whose native tongue is another language. May be repeated for a maximum of 4 units. Prerequisites: ELED 457 and student teaching or teaching experience.

ELED 468 PROFESSIONAL DEVELOPMENT SCHOOL INTERNSHIP II (6-12) Fourteen- to 15-week, full-time field experience in public school classrooms under guidance of master teachers and university supervisor. Graded S/U. Prerequisite: successful completion of Level III of Elementary Education Professional sequence.

ELED 469 PROFESSIONAL DEVELOPMENT SCHOOL INTERNSHIP II SEMINAR (3) Readings, action research and discussion on school environments, instructional delivery, diagnosis/evaluation, classroom management policies. Active inquiry within context of classrooms and agencies that influence schooling practices. Prerequisite: successful completion of Level III of Elementary Education Professional sequence. Corequisite: ELED 468.

ELED 470-489 [570-589] SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3) In-depth study of a selected topic in elementary education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Each topic may be taken as a separate course. May be repeated for a maximum of 9 units provided different topics are covered.

ELED 494 [594] TRAVEL AND STUDY: ELEMENTARY EDUCATION (1-6) Study abroad of educational facilities, programs or practices, or selected projects in elementary education topics. By special arrangement with program chairperson and sponsoring instructors. May be repeated for a maximum of 6 units.

ELED 495 [595] INDEPENDENT STUDY IN EDUCATION: ELEMENTARY (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. May be repeated for a maximum of 4 units. Prerequisite: approval of appropriate program chair.

ELED 496 [596] DIRECTED READING: ELEMENTARY EDUCATION (1-4) Independent reading in selected areas of elementary education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the department to major students. May be repeated for a maximum of 4 units. Prerequisite: approval of appropriate program chair.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

ELEMENTARY EDUCATION/SPECIAL EDUCATION (ESEE)

Upper Division

ESEE 468 FIELD EXPERIENCE (1) Course provides knowledge of characteristics of students with low-incidence disabilities through a 30-hour field observation. Corequisite of SPED 301 for teacher candidates enrolled in integrated elementary education—special education dual certification program.

ESEE 474 ELEMENTARY EDUCATION/SPECIAL EDUCATION INTERNSHIP I (3-6) Supervised clinical experience in elementary general education and elementary/middle special education settings and seminar. May be repeated for a

maximum of 6 units. Prerequisites: Successful completion of Level I and II ESEE program courses.

ESEE 476 ELEMENTARY EDUCATION/SPECIAL EDUCATION INTERNSHIP II (12) Interns demonstrate the knowledge, skills and disposition necessary for successful teaching in general and special education settings at the elementary/middle school level. Prerequisite: successful completion of ESEE 474.

ESEE 485 SEMINAR IN ESEE (3) Seminar held in conjunction with and must be taken at the same time as ESEE 476. Topics include: theoretical and practical aspects of teaching; critical issues and topics; making the transition from professional pre-service intern to professional in-service teacher. Restricted to enrollment in Integrated Elementary Education—Special Education Program. Prerequisite: Prescribed courses for ESEE majors.

ENGLISH (ENGL)

English Course Level and Numbering

Lower-division English courses (100–200-level) are designed as introductions to the subject. **Upper-division English courses (300–400-level)** are more particularly focused and assume students have the background specified by the course prerequisites. There is no difference in degree of difficulty or specialization between 300-level and 400-level courses; students should not assume, therefore, that a 400-level course is more advanced than one at the 300 level.

Lower Division

ENGL 102 WRITING FOR A LIBERAL EDUCATION (3) Development of strategies for writing expository prose based on analytical reading. Intellectually challenging writing and reading activities and student-teacher interaction emphasizing collaborative and active learning. Not open to those who have successfully completed ENGL 190.

ENGL 152 SOLVING LITERARY PROBLEMS (3) Using information effectively to solve textual, cultural and interpretive problems in literature. Includes multimedia and interdisciplinary approaches. Content varies.

ENGL 190 HONORS WRITING SEMINAR (3) Exploration of issues and critical methods vital to a liberal education. Development of strategies for effective writing. Emphasis on student essays and reports. Honors College course.

ENGL 200 INTRODUCTION TO STUDYING ENGLISH (3) Concepts, terms and skills developed through reading in the basic genres. Students are to take this course in the first two terms after declaring the English major.

ENGL 205 SHAKESPEARE FOR NON-MAJORS (3) Shakespeare's major plays and poetry in their cultural context. Emphasis on plot, interpretation and performance.

ENGL 217 DETECTIVE FICTION (3) Will trace the literary and cultural development of the classical detective novel from Poe to MacDonald. Will examine patterns of formulas in the works with an eye to determining how the structure of the novels and their enduring popularity contribute to an understanding of the cultures that produced them. Students will write one short paper and will take a final examination.

ENGL 221 BRITISH LITERATURE TO 1798 (3) Survey of poetry, prose and drama from the Middle Ages through the 18th century; emphasis on works by such writers as Chaucer, Shakespeare, Milton, Pope and Swift.

ENGL 222 BRITISH LITERATURE SINCE 1798 (3) Survey of poetry and prose of the 19th and early 20th centuries, such as works by Wordsworth, Keats, Dickens, Browning, Lawrence and Woolf.

ENGL 228 FUTURE WORLDS (3) Novels and short stories presenting alternative visions of the future. Writers include Huxley, Bradbury, Orwell, Rand, Vonnegut, Berger, LeGuin and Atwood. Prerequisite: two English courses.

ENGL 229 MODERN IRISH LITERATURE (3) 19th- and 20th-century prose, poetry and drama.

ENGL 230 MAIN CURRENTS IN AMERICAN LITERATURE (3) Historical and thematic approach to literature that has helped define the national voice. Works by such authors

as Hawthorne, Twain, Dickinson, Faulkner, Morrison and Plath.

ENGL 231 AMERICAN LITERATURE TO 1865 (3) Major writers and literary movements from the Colonial Period to the Civil War, such as works by Taylor, Emerson, Poe, Hawthorne, Melville and Whitman.

ENGL 232 AMERICAN LITERATURE SINCE 1865 (3) Literary movements and major writers since the Civil War, such as Dickinson, Twain, James, Frost, Hemingway, Fitzgerald and Faulkner. Prerequisite: ENGL 102.

ENGL 233 SURVEY OF AFRICAN AMERICAN LITERATURE (3) Slave narratives, post-Civil War and 20th-century developments and such writers as Wheatley, Douglass, Hughes and King.

ENGL 234 MAJOR WRITERS IN AFRICAN AMERICAN LITERATURE (3) Literature of slavery, the Reconstruction, the Harlem Renaissance, the Depression and after, with emphasis on Chesnut, Hughes, Wright and Alice Walker. Prerequisite: ENGL 233 is recommended but not required as a prerequisite to ENGL 234.

ENGL 235 ETHNIC-AMERICAN LITERATURE (3) Comparative survey of Asian, European, Black, Jewish and other immigrant American literature, with emphasis on literary, historical and sociological approaches.

ENGL 236 AMERICAN INDIAN LITERATURE, 1772-PRESENT (3) Emphasis on the contributions of American Indian writers to American literature. Study of the genres in which American Indians have written, the influences of both Indian and non-Indian world views, themes and techniques represented in these works.

ENGL 239 A SURVEY OF MODERN JEWISH LITERATURE (3) Jewish literature from Eastern Europe, the United States and Israel. Writers vary. Not open to those who successfully completed ENGL 237.

ENGL 240 CLASSICS OF THE WESTERN HERITAGE (3) Selections from the most influential literature of the Western tradition. Authors will vary but will be of the stature of Homer, Dante, Shakespeare, Voltaire, George Eliot and Dostoevsky.

ENGL 243 INTRODUCTION TO CLASSICAL MYTHOLOGY (3) The study of myth in selected works from Greek and Roman literature.

ENGL 244 WORLD FOLKLORE (3) Study of folk expression throughout the world. Focus on such folk narratives as fairy tale (marchen) and legend from a variety of cultures. Characteristics of folklore, folk groups and methodology. Children's folklore, jokes, folk architecture and arts.

ENGL 248 LITERATURE OF GLOBAL EXPERIENCE (3) A study of modern literature in its cultural diversity from six continents.

ENGL 251 APPLIED GRAMMAR (3) Grammar, syntax and usage for improvement of writing style. Prerequisite: ENGL 102 or ENGL 190.

ENGL 253 THE BIBLE AND LITERATURE (3) Introduction to the Bible and to its profound influence on secular literature. Texts will vary. Biblical background is not required.

ENGL 261 ELEMENTS OF POETRY (3) Elements and types of poetry in the Western tradition through readings of American, English and European works. Emphasis on imagery, diction, sound patterns, stanzaic form, major modes and genres.

ENGL 263 ELEMENTS OF FICTION (3) Elements and types of fiction in the Western tradition through close readings of American, English and European works, especially short stories. Emphasis on point of view, plot, character, setting, design and theme.

ENGL 265 ELEMENTS OF DRAMA (3) Elements and types of drama in the Western tradition through close readings of American, English and European works. Emphasis on structure, plot, character, setting, conventions, stage history.

ENGL 283 INTRODUCTION TO CREATIVE WRITING (3) Theories and technical considerations pertinent to writing poetry and fiction, with discussion of student writing.

ENGL 290 HONORS SEMINAR IN LITERATURE (3) Small group discussion and analysis of selected works from the Western tradition. Content varies. May be repeated for a maximum of 6 units. Honors College course.

Upper Division

ENGL 300 LITERARY RESEARCH AND APPLIED CRITICISM (3) Bibliography and research methods and critical approaches to literature, with emphasis on the formalistic, social, psychological and archetypal. Not open to students who successfully completed ENGL 361. Prerequisites: ENGL 200 and one other ENGL course.

ENGL 301 RHETORIC AND SCIENCE (3) A study of the role language plays in the making and unmaking of facts in the contemporary world of science and technology. Prerequisite: ENGL 102 or ENGL 190.

ENGL 310 WRITING ARGUMENT (3) Establishing, defending and arguing an opinion, focusing on structure, claims, evidence and warrants. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 311 WRITING POETRY (3) Nature of the creative process and art of imaginative expression in writing poetry. Advanced Writing Course.

ENGL 312 WRITING FICTION (3) Nature of the creative process and art of imaginative expression in writing short fiction.

ENGL 313 ACADEMIC ESSAY (3) Emphasizes expository writing within an academic setting. Priorities include organizational support for claims, correct usage and effective style, using conventional academic models. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 315 THE LITERARY ESSAY (3) Creative use of language, using the traditional literary essay as the model for personal expression and exploration of the human experience. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 316 WRITING ABOUT LITERATURE (3) Composition of the literary essay, its structure and style. Emphasis on explication, character, plot and thematic analysis of poetry, fiction and drama. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 317 WRITING FOR BUSINESS AND INDUSTRY (3) Standard written formats used in business and industry, including correspondence, memoranda and reports. Projects individualized to meet student needs and career interests. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 318 ADVANCED INFORMATIONAL WRITING (3) Researching and writing professional documents, including reports, manuals and technical publications. Projects individualized to meet student needs and interests. Advanced Writing Course. Prerequisite: ENGL 102 or ENGL 190.

ENGL 319 ORGANIZATIONAL COMMUNICATIONS (3) Study of factors influencing communication in organizations such as business, industry and government, including the nature of communication, organizational structure, downward and upward communication, conflict, groups, interactions and communication channels. Emphasis will be on detailed analysis of communications, particularly written communications.

ENGL 321 [521] MEDIEVAL BRITISH LITERATURE (3) Major British works of the Middle Ages, including Arthurian literature, the Pearl Poet, William Langland and others. Prerequisite: two ENGL courses.

ENGL 322 [512] MEDIEVAL AND EARLY MODERN BRITISH DRAMA (3) Development of English drama to 1642, excluding Shakespeare, including authors such as Marlowe, Kyd, Jonson, Ford and Webster. Prerequisite: two ENGL courses.

ENGL 323 [513] 16TH-CENTURY BRITISH LITERATURE (3) Literature of the early English Renaissance in its historical context, including authors such as More, Wyatt, Surrey, Spenser, Sidney, Raleigh and Elizabeth I. Prerequisites: two ENGL courses.

ENGL 324 [514] EARLY 17TH-CENTURY BRITISH LITERATURE (3) Major intellectual, political and literary developments from the accession of James I to the publication of *Paradise Lost*, including authors such as Donne, Jonson, Herbert, Herrick, Wroth, Marvell and Milton. Prerequisite: two ENGL courses.

ENGL 325 [515] 18TH-CENTURY BRITISH LITERATURE (3) Social and intellectual backgrounds, literary trends and significant authors, such as Swift, Pope, Fielding, Johnson and Boswell, with emphasis on satire. Prerequisite: two ENGL courses.

ENGL 326 [516] LITERATURE OF THE BRITISH ROMANTIC PERIOD (3) Major writers from 1790 to 1830 such as Blake, Wordsworth, Coleridge, Byron, Shelley and Keats with emphasis on the philosophical and social backgrounds. Prerequisite: two ENGL courses.

ENGL 327 THE VICTORIAN AGE (3) Main currents of British literature and society, 1830-1901, with emphasis on Tennyson, Browning, Arnold, Carlyle, Ruskin, Dickens and Eliot. Prerequisite: two ENGL courses.

ENGL 331 [517] AMERICAN DRAMA (3) American drama from the Colonial Period to the present, with emphasis on 20th-century plays by O'Neill, Williams, Miller, Bullins and Wilder. Prerequisite: two ENGL courses.

ENGL 336 POST-COLONIAL LITERATURE (3) Literature of colonized peoples from the beginning of colonization to present. Focus may be on one area in the world, such as Africa or the Caribbean.

ENGL 341 [518] HISTORY AND LITERATURE OF THE OLD TESTAMENT (3) The chief books of the Old Testament and the Apocrypha studied from a literary and historical point of view. Prerequisite: two ENGL courses.

ENGL 342 [519] FOLKLORE AND LITERATURE (3) How and why literary artists draw plots, characters, themes and motifs from traditional folk narratives. Distinctions between folk and literary tales. Focus on literary versions of classic fairy tales by such writers as Perrault, Baum, Coover, Carter, Yolen and Sexton. Prerequisite: two ENGL courses.

ENGL 343 [543] MYTH AND LITERATURE (3) Literary reinterpretations of themes and figures from Greek and Roman mythology. Prerequisites: two ENGL courses.

ENGL 346 MODERN DRAMA (3) British, American and European plays, with attention to playwrights such as Ibsen, Strindberg, Chekhov, Shaw, Pirandello, Brecht, Sartre and Beckett. Prerequisite: two ENGL courses.

ENGL 347 [547] WORLD LITERATURE WRITTEN IN ENGLISH (3) Literature originally published in English from Africa, India, Australia, New Zealand, Canada and the West Indies. Mainly 20th-century fiction, poetry and drama. Prerequisite: two ENGL courses.

ENGL 350 [550] COMPARATIVE GRAMMAR (3) Study of English grammar: traditional, structural, transformational. Prerequisite: two ENGL courses.

ENGL 351 HISTORICAL LINGUISTICS (3) An introduction to language typology and Indo-European philology; historical development of linguistics up to the 20th century. Prerequisite: two ENGL courses.

ENGL 353 [503] HISTORY OF AMERICAN ENGLISH (3) Origins and history of American dialects; development of elements of vocabulary, sounds and grammar which distinguish American English, standards of American English. Prerequisite: two ENGL courses.

ENGL 363 FILM AND LITERATURE (3) Comparative examination of the complex relationships between film and literature. Prerequisite: two ENGL courses.

ENGL 370 SPECIAL TOPICS: LITERATURE OF WOMEN (3) Selected works by and/or about women, with emphasis on themes, issues or genres. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 371 WOMEN POETS: THEMES AND IMAGES (3) Study of the development of a distinctive body of poetry by women, including Browning, Dickinson, Plath and Rich.

Emphasis on 20th-century American poets and historical background. Prerequisite: two ENGL courses.

ENGL 372 WOMEN WRITERS (3) Development of women's literary traditions in the work of 19th- and 20th-century British and American women, including Austen, Cather, Woolf and Lessing. Prerequisite: two ENGL courses.

ENGL 373 THEMES IN LITERATURE (3) Thematic approach to selected works of American, British and world literature. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 380 VOICES OF MEDIEVAL WOMEN (3) Voices assumed by and assigned to women in European literature of the 10th to the 15th centuries. Emphasis on medieval women authors, including Hrotsvit von Gendersheim, Hildegard von Bingen, Heloise, Marie de France, Christine de Pizan and Margery Kempe. Prerequisite: two ENGL courses.

ENGL 411 ADVANCED POETRY WRITING (3) Intensive study of form and technique. Portfolio development. Workshop format. Prerequisite: ENGL 311 or consent of the instructor.

ENGL 412 ADVANCED FICTION WRITING (3) Intensive study of form and technique. Portfolio development. Workshop format. Prerequisite: ENGL 312 or consent of instructor.

ENGL 413 IRISH LITERARY REVIVAL: THE SEARCH FOR A MYTH (3) Anglo-Irish writing from 1889 to 1939. Special emphasis on Yeats, Joyce and the Abbey Theatre. Examination of literary, social and political backgrounds, as well as significant later writers.

ENGL 414 EDITING THE LITERARY MAGAZINE I (3) Acquisition and practice of skills needed to produce a high-quality literary magazine. Skills include writing effectively in both expository and imaginative modes; understanding audience; analyzing and judging writing by others; grasping practical aspects of production; practicing professional conduct and ethics; refining a personal aesthetic. Prerequisites: ENGL 102 and one other English course.

ENGL 415 EDITING THE LITERARY MAGAZINE II (3) Acquisition and practice of skills needed to produce a high-quality literary magazine. Skills include writing effectively in both expository and imaginative modes; understanding audience; understanding ability to analyze and judge writing by others; experiencing practical aspects of production and post-production; practicing professional conduct and ethics; refining a personal aesthetic. Prerequisites: ENGL 102 and one other English course.

ENGL 416 EDITING (3) Basics of manuscript and online editing for business and industry. Manuscript preparation. Prerequisite: ENGL 102 or equivalent.

ENGL 417-419 TOPICS IN WRITING (3) Specialized topics for writers of non-fiction, fiction and poetry. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 420 [520] DEVELOPMENT OF THE BRITISH NOVEL: 18TH CENTURY (3) Georgian fiction and its social background, especially works by Defoe, Richardson, Fielding, Smollett, Sterne and Austen. Prerequisite: two ENGL courses.

ENGL 421 [521] DEVELOPMENT OF THE BRITISH NOVEL: 19TH CENTURY (3) Mainly Victorian fiction and its social background, especially works by Scott, the Brontës, Thackeray, Dickens, Eliot and Hardy. Prerequisite: two ENGL courses.

ENGL 422 [522] DEVELOPMENT OF THE BRITISH NOVEL: 20TH CENTURY (3) Modern fiction and its social background, especially works by Joyce, Lawrence, Woolf, Forster, Waugh and Greene. Prerequisite: two ENGL courses.

ENGL 423 [523] MODERN BRITISH POETRY (3) Emphasis on Hopkins, Hardy, Yeats, Auden, Spender, Sitwell, Thomas and Larkin. Prerequisite: two ENGL courses.

ENGL 425 [525] CHAUCER (3) Major poems, especially "The Canterbury Tales" and "Troilus and Criseyde." Prerequisite: two ENGL courses.

ENGL 426 [526] TOPICS IN SHAKESPEARE STUDIES (3) Topics and issues related to Shakespeare, his times, his contemporaries, his reception and performance history. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 427 [527] SHAKESPEAREAN COMEDY (3) Shakespeare's development as a poet and dramatist in the comedies and romances. Prerequisite: two ENGL courses.

ENGL 428 [528] SHAKESPEAREAN TRAGEDY (3) Shakespeare's development as a poet and dramatist in the histories and tragedies. Prerequisite: two ENGL courses.

ENGL 429 [529] MILTON (3) Selected poetry and prose in relation to the literary tradition and the scientific, religious, cultural and political developments of the 17th century. Prerequisites: two ENGL courses.

ENGL 431 [531] LITERATURE OF THE AMERICAN ROMANTIC PERIOD (3) Social and political backgrounds, 1819–1860, important literary ideas, criticism and major authors, such as Irving, Cooper, Emerson, Thoreau, Hawthorne, Melville and Poe. Prerequisite: two ENGL courses.

ENGL 432 [532] LITERATURE OF THE AMERICAN REALISTIC PERIOD (3) Major writers, such as Dickinson, Twain, Crane and James; important secondary writers; social and political backgrounds; important literary ideas and criticism, 1860–1914. Prerequisite: two ENGL courses.

ENGL 433 [533] AMERICAN SHORT STORY (3) Authors and schools, such as Irving, Hawthorne, Poe, Hemingway, Welty, Wright, Porter, local color writers, realists and naturalists. Prerequisite: two ENGL courses.

ENGL 435 [535] DEVELOPMENT OF THE AMERICAN NOVEL: 19TH CENTURY (3) Major novelists, such as Cooper, Melville, Hawthorne, Twain, Howells, James and Crane. Prerequisite: two ENGL courses.

ENGL 436 [536] DEVELOPMENT OF THE AMERICAN NOVEL: 20TH CENTURY (3) Major novelists, such as Wharton, Fitzgerald, Faulkner and Ellison. Prerequisite: two ENGL courses.

ENGL 437 [537] AMERICAN POETRY THROUGH FROST (3) Puritan beginnings through the early 20th century, with emphasis on Emerson, Poe, Whitman, Dickinson and Frost. Prerequisite: two ENGL courses.

ENGL 438 [538] MODERN AMERICAN POETRY (3) Poetry and poetics of the Modern Period. Major authors including Eliot, Moore, Stevens, and Williams. Movements studied include Imagism, Harlem, Renaissance, and Objectivism. Prerequisites: 2 ENGL courses.

ENGL 439 MODERN WORLD POETRY (3) International poets of the 20th century, such as Rainer Maria Rilke, Eugenio Montale and Octavio Paz, and related literary movements. Prerequisite: two ENGL courses.

ENGL 440 [539] CONTEMPORARY AMERICAN POETRY (3) American poetry and poetics since World War II. Major writers including Bishop, Lowell, Plath, Ashbery, Ginsberg, and Sexton. Confessional, Black Mountain, Beat, Language and Black Arts movements. Prerequisites: 2 ENGL courses.

ENGL 441 [541] MODERN FICTION TO WORLD WAR II (3) Work of the modern masters of fiction, with emphasis on Proust, Mann and Joyce. Prerequisite: two ENGL courses.

ENGL 442 [542] MODERN FICTION SINCE WORLD WAR II (3) Works of the significant writers — English, American and Continental — of the past 50 years, including such figures as Grass, Robbe-Grillet, Solzhenitsyn and Burgess. Prerequisite: two ENGL courses.

ENGL 451 [551] HISTORY OF THE ENGLISH LANGUAGE (3) Changes and reasons for the changes in grammar, sound and vocabulary of the language from Old English to modern times. Prerequisite: two ENGL courses.

ENGL 452 [552] STRUCTURE OF THE ENGLISH LANGUAGE (3) A linguistic approach to sounds, forms, syntax and usage. Prerequisite: two ENGL courses.

ENGL 461 [561] HISTORY OF LITERARY CRITICISM (3) Major statements, literary theory from Aristotle to the present, including Horace, Sidney, Johnson, Coleridge, Eliot and Frye. Prerequisite: two ENGL courses.

ENGL 462 MODERN LITERARY THEORY (3) Intensive study of modern literary models, including formalism, structuralism, deconstruction, hermeneutics and feminism. Prerequisite: two ENGL courses.

ENGL 463 SEMIOTICS: THE STUDY OF SIGNS (3) Study of the theory of semiotics, the study of signs, and its application to both print and non-print texts including photography, film, book illustration. The relationship between written and visual languages. Prerequisite: two ENGL courses.

ENGL 464 [564] TOPICS IN LITERARY THEORY (3) Intensive study of a particular theoretical approach to literature or literary study, including philosophical background and practical implications. Prerequisites: ENGL 102 or ENGL 190.

ENGL 465 [565] BRITISH AND AMERICAN PROSE (3) Nonfiction prose, with emphasis on form and style. Prerequisite: two ENGL courses.

ENGL 469 STUDIES IN ONE OR TWO AUTHORS (3) Intensive examination of significant writer or comparative treatment of two. Frequently studied writers include D.H. Lawrence, Virginia Woolf, William Faulkner and Emily Dickinson. May be repeated for a maximum of 6 units under different topics.

ENGL 471 [571] TOPICS IN WORLD LITERATURE (3) Authors, periods, genres or conventions. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 472 [572] TOPICS IN BRITISH LITERATURE (3) Authors, periods, genres or conventions. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 473 [573] TOPICS IN AMERICAN LITERATURE (3) Authors, periods, genres or conventions. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 475 [575] TOPICS IN LINGUISTICS (3) Topics and issues in contemporary linguistics theory, with particular attention to recent interdisciplinary subspecialty developments: psycholinguistics, sociolinguistics, etc. Topics vary. Prerequisite: one linguistics course or consent of the instructor. May be repeated for a maximum of 6 units.

ENGL 476 [576] TOPICS IN MULTI-ETHNIC AMERICAN LITERATURE (3) Possible topics include women in ethnic literature, Jewish writers, the Catholic novel. Content varies. May be repeated for a maximum of 6 units. Prerequisite: two ENGL courses.

ENGL 477 [577] TOPICS IN BLACK AMERICAN LITERATURE (3) Authors, periods, genres or conventions. Content varies. May be repeated for a maximum of 6 units. Prerequisites: two ENGL courses.

ENGL 485 SEMINAR IN ENGLISH STUDIES AS CAPSTONE (3) Intensive study in one area of English studies, including British, American or world literature, rhetoric, linguistics, creative writing or critical theory. The completion of the major portfolio. Students may not repeat a seminar for credit. Prerequisites: ENGL 200, ENGL 300 or current enrollment in ENGL 300, and senior English major standing.

ENGL 486 SEMINAR IN ENGLISH STUDIES (3) Intensive study in one area of English studies, including British, American or world literature, rhetoric, linguistics, creative writing or critical theory. May be repeated for a maximum of 6 units. Students may not repeat a seminar topic for credit. Prerequisites: two ENGL courses.

ENGL 490 [590] DIRECTED STUDIES IN ENGLISH (3) Independent reading of a specific author, period, topic, problem or school of literature. Topic selected by student in consultation with professor. May be repeated for a maximum of 6 units. Prerequisites: 18 units in English, or 12 units in English and 6 in a related discipline; minimum 3.00 GPA in English and the related discipline; consent of department chair and instructor.

ENGL 494 [594] TRAVEL AND STUDY (3–6) Places and topics to be selected by student in consultation with instructor. Prerequisite: two ENGL courses.

ENGL 497 ENGLISH INTERNSHIP (3) On-the-job experience in research, editing and writing in government, public relations, journalism, industry and other professional positions. ENGL 497 may be repeated or taken in combination with ENGL 498 for a maximum of 6 units. Graded S/U. Consent of coordinator required.

ENGL 498 INTERNSHIP AS CAPSTONE (1-3) On-the-job experience in research, editing and writing in government, public relations, journalism, industry and other professional positions. Completion of the major portfolio. ENGL 498 may be repeated for a maximum of 6 units. Prerequisite: consent of English internship coordinator; ENGL 200.

ENGL 499 HONORS THESIS IN ENGLISH (4) Intensive treatment of a topic in such areas as literary criticism, creative writing and expository writing chosen by the student in consultation with the thesis adviser. Restricted to candidates for Honors in English.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

ENGLISH FOR SPEAKERS OF OTHER LANGUAGES (ESOL)

Lower Division

ESOL 101 CONVERSATIONAL ENGLISH FOR NON-NATIVE SPEAKERS I (2) This is a beginning/low intermediate course in which students develop their confidence to speak in a variety of situations. Students learn how to participate in social conversations, request and give information, explain their ideas and discuss subjects of interest to them. By permission of ELC director.

ESOL 104 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES: ADVANCED READING (3) Introduction to English academic discourse; emphasis on reading. Must be taken concurrently with ESOL 106. Prerequisite: placement test.

ESOL 105 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES: INTERMEDIATE (3) Advanced grammar review with emphasis on sentence and short-paragraph construction.

ESOL 106 ENGLISH FOR SPEAKERS OF OTHER LANGUAGES: ADVANCED WRITING (3) Introduction to English academic discourse; emphasis on writing. Prerequisite: placement test.

ESOL 107 LISTENING AND SPEAKING FOR ADVANCED ESOL STUDENTS (3) Intensive listening and speaking practice for high intermediate and advanced students of ESOL; formal oral presentation pronunciation and conversation practice. Prerequisite: examination or consent of professor.

ESOL 201 CONVERSATIONAL ENGLISH FOR NON-NATIVE SPEAKERS II (2) Conversational English course for speakers of other languages. This is an intermediate course in which fluency in speech and accuracy in both listening and speaking are stressed. Speaking skills focus on being able to perform language functions such as agreeing and disagreeing, evaluating, complaining and asking questions. In addition, students will do group and individual presentations. Prerequisites: CENNS I or placement test; permission of ELC director.

ESOL 202 READING, DISCUSSION AND WRITING FOR ADVANCED ESL (INTERNATIONAL) STUDENTS (2) Advanced course for international students to develop writing skills, speaking proficiency and advanced reading skills, such as vocabulary, comprehension of grammatical structures, and identifying main idea and details; permission of ELC director.

ENTREPRENEURSHIP (ENTR)

Lower Division

ENTR 120 ENTREPRENEURIAL PROCESS (3) Distinctive knowledge, skills, strategies and structures required for entrepreneurial ventures, including analyses of business, societal, personal and interpersonal issues. Students will gain insights of the entrepreneurial process through direct investigation of real-world entrepreneurs.

Upper Division

ENTR 355 ENTREPRENEURSHIP AND SMALL BUSINESS (3) The research and planning process needed to start a small business is emphasized. Entrepreneurial management strategies for marketing, finance and operations are studied. The preparation of a business plan is required. Prerequisites: FIN 331, MKTG 341/342, MNGT 361, major standing.

ENTR 401 CONSULTING WORKSHOP (3) Series of modules that addresses various aspects of the consulting experience and involves actual consulting interventions. Prerequisites: ENTR 355 and senior major standing.

ENTR 402 FAMILY BUSINESS MANAGEMENT (3) Distinctive strategies, structures and skills required to lead closely-held and family firms through change and growth. The agency relationship between ownership and management has specific dynamics and strategic challenges when facing change and growth. Prerequisites: ENTR 355 and senior major standing.

ENTR 403 INTERNATIONAL ENTREPRENEURSHIP (3) Exposure to the processes and challenges associated with a business entering foreign markets. Through working with tangible clients, students will develop the skills to develop a persuasive business plan, identify key resources for entrepreneurial success, manage client-consultant relations and learn numerous other diverse skills utilized in international consulting. Prerequisites: ENTR 355 and senior major standing.

ENTR 498 ENTREPRENEURSHIP PRACTICUM (3) Internships (unpaid and paid) and fellowships within entrepreneurial ventures provide great opportunity for service learning outcomes. This practicum will provide students with the opportunity to learn strategies of start-ups and venture capital firms through active engagement. Internships should be in new and expansion phase businesses or venture capital firms. One of the primary outcomes should be extensive shadowing of an active entrepreneur. Prerequisites: ENTR 355 and senior standing and department consent.

ENVIRONMENTAL SCIENCE/ STUDIES (ENVS)

Upper Division

ENVS 301 PEOPLE AND PESTS (3) Impact of select pest species (insects, weeds or microbes) on humans and human affairs; why some organisms become pests; approaches to controlling pest organisms. Not for credit toward ENVS major or minor. Prerequisites: at least one biology course.

ENVS 337 THE CHESAPEAKE BAY AND ITS WATERSHED (3) The Chesapeake Bay and the natural processes and anthropogenic disturbances that influence its health are the focus of this Advanced Writing course. The multidisciplinary nature of environmental problem solving is also explored through writing assignments. Prerequisites: Core 2: English Composition, two courses in two different disciplines from among the following: BIOL 201, BIOL 202, CHEM 104, CHEM 110, GEOL 121, GEOG 101, or permission of the instructor.

ENVS 382 ENVIRONMENTAL EDUCATION AND SERVICE LEARNING IN THE TROPICS (3) Designed for majors in Science or Education with an interest in Environmental Education; course work will take place in Costa Rica; emphasis on tropical forest ecology concepts applicable to K-12 environment education and management of tropical natural resources. Cross-listed as BIOL 382. Prerequisites: minimum junior status and consent of the instructor.

ENVS 430-439 SPECIAL TOPICS IN ENVIRONMENTAL SCIENCE AND STUDIES (1-4) Study of a special topic related to Environmental Science and Studies. Topic can vary and will be announced. May be repeated if a different topic is covered.

ENVS 471 INDEPENDENT STUDY IN ENVIRONMENTAL SCIENCE AND STUDIES (1-3) Studies in selected content areas tailored to student needs. This course may be repeated for a total of 3 units. Prerequisites: ESS major only, completion of 30 units of required ESS course work and consent of instructor.

ENVS 482 ENVIRONMENTAL RESEARCH (3) Independent investigation of an environmental problem/question under the guidance of a faculty member. Paper and public presentation required. Prerequisites: ESS major, junior or senior standing and consent of instructor. Special permit required.

ENVS 485 ENVIRONMENTAL INTERNSHIP (3) Practical application of environmental science and studies through a supervised work experience with business, industry, public or private agency. Analytical paper in which the student integrates workplace experience with academic studies required. Prerequisites: ESS major, junior or senior standing, 2.50 GPA in ESS required courses and consent of internship coordinator. Graded S/U. Special permit required.

ENVS 491 SENIOR SEMINAR (3) Synthesis, analysis and application of information from a broad range of perspectives. Prerequisites: ESS major, completion of Core 9: Advanced Writing Seminar and senior standing. Special permit required.

FAMILY STUDIES (FMST)

Lower Division

FMST 101 INTRODUCTION TO FAMILY STUDIES (3) An interdisciplinary look at family studies.

FMST 102 HONORS INTRODUCTION TO FAMILY STUDIES (3) An interdisciplinary look at family studies. Emphasis on discussion and analyses of current issues. Honors College course.

FMST 140 MEDICAL TERMINOLOGY FOR HUMAN SERVICE WORKERS (1) Introduction to medical terminology, designed to increase familiarity with medical terms associated with bodily systems, disease processes and clinical procedures commonly used in the health care setting.

FMST 201 FAMILY RESOURCES (3) Individual and family decision-making related to the development and allocation of resources such as time, money, material assets, energy, space and support networks. Includes the exploration and application of managing resources for families at risk and field observation of family resource professionals.

FMST 297 PREPARING HUMAN SERVICE WORKERS: PRE-INTERNSHIP (3) This course prepares students for professional internships in community agencies. Students learn about ethical and professional competencies, intervention with diverse populations, reports in administrative settings and development of learning plans including goal setting. Technological components will be utilized. This course is a prerequisite for the FMST 397 and 497 internship courses and should be taken in the term immediately prior to enrollment in FMST 397.

Upper Division

FMST 301 FAMILY RELATIONSHIPS (3) Family dynamics along the continuum of family development and across generations. Focusing on family communication, conflict management and education. Prerequisites: FMST 101 and PSYC 101 or SOCI 101.

FMST 302 THEORIES OF FAMILY FUNCTIONING (3) An overview and application of theoretical frameworks underlying research on families. Theories include Family Systems, Family Development, Symbolic Interaction, Social Exchange, Ecological, Conflict and Feminist. Prerequisites: FMST 101 and PSYC 101 or SOCI 101. This course is a prerequisite for FMST 485.

FMST 303 TRENDS IN CONTEMPORARY FAMILY LIFE (3) Patterns and changes in family structure and processes in their social and historical context. Prerequisites: FMST 101 and SOCI 101.

FMST 305 PARENT-CHILD RELATIONSHIPS ACROSS THE LIFESPAN (3) Parent-child relationships from pregnancy and childbirth through the death of elderly parents using systems and life course perspectives. Cultural and contextual factors shaping the parent-child relationship. Prerequisite: FMST 101.

FMST 340 [540] THE HOSPITALIZED CHILD AND FAMILY (3) Psychosocial and developmental needs of infants, children,

adolescents and families in a health care context, with a focus on the roles and interventions of the child life specialist. Prerequisites: FMST 101, PSYC 101, SOCI 101 and PSYC 203.

FMST 345 [545] INTRODUCTION TO ART THERAPY (3) An overview of the art therapy field by presenting its history, including familiarization with the major practitioners and the theoretical bases they employ. This course will also focus on the development and healing aspects of art and the creative process, as well as an understanding of the basic principles of how our unconscious thoughts reach expression in images rather than words. Students will engage in art making experiences as a means to explore the creative process and its relationship to the psychological and emotional self. Prerequisites: FMST 101, PSYC 101 and PSYC 203. \$25 lab/class fee.

FMST 350 [550] FUNDAMENTALS OF LEADERSHIP IN THE NONPROFIT SECTOR (3) Overview of nonprofit organizations, roles and responsibilities of leaders in the nonprofits sector, issues concerning nonprofits. Junior/senior standing required. Prerequisites: PSYC 101, SOCI 101, ENGL 102, FMST 101, FMST 201 and consent of chair.

FMST 370-379 [570-579] SPECIAL TOPICS IN FAMILY STUDIES (3) In-depth study of a selected topic in family studies. May be repeated for a maximum of 9 units. Prerequisite: FMST 101.

FMST 380 FAMILY LAW (3) Legal and public policy framework for the analysis and application of family law issues facing families across the lifespan in American society. Prerequisite: FMST 101, PSYC 101 or SOCI 101.

FMST 387 COMMUNITY SERVICES FOR FAMILIES (3) Application of conceptual knowledge within community support and service programs including needs assessment, program planning and direct or indirect intervention with families. Prerequisites: FMST 101, PSYC 101 and SOCI 101. This course is a prerequisite for FMST 397.

FMST 397 INTERNSHIP IN FAMILY STUDIES (3) [120 field hours] Supervised experience in family studies. May be repeated for a maximum of 9 units. [360 field hours]. Prerequisites: 21 units in family studies, including FMST 101, FMST 201, FMST 297, FMST 301, FMST 302, FMST 387 and consent of Family Studies adviser.

FMST 415 SERVICES TO CHILDREN AND YOUTH (3) Overview of supports and services necessary to foster healthy development in children, youth and families. Focuses on the role of family and community influences in socializing children. Prerequisites: FMST 101, FMST 201, ECED 201, FMST 301, FMST 302, FMST 303, FMST 305.

FMST 485 RESEARCH METHODS IN FAMILY STUDIES (3) Analyzing and writing about research in family studies. Prerequisites: FMST 101, PSYC 212, FMST 302, ENGL 102 or ENGL 190.

FMST 490 SENIOR SEMINAR IN FAMILY STUDIES (4) Professional integration of theory and practice related to service learning, human service work, family studies and family life education. Prerequisites: FMST 485 or equivalent. Students must be in final term of academic program. Approval of department chair.

FMST 491 INDEPENDENT STUDY IN FAMILY STUDIES (1-6) Students explore an in-depth topic specific to the area of concentration under the direction of a graduate program faculty member. Course may be repeated for 6 units. Prerequisite: approval of department chairperson.

FMST 497 ADVANCED INTERNSHIP IN FAMILY STUDIES AND COMMUNITY DEVELOPMENT (4) [240 field hours] Advanced human service internship experience. Course is Web-enhanced. Prerequisites: 21 units in Family Studies as well as completion of FMST 297, FMST 397 and/or consent of department chair.

FINANCE (FIN)

Upper Division

FIN 331 PRINCIPLES OF FINANCIAL MANAGEMENT (3) Introductory course designed to provide students with the fundamental concepts underlying the theory of finance. Financial markets, security valuation, analysis of financial condition, forecasting, working capital management,

capital budgeting, cost of capital, leverage, optimal capital structure, dividend policy. Prerequisites: junior/major standing; MATH 231/233 or ECON 205, ACCT 201/211, ACCT 202/212, ECON 201/203, ECON 202/204.

FIN 333 INVESTMENTS AND EQUITY SECURITY ANALYSIS (3) Analysis of financial assets, including equities and fixed income instruments. Topics include securities valuation, use of fundamental and technical analysis, and portfolio management. Valuation of government and corporate securities, institutional factors, security analysis, portfolio management. Prerequisites: FIN 331; junior major standing.

FIN 350 FINANCIAL MODELING IN CORPORATE FINANCE (3) This is the first of two corporate finance courses for all finance majors. Learning financial modeling skills using Excel is an integral component of this course. The course emphasizes the application of powerful spreadsheet features of Excel in building flexible financial models. Topics include designing models for time value of money, financial statement analysis and forecast, security valuation including stock and bond, and models for financing decision making. Prerequisites: FIN 331, junior/senior and major standing.

FIN 351 ADVANCED CORPORATE FINANCE (3) This is the second in the sequence of two intermediate level corporate finance courses for all finance majors. Applying financial modeling skills using Excel is an integral component of this course. Equipped with basic finance knowledge and modeling skills from FIN 350, students are to apply concepts, approaches, and technology for supporting the decision-making process to solve a wide variety of financial problems. Topics include capital budgeting, enterprise valuation models, capital structure theory, corporate payout policy, and mergers and acquisitions. Prerequisites: FIN 350, junior/senior and major standing.

FIN 423 INVESTMENTS AND FIXED INCOME SECURITY ANALYSIS (3) An in-depth analysis of fixed-income securities, swaps, options, futures and forward contracts. Analyzing financial securities, determining their values and use of specific financial goals, emphasizing non-traditional securities. Prerequisites: FIN 333; junior major standing.

FIN 424 ENTREPRENEURIAL FINANCE (3) This course is designed to provide the owner/operator of a small business with the financial tools necessary to develop a successful business from its start-up through harvesting. Topics include learning how to identify and evaluate business opportunities, develop a business concept and marketing plan, access and obtain the required resources, manage the growth of new ventures and exit strategies. Prerequisites: FIN 331; junior/senior standing.

FIN 430 FINANCIAL INSTITUTIONS AND MANAGEMENT OF RISK (3) Topics include a discussion of the Federal Reserve, including the goals and methods of monetary policy and examination of financial institutions with an emphasis on depository institutions. The focus of the course will be to identify the risks faced by financial institutions and the management of the most important risks. Prerequisites: FIN 332 and FIN 351; senior major standing.

FIN 435 INTERNATIONAL FINANCE (3) Framework of international finance, including balance of payments, foreign exchange, foreign money and capital markets, and financial management of the multinational corporation. Prerequisites: FIN 331; major standing.

FIN 439 FINANCIAL POLICY (3) Case approach to qualitative and quantitative issues in finance. Analysis of financial condition, forecasting, asset and liabilities management, leasing, hedging, business combinations, reorganization and bankruptcy. Prerequisites: FIN 351, FIN 423, senior status, major standing.

FIN 470 TOPICS IN FINANCE (3) In-depth study of contemporary issues in finance. Course content varies with each topic. May be repeated for credit provided a different topic is covered. Prerequisite: FIN 351.

FIN 491 SEMINAR IN FINANCE (3) Selected areas of interest in the field of finance. Course content varies. Prerequisite: FIN 351.

FIN 495 INDEPENDENT RESEARCH IN FINANCE (1-3) Directed in-depth academic research in finance in a specific area of joint faculty member/student interest. May be repeated for a maximum of 6 units. Prerequisites: FIN 351; minimum 2.50 cumulative GPA, consent of instructor and chair. Special permit.

FIN 496 PRACTICUM IN CORPORATE FINANCE (3) Capstone application of knowledge, skills and attitudes through professional experience. Prerequisites: FIN 351 and FIN 423.

FIN 497 INTERNSHIP IN FINANCE (3) Students are required to work in assigned projects in business environments. Graded S/U. May be repeated for a maximum of 6 units. Prerequisites: FIN 350, declared CBE major with Finance. Minimum of 2.50 cumulative GPA. Consent of instructor and chair. Special permit.

FINANCIAL PLANNING (FPLN)

FPLN 341 FUNDAMENTALS OF FINANCIAL PLANNING (3) Introductory course designed to provide students with an overview of the financial planning process. Topics include setting client goals and objectives, investment planning, tax planning, insurance and risk management, and estate planning. Overview of personal financial planning.

FPLN 343 INSURANCE AND RISK MANAGEMENT (3) The role of insurance as a risk management tool. Topics include the use of life insurance, health insurance and disabilities insurance to reduce a client's overall exposure to risks. Prerequisite: FPLN 341.

FPLN 441 RETIREMENT PLANNING AND EMPLOYEE BENEFITS (3) Designed to provide students with the background necessary to assist clients in planning for their retirement. Provides students with an understanding of the contributions employee benefits plans make toward achieving financial independence. Developing a systematic approach to estimating contribution plans, IRA, 401K, tax-sheltered annuities and government programs. Prerequisite: FPLN 341.

FPLN 443 ESTATE PLANNING (3) Effects of federal tax system and other factors impacting estate planning. Prerequisite: FPLN 341.

FORENSIC CHEMISTRY (FRSC)

FRSC 363 [564] CHEMISTRY OF DANGEROUS DRUGS (3) A study of the chemistry, methods of detection and analysis of narcotics, depressants, stimulants and hallucinogens. Also, the influence of physiochemical properties upon the pharmacological effects of drug receptor interactions. Historical, forensic and socio-economic implications associated with drug abuse will also be reviewed. Three lecture hours. Prerequisites: CHEM 330 and CHEM 351 or CHEM 331 and CHEM 332; CHEM 210 recommended.

FRSC 367 [568] FORENSIC CHEMISTRY (3) An introduction to chemical and physical analyses used by a modern crime laboratory in the evaluation of physical evidence encountered in criminal acts. Areas of concentration will include drug analysis, toxicology, forensic serology, explosives analysis, arson examination, firearms and tool marks, and trace evidence. Emphasis will be placed on the value of such examinations as presented by the expert witness in a criminal trial. Three lecture hours. Prerequisites: CHEM 111, CHEM 210, CHEM 330 or CHEM 332.

FRSC 368 PROFESSIONAL PRACTICES IN FORENSIC SCIENCE (3) Introduction to the various professional practices encountered in forensic science. Topics include laboratory safety, quality assurance and quality control, documentation, ethics, chain of custody and expert witness testimony. Required of all Forensic Chemistry tracks. Prerequisite: CHEM 367.

FRSC 440 FORENSIC BIOCHEMISTRY, EMERGENCY MEDICINE AND DEATH ANALYSIS (3) Overview of the principles of biochemistry as it applies to forensic science including emergency medicine in common and sexual assaults, environmental contamination, natural mass disasters, terrorist attacks, and natural and suspicious deaths. Required of all Forensic Chemistry tracks. Prerequisite: CHEM 367.

FRENCH (FREN)**Lower Division**

FREN 101 FRENCH ELEMENTS I (3) Principles of French grammar; drills in pronunciation; elementary conversation; composition; readings. Not open to native or heritage speakers without consent of instructor.

FREN 102 FRENCH ELEMENTS II (3) Review and further study of grammar principles; pronunciation; conversation composition; readings. Not open to native or heritage speakers without consent of instructor. Prerequisite: FREN 101.

FREN 201 FRENCH INTERMEDIATE I (3) Review of grammar and pronunciation; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in French. Not open to native or heritage speakers without consent of instructor. Prerequisite: FREN 102 or equivalent.

FREN 202 FRENCH INTERMEDIATE II (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in French. Not open to native or heritage speakers without consent of instructor. Prerequisite: FREN 201 or equivalent.

Upper Division

FREN 301 ADVANCED CONVERSATION (3) Spoken French beyond the intermediate level with focus on pronunciation, phonetics, oral presentations, listening comprehension and conversation. Not open to native or heritage speakers without consent of instructor. Prerequisite: FREN 201-202 or equivalent.

FREN 302 ADVANCED COMPOSITION (3) Development of written French beyond the intermediate level. Introduction to different forms of textual analysis with readings from both literary and non-literary sources. Not open to native or heritage speakers without consent of instructor. Prerequisite: FREN 201-202 or equivalent.

FREN 310 FRENCH PHONETICS (3) Correction of French pronunciation and analysis of spoken French based on phonological theory. Prerequisites: FREN 301-302.

FREN 325 EARLY FRENCH LITERATURE AND CIVILIZATION: MIDDLE AGES TO 17TH CENTURY (3) Survey of literature of France from the Middle Ages to the end of the 17th century in its cultural context. Conducted in French. Prerequisite: FREN 301-302 or equivalent.

FREN 326 18TH-CENTURY LITERATURE AND CIVILIZATION (3) Survey of 18th-century French literature in its cultural context. Conducted in French. Prerequisite: FREN 301-302 or equivalent.

FREN 327 19TH-CENTURY LITERATURE AND CIVILIZATION (3) Survey of 19th-century French literature in its cultural context. Conducted in French. Prerequisite: FREN 301-302 or equivalent.

FREN 328 20TH-CENTURY LITERATURE AND CIVILIZATION (3) Survey of the literature of the first half of the 20th century in its cultural context. Conducted in French. Prerequisite: FREN 301-302 or equivalent.

FREN 329 CONTEMPORARY FRENCH LITERATURE AND CIVILIZATION: 1945 TO PRESENT (3) Survey of literature of the second half of the 20th century and its cultural context with an emphasis on works dealing with issues in contemporary France and the Francophone world. Conducted in French. Prerequisite: FREN 301-302 or equivalent.

FREN 331 FRENCH FOR BUSINESS (3) Introduction to French business and economy, with practice in functional spoken and written transactions in French. Prerequisites: FREN 201-202 or equivalent or consent of instructor.

FREN 351 INTRODUCTION TO TRANSLATION: FRENCH TO ENGLISH (3) Training in translation, principally French to English, from magazines and books from a wide variety of disciplines. Prerequisites: FREN 301-302 or equivalent.

FREN 370 SPECIAL TOPICS IN FRENCH (3-6) Specialized topics in language and culture. Content varies. May be repeated once for credit provided a different topic is covered. Prerequisite: FREN 202 or equivalent.

FREN 391 ADVANCED FRENCH GRAMMAR (3) French syntax, idiomatic construction, word formation. Conversation, oral and written drill. Conducted in French. Prerequisites: FREN 301-302.

FREN 402 APPLIED FRENCH LINGUISTICS (3) Phonetics, morphology, syntax, points of interference. Linguistic study relating to methodology for French teachers. Prerequisites: FREN 301-302 or equivalent.

FREN 410 WRITING ABOUT FRENCH LITERATURE (3) Expository writing about French literature, read in translation, with emphasis on textual analysis and literary theory. Course conducted in English. Prerequisite: ENGL 102.

FREN 411 THE FRENCH NOVEL (3) Study of the French novel and narrative techniques from the 17th century to the present. Conducted in French. Prerequisites: any two French courses at the 325-329 levels.

FREN 420 FRANCE TODAY THROUGH THE MEDIA (3) Study of contemporary French society with a focus on major issues as portrayed in the press, on television and in film. Prerequisite: FREN 301-302 or equivalent.

FREN 421 FRENCH LITERATURE OF THE 17TH CENTURY I (3) Selected works from France's major classical writers. Conducted in French. Prerequisites: any two French courses at the 325-329 levels.

FREN 425 FRENCH LITERATURE OF THE 18TH CENTURY (3) Principal works of the major writers presented in their literary, sociological and philosophical context. Conducted in French. Prerequisites: any two French courses at the 325-329 levels.

FREN 441 FRENCH LITERATURE OF THE 20TH CENTURY (3) The evolution from fin de siècle to the present day of the novel, the theatre and poetry as reflections of the artistic and philosophical developments leading to the modern age. Shifting emphasis from term to term. Conducted in French. Prerequisites: any two French courses at the 325-329 levels.

FREN 470 SPECIAL TOPICS IN FRENCH (3) Discussion of a central topic with changing emphasis from year to year. May be repeated for credit provided a different topic is covered. Prerequisites: any two French courses at the 325-329 levels.

FREN 491 DIRECTED READINGS IN FRENCH LITERATURE (1-3) Reserved for superior students under the guidance of a departmental adviser. May be repeated for a maximum of 9 units. Conducted in French. Prerequisites: at least 3 units of literature study at the 400 level, consent of department chair.

FREN 492 DIRECTED READINGS IN FRENCH (1-3) Similar to FREN 491 with concentration on a different subject matter. Conducted in French. Prerequisites: at least 3 units of literature study at the 400 level, consent of department chair.

FREN 493 HONORS DIRECTED READINGS (3) Individual readings and background research under direction of a faculty member in preparation for writing an honors thesis. Prerequisite: admission to the departmental Honors Program.

FREN 494 TRAVEL AND STUDY ABROAD (3) French language, culture, civilization and literature at approved study abroad sites in France. Prerequisite: approval of department chair.

FREN 495 INTERNSHIP FOR PROFICIENCY IN FRENCH (3) Supervised experience in a work setting providing students the opportunity to apply classroom learning and skills outside the academic world. Students receive 3 units for 8 hours of work per week. Junior or senior undergraduate students in good academic standing and who meet the requirements established for Proficiency in French should apply for membership during the month of November for the spring term and during the month of April for the fall term. Prerequisites: open only to students who are enrolled in the Proficiency in French program and who have complied with the program regulations; written consent of the program coordinator.

FREN 497 INTERNSHIP IN FRENCH (3) Designed to give training and experience using French in working with government, business and industry in Maryland or Washington, D.C., under professional supervision. Prerequisites:

junior or senior standing French majors (professional track) only, and completion of at least 27 units above 300-level courses. Written consent of program coordinator.

FREN 499 HONORS THESIS IN FRENCH (3-6) Writing of an honors thesis based on individual research. Open only to advanced honors candidates. Prerequisite: FREN 493.

GENERAL STUDIES (GENL)**Lower Division**

GENL 121 PERSONAL LIFE AND CAREER PLANNING (2) To enable students to understand their role in the world of work, develop career directionality and maturity, explore concepts related to successful career choice, begin to take action toward achieving satisfactory life planning, in the context of a decision-making format.

Upper Division

SOSC 401 [501] TOPICS IN SOCIAL SCIENCE (3) Issues and problems to be selected by the instructor and studied from the multiple approaches of various social sciences. Prerequisite: 15 units in the social sciences.

GEOGRAPHY (GEOG)**Lower Division**

GEOG 101 PHYSICAL GEOGRAPHY (3) Introductory spatial analysis of fundamental terrestrial natural phenomena, including their impact on humanity. Emphasis on Earth planetary motions, weather and climate, landforms, soils and vegetation.

GEOG 102 WORLD REGIONAL GEOGRAPHY (3) Survey of world regions identifying geographical features and area and their significance.

GEOG 105 GEOGRAPHY OF INTERNATIONAL AFFAIRS (3) An introductory survey of the changing political map of the world with special emphasis on a geographical comprehension of the major regions of international cooperation and conflict.

GEOG 109 INTRODUCTION TO HUMAN GEOGRAPHY (3) Uses the analytical approach of social sciences in the study of institutions of human society to reveal spatial patterns in the responses of people to basic problems and needs.

GEOG 110 HONORS INTRODUCTION TO HUMAN GEOGRAPHY (3) Uses the analytical approach of social sciences in the study of institutions of human society to reveal spatial patterns in the responses of people to basic problems and needs. Emphasis on discussion and analyses of problems. Honors College course.

GEOG 112 HONORS WORLD REGIONAL GEOGRAPHY (3) Survey of world regions identifying geographical features and area and their significance. Honors College course.

GEOG 221 INTERPRETATION OF MAPS (3) Introduction to map elements and map interpretation; study of various types of maps, index systems and general application of maps in geography.

GEOG 223 PHYSICAL GEOGRAPHY APPLICATIONS (3) Fundamental concepts explored through laboratory exercises, including Earth-sun relationships, weather and climate systems, and landform characteristics. Prerequisites: GEOG 101 and GEOG 221.

GEOG 230 UNDERSTANDING AND COMMUNICATING THROUGH MAPS (3) Maps and graphs as effective media for visual presentation and analysis of geographic data.

GEOG 251 INTRODUCTION TO PLANNING (3) The sequential origins of planning and urban design, a study of contemporary planning practice, and an analysis of the social, economic and political context of plan formulation and implementation.

GEOG 270-279 TOPICS IN PLANNING AND GEOGRAPHY (3) Investigation of various geographic and planning issues. Emphasis on analytical skills through readings and research design. Topics to be announced. May be repeated for a maximum of 6 units provided a different topic is covered.

Upper Division

Systematic Courses

GEOG 315 GEOMORPHOLOGY (4) Detailed analysis of the formation, surficial characteristics and global distributions of the Earth's landforms. Labs emphasize interpretation of landform assemblages through use of topographic maps and aerial photographs. Cannot be taken for credit by students who have received credit for PHSC 222 or GEOG 371. Prerequisite: 6 units of geography and/or geology, including either GEOG 101 or PHSC 121.

GEOG 317 [502] ENERGY RESOURCES (3) Spatial patterns of traditional and alternative forms of energy will be analyzed. The many facets of the energy problem will be analyzed, including physical deposits, economic variables, public policy implication and geographical patterns. Prerequisite: 6 units of geography or consent of instructor.

GEOG 319 [503] SOILS AND VEGETATION (3) A resource study of the world's soils and plant formations with emphasis placed upon their genesis and spatial differentiations. Prerequisites: GEOG 101 and one of the following: CHEM 101, BIOL 115, BIOL 201 or 205.

GEOG 329 MEDICAL GEOGRAPHY (3) A study of health problems viewed as imbalances in the interrelationships between humans and elements of their environment, both the physical and cultural. Emphasis is placed on gaining an overview of the field through a comprehension of the application of geographic principles and techniques to the study of human health problems. Prerequisite: 6 units of geography or consent of instructor.

GEOG 355 [510] HISTORICAL GEOGRAPHY OF URBANIZATION (3) Spatial and temporal development of urbanization and urban morphology from the rise of civilization in the ancient Near East to the contemporary post-industrial city. The entire scope of urban functions is surveyed, with the emphasis on the city as a human-made environment. Prerequisite: 6 units of geography or consent of instructor.

GEOG 356 GEOGRAPHY OF CRIME (3) Application of geographical methods and procedures to the study of environmental criminology. Explores socio-spatial and environmental data pertaining to crime, victimization and offenders at the neighborhood, metropolitan, state and national levels. Prerequisite: GEOG 102, GEOG 105 or GEOG 109.

GEOG 357 [511] CULTURAL GEOGRAPHY (3) Study of origins and diffusion of cultures and the resulting impact in creating the world's contrasting cultural landscapes. Prerequisite: 6 units of geography or consent of instructor.

GEOG 359 [512] ECONOMIC GEOGRAPHY (3) Designed to explain the location of economic activities through a series of principles and theories. Emphasis is on the various sectors of the economy, transportation and economic development. Prerequisite: 6 units of geography or consent of instructor.

GEOG 373 [515] CLIMATOLOGY (3) Analysis of the character, causes and global distribution of climatic types, chiefly employing the Koppen classification system. Prerequisite: 6 units of geography or consent of instructor.

GEOG 375 [516] QUANTITATIVE METHODS IN GEOGRAPHY (3) Focus on statistical problems associated with the analysis of geographic data. Emphasis on the unique spatial problems of point pattern analysis, area association and regionalization. Prerequisite: 6 units of geography or consent of instructor.

GEOG 377 [517] METEOROLOGY (3) An introduction to the study of weather. Emphasis on the interaction of solar energy, air pressure, wind and moisture in creating global weather patterns. Field work may be required. Prerequisite: 6 units of natural science or geography or the equivalent.

GEOG 381 [519] POLITICAL GEOGRAPHY (3) Effect of political groupings upon human use of the world, and the influence of the geographic base upon political power. Prerequisite: 6 units of geography or consent of instructor.

GEOG 383 NATURAL RESOURCES AND SOCIETY: A GEOGRAPHIC PERSPECTIVE (3) Social and environmental dimensions of natural resources, their management and

misuse from a geographic perspective. Prerequisites: ENGL 102, 6 units of geography.

GEOG 385 [520] POPULATION GEOGRAPHY (3) General population theory, data sources for population geographers, and the processes of fertility, mortality and migration. Patterns of population growth and change viewed from both temporal and geographical perspectives. Prerequisite: 6 units of geography or consent of instructor.

GEOG 391 [522] URBAN SYSTEMS (3) Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic and cultural phenomena. Field work. Prerequisite: 6 units of geography or consent of instructor.

GEOG 393 TRANSPORTATION AND INFRASTRUCTURE PLANNING (3) Transportation, water supply, wastewater treatment and solid waste management systems, their role in the growth and development of urban areas. Policies, programs and infrastructure planning. Prerequisite: GEOG 391 or consent of instructor.

GEOG 401 [551] GROWTH OF GEOGRAPHIC THOUGHT (3) History, nature and methodology of geography as a discipline. Analysis of schools of geographic thought: critical evaluation of important geographic work. Prerequisite: 6 units of geography or consent of instructor.

GEOG 405 [553] COMPREHENSIVE PLANNING (3) The integration of separate urban systems into the comprehensive design of an urban region. Special emphasis will be placed on neighborhood, community and town planning. Field work may be required. Prerequisites: GEOG 391 or equivalent and consent of instructor.

GEOG 407 THE GEOGRAPHY OF THE AGED (3) The aged have emerged in contemporary society as a significant minority group. Elements responsible for the increase in the number of older Americans will be examined as well as the forces affecting the distribution of the aged. Particular emphasis will be given to the locational problems of older people in urban areas. Prerequisite: 6 units of geography or consent of instructor.

GEOG 409 APPLIED CLIMATOLOGY (3) The effects of world climatic patterns on the human and physical environment are analyzed. Special emphasis is devoted to the interactions between climate and the urban environment. Prerequisites: GEOG 373, GEOG 377 or consent of instructor.

GEOG 410 ENVIRONMENTAL GEOGRAPHY (3) Energy, water and mass budgets at the surface of the earth. Prerequisites: GEOG 101 and 3 units from one of the following disciplines: BIOL, CHEM, PHYS, PHSC or GEOL.

GEOG 411 [557] STUDIES IN NATURAL HAZARDS (3) The nature, frequency of occurrences and distribution of environmental hazards and their impacts on humans. Prerequisite: 6 units of geography or consent of instructor.

GEOG 413 SEVERE AND HAZARDOUS WEATHER (3) Extreme atmospheric events and phenomena; case study analysis of atmospheric events that shaped history, geography and environment; scientific explanation of extreme atmospheric event occurrence. Prerequisites: GEOG 101, GEOL 357 or GEOG 377.

GEOG 415 [559] GEOGRAPHICAL ASPECTS OF POLLUTION (3) A systematic study of the spatial aspects of air and water pollution, with special emphasis on pollution in the Greater Baltimore area. Field trips will be conducted to pollution sites and pollution control agencies within the local area. Prerequisite: 6 units of geography or consent of instructor.

GEOG 417 OUTDOOR RECREATION AND PLANNING MANAGEMENT (3) A study of outdoor recreation in terms of relationships of people, land and leisure. Emphasis on the principles of planning, designing and maintaining outdoor recreation areas and facilities. Prerequisite: 6 units of geography or consent of instructor.

GEOG 445 GEOGRAPHY OF SOUTHEAST ASIA (3) Regional analysis of Southeast Asia: physical geography, historical evolution, industry and agriculture, social and cultural factors, and role in world affairs. Problems of nationality, economic development, gender and cultural conflicts. Prerequisites: 6 units of geography or consent of instructor.

GEOG 481 ENVIRONMENTAL IMPACT ANALYSIS (3) The collection, collation, analysis and incorporation of physical, social, biological and economic information for the review and the preparation of environmental impact statement (EIS) reports. Prerequisite: 6 units of geography or consent of instructor.

GEOG 484 LAND USE PLANNING (3) Contemporary land use planning emphasizing the problematic nature of land development, the environmental land use planning process, and related growth management, issues and techniques. Prerequisite: GEOG 251 or consent of instructor.

Technique Courses

GEOG 232 [518] INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS (4) Hardware and software for the storage, retrieval, manipulation, analysis and display of data, emphasizing raster-based geographic information systems. Prerequisite: 6 units of geography or consent of instructor.

GEOG 321 [504] INTERPRETATION OF AERIAL PHOTOGRAPHS (3) Reading and interpretation of aerial photographs. The application of the aerial photograph in the fields of geography, geology and photogrammetry.

GEOG 323 [505] CARTOGRAPHY AND GRAPHICS I (3) Study in design, construction and effective application of maps and charts for analysis and publications; practical exercises in the use of cartographic tools, materials and techniques.

GEOG 324 [506] CARTOGRAPHY AND GRAPHICS II (3) Continued exercises in map graphics and aerial distribution maps. New techniques in presentation of graphic data and spatial relationships. Prerequisite: GEOG 323.

GEOG 341 [508] TECHNIQUES AND MATERIALS FOR GEOGRAPHY TEACHERS (3) A systematic review of geographic concepts in relation to interdisciplinary studies in the physical and social sciences. Examination of the content of geography and problems of presentation.

GEOG 414 [523] GIS APPLICATIONS (3) Vector-based GIS software for solving real-world problems. Prerequisite: GEOG 232 or consent of instructor.

GEOG 416 PRINCIPLES OF REMOTE SENSING AND DIGITAL IMAGE PROCESSING (3) Obtaining quantitative information from remotely sensed images; visual and automated techniques in study of spatial and environmental relationships. Prerequisite: 6 units of geography or consent of instructor.

GEOG 418 [507] COMPUTER MAPPING (3) Computer hardware and software for preparation of general-purpose and thematic maps; application of computer mapping for decision-making purposes. Prerequisites: 6 units of geography or consent of instructor; prior computer experience is strongly recommended.

Regional Courses

GEOG 420 [560] GEOGRAPHY OF THE UNITED STATES AND CANADA (3) Physical and cultural landscapes of the United States and Canada including patterns of economic development of each region and their relationship to their environmental setting. Prerequisite: 6 units of geography or consent of instructor.

GEOG 423 [561] GEOGRAPHY OF MARYLAND (3) Physical and human geographical elements of the Maryland landscape which explain current patterns and environmental problems. Particular emphasis on historical geographical background of the present landscape. Prerequisite: 6 units of geography or consent of instructor.

GEOG 424 HISTORICAL GEOGRAPHY OF ATLANTIC CANADA (3) The development of the Atlantic Provinces is followed through to the period of Confederation in 1867 with an emphasis on the pivotal role the area played in the geopolitical interests of France and Britain in North America. Prerequisite: 6 units of geography or consent of instructor.

GEOG 427 THE GLOBAL ECONOMY (3) Geographical patterns of spatial interactions in the global economy; roles of the state, transnational corporations and intergovernmental organization. Prerequisite: 6 units of geography or consent of instructor.

GEOG 431 [562] GEOGRAPHY OF AFRICA (3) A systematic and regional approach to the study of people and environment of Africa, south of the Sahara. Special focus is placed on the distribution of natural resources and the historical-political development of each country as important background for the understanding of current African affairs. Prerequisite: 6 units of geography or consent of instructor.

GEOG 443 [564] GEOGRAPHY OF EAST ASIA (3) Regional studies of the physical and cultural foundations in China, Japan and Korea. Emphasis upon human and economic resources and role in world affairs. Prerequisite: 6 units of geography or consent of instructor.

GEOG 445 GEOGRAPHY OF SOUTHEAST ASIA (3) Regional studies of the physical and cultural foundations of Vietnam, Burma, Malaysia, Thailand, Laos, Philippines and Indonesia. Principal human and economic resources, problems of development and role in world affairs. Prerequisite: 6 units of geography or consent of instructor.

GEOG 447 [565] GEOGRAPHY OF THE MIDDLE EAST (3) Analysis of Southwest Asia and North Africa, including major natural and cultural resources, related patterns of spatial organization, economic and political development, and associated problems. Prerequisite: 6 units of geography or consent of instructor.

GEOG 448 CONFLICT IN IRELAND (3) An analysis of attempted and proposed solutions to the Irish conflict based on physical and cultural elements of the island's historical geography. Prerequisite: 6 units of geography or consent of instructor.

GEOG 451 [566] GEOGRAPHY OF EUROPE (3) Regional analysis and appraisal of the human geography and natural resources of Europe. Problems of nationality, economic development and cultural conflicts. Prerequisite: 6 units of geography or consent of instructor.

GEOG 452 GEOGRAPHY OF THE EUROPEAN UNION (3) Spatial distribution of physical and cultural features of the European Union. Historical development of the EU. Geographical aspects of major issues facing the EU: security, enlargement, foreign policy, structure, identities. Prerequisite: GEOG 102 or 105, or consent of instructor.

GEOG 453 [567] THE RUSSIAN COLOSSUS: HISTORICAL AND CONTEMPORARY GEOGRAPHIES OF RUSSIA (3) Physical and cultural patterns and their bearing on the former Soviet Union as a world power. Regional distribution and use of natural and human resources in agriculture and industry. Problems in economic development and production. Prerequisite: 6 units of geography or consent of instructor.

GEOG 461 [568] GEOGRAPHY OF LATIN AMERICA AND THE CARIBBEAN (3) Analysis of Latin America focuses on the interrelationships between physical and cultural elements which provide a diversity of human habitats throughout the region. May be repeated for a maximum of 6 units. Prerequisite: 6 units of geography or consent of instructor.

GEOG 462 [569] THE TWO DOWN-UNDERS: GEOGRAPHIES OF AUSTRALIA AND AOTEAROA-NEW ZEALAND (3) Analysis of the physical and cultural landscapes of Australia and Aotearoa/New Zealand, including patterns of settlement and economic development and the relationship of these patterns to their environmental settings. Emphasis on the historical backgrounds of these countries' present landscapes. Prerequisite: 6 units of geography or permission of the instructor.

GEOG 463 [563] THE SILK ROAD: THE GEOGRAPHIES OF CENTRAL EURASIA (3) Course offers in-depth discussion of Central Asian geographies and histories in the context of the extended Silk Road Region. The extended region represents a mélange of cultural identities and histories, political economies and ideological struggles that bind the emerging nations of Central Asia to Russia, and increasingly to the U.S. Current interactions of the newly formed republics with China, Turkey and Iran will also be explored. Prerequisite: 6 units of geography or permission of the instructor.

Seminars, Special and Honors Courses

GEOG 470-479 [570-579] SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3) Reading and research in selected topics in the field of geography. Seminar topics will be announced. May be repeated for credit provided a different topic is covered. Prerequisite: 6 units of geography or consent of instructor.

GEOG 491 [582] GEOGRAPHY/ENVIRONMENTAL PLANNING INTERNSHIP (1-6) Supervised placement and research in selected public and private agencies at appropriate institutions. May be repeated for a maximum of 6 units. Prerequisite: consent of chair and 6 units of geography.

GEOG 493 [583] FIELD GEOGRAPHY (2-6) Practical laboratory experience in techniques in the collection and analysis of data by observations, measurements, mapping and photographic records. Such techniques are to be applied to selected geographic problems. Prerequisite: 6 units of geography or consent of instructor.

GEOG 494 [584] TRAVEL AND STUDY (3-6) Countries and topics to be selected by departments and instructors sponsoring the program. For complete information contact the chair of the department. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor.

GEOG 495 [585] DIRECTED READING IN GEOGRAPHY (3) Independent reading in selected areas of geography. Open by invitation of the department to students taking a major or minor in Geography. May be repeated for a maximum of 6 units. Prerequisites: 15 units in geography and a minimum 3.00 GPA in geography.

GEOG 496 [586] INDEPENDENT STUDY IN GEOGRAPHY (1-6) Independent research, study or field experience under supervision of a member of the geography faculty. Designed for advanced students who wish to conduct independent investigations on aspects of geography which are of special interest or not covered in other courses. Registration arranged with department chairperson. May be repeated for a maximum of 6 units. Prerequisite: advanced undergraduate standing with at least 18 units of geography or graduate standing.

GEOG 498 HONORS DIRECTED READINGS (3) Independent reading in geography and related disciplines on a topic selected by the student in consultation with the instructor. May be repeated for a maximum of 6 units. Prerequisite: admission to the Departmental Honors Program.

GEOG 499 HONORS THESIS IN GEOGRAPHY (1-6) Researching and writing of a thesis, to be directed by a faculty member in a chosen area of specialization. May be repeated for a maximum of 6 units. Prerequisite: admission to the Departmental Honors Program.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

GEOLOGY (GEOL)

Lower Division

GEOL 109 VOLCANOES AND EARTHQUAKES (3) The geological origin, occurrence and hazards of volcanoes and earthquakes. Plate tectonic theory, efforts at forecasting these events and effects on human populations will also be discussed. Three lecture/demonstration hours.

GEOL 115 MARYLAND GEOLOGY IN THE FIELD (1) This course consists of organizational meetings followed by four to six field trips, typically on weekends, designed to introduce the student to geology and geological career opportunities. Grades of Satisfactory or Unsatisfactory will be based upon participation in at least four field trips and short written reflections that will be prepared after each trip. There are no prerequisites for the course.

GEOL 121 PHYSICAL GEOLOGY (4) Composition and structure of the earth, the internal and external forces acting upon it, and the surface features resulting. Laboratory studies of common rocks and minerals, geologic and topographic maps, and aerial photographs. Field trips required. Three lecture hours and two laboratory hours per week. \$25 lab/class fee.

GEOL 122 HONORS PHYSICAL GEOLOGY (4) Composition and structure of the earth, the internal and external forces acting upon it, and the surface features resulting. Laboratory studies of common rocks and minerals, geologic and topographic maps, and aerial photographs. Field trips required. Three lecture hours and two laboratory hours per week. Not open to students who successfully completed PHSC 121. Honors College course. \$25 lab/class fee.

GEOL 123 HISTORICAL GEOLOGY (4) The history and development of the continents and ocean basins and the evolution of life on earth will be discussed based upon information obtained from the sedimentary rock record. Field trips required. Three lecture hours and two laboratory hours per week. Prerequisite: GEOL 121. \$25 lab/class fee.

Upper Division

GEOL 305 [505] ENVIRONMENTAL GEOLOGY (4) Earth's natural surface systems (hydrologic, atmospheric and climatic): causes and extent of human modifications; potential solutions to resulting problems. Introduction to standard field and laboratory methods in environmental geology. Field trips required. Three lecture hours and three lab hours. Prerequisite: GEOL 121.

GEOL 321 [521] STRUCTURAL GEOLOGY (4) The identification and analysis of tectonic forms to determine the physical conditions of formation and the context of historical geological events in which they occur. Three lecture hours and three laboratory hours. Field trips required. Prerequisites: GEOL 121 and PHYS 211 or equivalent.

GEOL 323 GEOMORPHOLOGY (4) Detailed analysis of the formation, surficial characteristics and global distribution of the earth's landforms. Labs emphasize interpretation of landform assemblages through use of topographic maps and aerial photographs. Cannot be taken for credit by students who have received credit for GEOG 315. Prerequisites: 6 units of geography and/or geology courses, including either GEOG 101 or GEOL 121.

GEOL 331 [531] MINERALOGY (4) The study of minerals with emphasis on crystallography, crystal chemistry and chemical-structural classification. Laboratory identification of minerals both in hand specimen and thin section by application of principles of optical mineralogy. Three lecture hours and three laboratory hours. Prerequisites: GEOL 121, CHEM 110.

GEOL 333 [533] PETROLOGY OF IGNEOUS AND METAMORPHIC ROCKS (4) Study of the properties and genesis of two major rock groups. Megascopic and microscopic techniques in rock classification. Environments of formation. Case studies from the Maryland Piedmont. Three lecture hours and three laboratory hours. Field trips required. Prerequisite: GEOL 331.

GEOL 357 [557] PHYSICAL OCEANOGRAPHY (3) Physical, chemical and geologic characteristics of ocean basins, boundaries and sea water, including origin and behavior of waves and currents. Prerequisites: PHYS 211 or 241 and CHEM 110, or consent of instructor.

GEOL 415 [515] HYDROGEOLOGY (4) Geologic aspects of groundwater: origin, occurrence and movement. Prerequisites: CHEM 111; PHYS 211 or PHYS 241. Recommended: GEOL 321 and GEOL 443.

GEOL 441 [541] OPTICAL MINERALOGY AND PETROGRAPHY (3) The theory and application of polarized light and elements of crystallography in the analysis of rock-forming minerals by use of a petrographic microscope. Prerequisite: GEOL 333.

GEOL 443 [543] SEDIMENTOLOGY AND STRATIGRAPHY (4) Production, transport and deposition of sediments and sedimentary bodies for the development of facies models useful in interpretation of the stratigraphic record. Prerequisites: GEOL 121, CHEM 110.

GEOL 451 [551] PETROLOGY OF SEDIMENTARY ROCKS (3) Macro- and microscopic analyses of sedimentary rocks. Classifications and diagenetic processes. Offered spring term, alternate years. Prerequisite: GEOL 443.

GEOL 470-479 SPECIAL TOPICS IN GEOLOGY (1-4) The study of special topics in the geosciences. Special topics

will be determined by their need for study and relevance to existing courses. May be repeated with a different topic for a maximum of 6 units.

GEOL 489 INTRODUCTION TO RESEARCH (1) Development of a research question, designing research projects, writing a proposal, scientific report writing and oral presentation. As a final project, students develop a research proposal. Graded S/U. Prerequisites: GEOL 121, GEOL 123, and 8 additional GEOL units; permission of instructor.

GEOL 490 INDEPENDENT STUDY IN GEOLOGY (1-4) Individual and supervised research in selected areas of geosciences. Topics may be laboratory or field based. May be repeated for a maximum of 6 units. Prerequisites: junior status, GEOL 121-123, and at least one additional GEOL course.

GEOL 491 DIRECTED READINGS (1-4) Independent reading in an area selected by the student in consultation with the instructor. May be repeated for a maximum of 6 units. Prerequisites: junior status, GEOL 121, GEOL 123 and one additional GEOL course.

GEOL 492 INTRODUCTION TO FIELD METHODS (2) Surveying techniques, description of geological materials, geological mapping and environmental investigations. Field trips required. Prerequisites: GEOL 121, GEOL 123 and 8 additional GEOL units; permission of instructor.

GEOL 494 TRAVEL STUDY (1-3) Investigation of field problems and phenomena. May be repeated for a maximum of 3 units. Prerequisite: special permit required.

GEOL 495 [599] RESEARCH PROBLEMS IN GEOLOGY (1-2) Design and successful completion of a geological research project based on a problem of significance. Project results will be presented in a public forum. Field trips required. Prerequisites: GEOL 121, GEOL 123, GEOL 489 and two additional upper-level GEOL courses.

GEOL 499 HONORS THESIS IN GEOLOGY (1-4) Writing of an honors thesis based on independent research done under the direction of a staff member. May be repeated for a maximum of 6 units. Prerequisites: consent of the instructor and open only to advanced honors candidates.

GERMAN (GERM)

Lower Division

GERM 101 GERMAN ELEMENTS I (3) Principles of German grammar; drills in pronunciation; elementary conversation; composition; readings. Not open to native or heritage speakers without consent of instructor.

GERM 102 GERMAN ELEMENTS II (3) Review and further study of grammar principles; pronunciation; conversation; composition; readings. Not open to native or heritage speakers without consent of instructor. Prerequisite: GERM 101.

GERM 201 GERMAN INTERMEDIATE I (3) Review of grammar and pronunciation; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in German. Not open to native or heritage speakers without consent of instructor. Prerequisite: GERM 102 or equivalent.

GERM 202 GERMAN INTERMEDIATE II (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in German. Not open to native or heritage speakers without consent of instructor. Prerequisite: GERM 201 or equivalent.

Upper Division

GERM 301 GERMAN COMPOSITION AND CONVERSATION I (3) Reading, conversation and composition on topics of cultural and literary interest; grammar and syntax. Conducted in German. Prerequisite: GERM 202 or equivalent.

GERM 302 GERMAN COMPOSITION AND CONVERSATION II (3) Reading, conversation and composition on topics of cultural and literary interest; grammar and syntax. Prerequisite: GERM 301 or equivalent.

GERM 303 GERMAN TRANSLATION (3) Translation of texts of increasing difficulty from and to German. Prerequisites: GERM 201-202 or equivalent.

GERM 311 CULTURE AND CIVILIZATION (3) A brief survey of the history, geography and institutions of Germany. Conducted in German. Prerequisites: GERM 201-202 or equivalent.

GERM 341 READINGS IN CONTEMPORARY GERMAN (3) Reading and comprehension of non-literary texts. Prerequisites: GERM 201-202 or consent of instructor.

GERM 370 SPECIAL TOPICS IN GERMAN (3-6) Specialized topics in language and culture. Content varies. May be repeated once for a total of 6 units provided a different topic is covered. Prerequisite: GERM 202 or equivalent.

GERM 391 ADVANCED GERMAN GRAMMAR (3) German syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Conducted in German. Prerequisites: GERM 301-302.

GERM 392 ADVANCED GERMAN (3) Integrated approach to improving speaking, listening, writing and reading. Conducted in German. Prerequisites: GERM 301, consent of instructor.

GERM 401 GERMAN PHONETICS (3) Pronunciation and drills in contemporary German, conducted in German. Not open to native speakers of German. Prerequisites: GERM 301-302 or equivalent.

GERM 427 GERMAN CLASSICISM (3) Goethe, Schiller, Lessing and others. Conducted in German. Prerequisite: GERM 311 or 341 or equivalent.

GERM 441 MODERN GERMAN LITERATURE (3) The modern masters: Kafka, Mann, Hess, Rilke, Brecht. Conducted in German. Prerequisite: GERM 311 or 341 or equivalent.

GERM 442 GERMAN LITERATURE SINCE 1945 (3) Themes and movements since World War II. Poetry: Eich, Enzensberger, Cean, Bachmann; prose fiction: Boell, Grass; drama: Borchert, Duerrenmatt, Frisch. Conducted in German.

GERM 465 GOETHE'S FAUST (3) A study of the background, themes and structures of this masterpiece. Conducted in German. Prerequisite: GERM 311 or 341 or equivalent.

GERM 470 SPECIAL TOPICS IN GERMAN (3) Discussion of a central topic with changing emphasis from year to year. Conducted in German. May be repeated for credit provided a different topic is covered. Prerequisite: GERM 311 or 341 or equivalent.

GERM 481 THE GERMAN NOVELLE (3) The theory and development of the *novelle* in German literature from Goethe to the present. Conducted in German. Prerequisite: GERM 311 or 341 or equivalent.

GERM 491-492 DIRECTED READINGS IN GERMAN (1-3) Reserved for superior students under the guidance of a departmental adviser. Content related to students' previous programs. Prerequisites: at least 3 units of study at the 400 level, consent of department chair.

GERM 494 TRAVEL STUDY ABROAD (3-16) German language, culture, civilization and literature at approved study abroad sites in German Speaking Europe. Prerequisite: German 202 or equivalent.

GERM 495 INTERNSHIP FOR THE PROFICIENCY IN GERMAN (3) Supervised experience in a work setting providing students the opportunity to apply their classroom learning and skills outside the academic world. Students receive 3 units for eight hours of work per week. Junior or senior undergraduate students in good academic standing who meet the requirements established for the Proficiency in German program should apply for the internship during the month of November for the spring term and during the month of April for the fall term. Prerequisites: open only to students who are enrolled in the Proficiency in German program and who have complied with the program regulations. Written consent of program coordinator.

GERM 497 INTERNSHIP IN GERMAN (3) Training and experience using German in working with government, business and industry in Maryland or Washington, D.C., under professional supervision. Prerequisites: junior or senior standing German majors (professional track) only, and completion of at least 27 units above 300-level courses. Written consent of coordinator of program.

GERONTOLOGY (GERO)

Lower Division

GERO 101 INTRODUCTION TO GERONTOLOGY (3) Study of human aging from a variety of perspectives including sociological, psychological and biological. Provides a background in social and political public policy issues related to the aging of America.

Upper Division

GERO 330 [530] COMMUNITY PLANNING FOR AN AGING SOCIETY (3) Multidisciplinary approach to the urban environment as a physical and social context for the diverse lifestyles of its older residents. Theoretical approaches to aging and the environment are examined with emphasis on how planned and built environments impact the quality of life of older persons. Prerequisite: junior standing.

GERO 367 DEATH, DYING AND BEREAVEMENT (3) Examination of present social considerations on death including demographic, attitudinal and ritualistic variables; death education through the life cycle; structure of the grief process; impact of terminal illness on the patient and the family; ethical issues surrounding euthanasia and suicide. Not open to students who successfully completed SOCI 367. Prerequisite: SOCI 101.

GERO 370-374 SPECIAL TOPICS (3) Topics of contemporary interest and emerging issues in gerontology. Prerequisites: GERO 101 and permission of gerontology adviser.

GERO 397 GERONTOLOGY INTERNSHIP (3) Supervised experience in gerontology. May be repeated for a maximum of 9 units with gerontology adviser's permission. Prerequisite: 15 units in gerontology, including GERO 101.

GERO 450 [550] DIRECTED READINGS IN GERONTOLOGY (3) Systematic inquiry into a topic of the student's choice in consultation with faculty. Prerequisite: graduate standing or 25 units of GERO courses.

GERO 485 GERONTOLOGY SENIOR SEMINAR (3) Programmatic, ethical and public policy issues of aging. Prerequisite: completion of gerontology core course requirements.

GREEK (GRK)

Lower Division

GRK 101-102 ELEMENTS OF MODERN GREEK I, II (3,3) A thorough foundation in grammar; drills in pronunciation; elementary conversation and composition; introduction to Greek culture. GRK 101 is a prerequisite to GRK 102.

GRK 103 ANCIENT GREEK ELEMENTS (3) Ancient Greek grammar structure and vocabulary related to modern languages.

GRK 104 ANCIENT GREEK ELEMENTS II Review and further study of grammar, syntax and vocabulary; drills in morphology and translation; discussion of Greek culture as appropriate. Prerequisite: GRK 103 or equivalent.

HEALTH CARE MANAGEMENT (HCMN)

Upper Division

HCMN 305 COMMUNITY HEALTH ADMINISTRATION (3) A survey of current approaches to the theories, practices and organization of community health services administration. Prerequisite: HLTH 207.

HCMN 413 SERVICES AND HOUSING FOR THE LONG-TERM CARE CONSUMER (3) Financing and regulatory structure for services and housing options for chronically ill, dependent populations in the United States; market trends, reimbursement structures and regulatory policies. Prerequisite: HLTH 207 or consent of instructor. Offered spring only.

HCMN 415 FINANCING AND ORGANIZATION OF HEALTH CARE SERVICES IN THE U.S. (3) Financing and organization of health care services, emphasizing managed care philosophies in context of organizational and economic theories. Prerequisite: HLTH 207. Offered fall only.

HCMN 417 [517] LONG-TERM CARE ETHICAL PROBLEMS (3) Applying long-term care law, rules, theory, and clinical and administrative best practice to the solution of practical

ethical problems common in long-term care. Prerequisite: HLTH 207 or consent of instructor.

HCMN 419 [519] LONG-TERM CARE ADMINISTRATION (3) An introduction to institutional and community-based long-term care facility administration. Examines laws, rules and nationally established domains of nursing home and residential care managerial practice within an ethically based philosophy of care. Prerequisites: HLTH 207, HCMN 305 and HCMN 413 or consent of instructor.

HCMN 441 [541] LEGAL AND ETHICAL ISSUES IN HEALTH ADMINISTRATION (3) Examination of legal and ethical issues in the administration of health programs. Emphasis is placed on the impact of cost-containment efforts, quality and malpractice concerns, profit-seeking in health, biomedical advances and the new delivery mechanisms. Prerequisite: HLTH 207. Offered spring only.

HCMN 495 HEALTH CARE MANAGEMENT INTERNSHIP (1-12) Supervised, capstone experience in health management. Prerequisites: completion of all required courses with 2.00 or higher grade equivalent and permission of department chair. May be repeated for up to 12 units. Graded S/U.

HEALTH SCIENCE (HLTH)

Lower Division

HLTH 101 WELLNESS FOR A DIVERSE SOCIETY (3) Health promotion, disease prevention and healthy lifestyles; analysis of personal attitudes and behaviors.

HLTH 102 HONORS WELLNESS FOR A DIVERSE SOCIETY (3) Health promotion, disease prevention and healthy lifestyles; analysis of personal attitudes and behavior. Honors College course.

HLTH 103 EMC, FIRST AID AND SAFETY (3) Emergency intervention designed for people who may have to give first aid, advanced life support or cardiopulmonary resuscitation in the course of their daily lives. Standard certification will be by the American Heart Association. Safety awareness will be explained.

HLTH 201 INTERNATIONAL HEALTH (3) An overview of international health issues and problems, methods of health care delivery, health infrastructure and epidemiology on a global scale.

HLTH 204 NUTRITION AND WEIGHT CONTROL FOR THE CONSUMER (3) Using consumer models, this course contains elements of nutrition, weight control and fitness. Prerequisite: HLTH 101.

HLTH 207 HEALTH CARE IN THE U.S. (3) Analysis of health care demands, cost, supply and recipients. Analysis of different health care settings and factors such as professionalism, the professional education system, authority structures, ethical responsibilities and referrals. Emerging policy debate and role of managed care are also explored.

HLTH 208 MENTAL HEALTH, STRESS MANAGEMENT AND CRISIS INTERVENTION (3) Emphasis on helping relationships, constructive communication, stress and stressful life events, various approaches to handling crisis situations, and an overview of the mental health services system. Prerequisite: HLTH 101.

HLTH 217 HONORS HEALTH CARE IN THE U.S. (3) An analysis of health care demand and supply, issues of professionalism, authority structures and organizational forms; emphasis on student research and discussion of issues. Honors College course.

HLTH 219 WOMEN'S HEALTH (3) Critical analysis of gender as a social construct of health. Exploration of physiological, psychological, behavioral and technical aspects of women's health care needs and barriers. Enables students to become informed consumers of health care services. Prerequisite: consent of instructor.

HLTH 220 SEXUALITY IN A DIVERSE SOCIETY (3) Covers the multifaceted components of human sexuality, including historical influences, religious influences, moral development and values, sexual practices and alternate behaviors, health behaviors, and sex-related diseases.

HLTH 222 FOUNDATIONS OF HEALTH EDUCATION AND HEALTH BEHAVIOR (3) Social, cultural and historical foundations examined in light of planning and implementing health education programs. Prerequisite: HLTH 101.

HLTH 225 WEIGHT CONTROL: THEORY AND PRACTICE (3) The theoretical and practical aspects of losing, gaining or maintaining weight. Recent medical and behavioral literature are reviewed. Opportunities exist in class to make application of the theories. Prerequisite: HLTH 101 or consent of instructor.

Upper Division

HLTH 311 CHRONIC AND COMMUNICABLE DISEASE (3) A factual, non-clinical approach to the major chronic and communicable diseases that are health problems in the U.S. population today. Patient education methods and the role of the health educator in relation to these diseases are stressed. Prerequisites: HLTH 101, BIOL course with lab.

HLTH 315 CURRICULUM AND PLANNING (3) In-depth analysis of the planning process for both community and school settings. Prerequisite: HLTH 222.

HLTH 331 NUTRITION FOR HEALTH PROFESSIONALS (3) An in-depth study of the chemical nature and utilization of nutrients; the composition, digestion, absorption of foods, and the normal nutritional requirements of the human body. Focus on nutrition and health, and nutrition and disease. Prerequisites: CHEM 105, BIOL 190 or special permit only.

HLTH 333 FOOD SAFETY SCIENCE (3) Principles of the spread of food-borne illness as applied to maintaining safe supplies in food and food service establishments. Field trips required. Prerequisite: BIOL 201 or BIOL 190.

HLTH 387 STUDENT TEACHING IN SECONDARY EDUCATION—SCHOOL HEALTH (6)

HLTH 388 STUDENT TEACHING IN SECONDARY EDUCATION—SCHOOL HEALTH (12)

HLTH 401 [501] TEACHING ABOUT DRUGS AND SEX (3) Content, procedures and methods for presenting sensitive subjects, including human sexuality and drugs. Not open to law enforcement majors. Prerequisites: HLTH 101 or HLTH 222, HLTH 325, PSYC 101, BIOL 190.

HLTH 402 [502] HEALTH AND SOCIAL WELFARE PROMOTION: HEALTH COMMUNICATION (3) Analysis of health message design, health behavior and communication theory emphasizing the persuasion process to improve health and other social conditions of living. Application of theoretical principles augmented with specific skills to design, implement and evaluate health messages. Not open to students who have successfully completed CDCE 401 or CDCE 402. Prerequisite: HLTH 101 or equivalent.

HLTH 405 [505] DRUGS IN OUR CULTURE (3) An in-depth review of harmless, harmful, useless and useful substances that may affect behavior or mood; the interaction of psychological, sociological and physiological components are included. Prerequisite: HLTH 101.

HLTH 407 VIOLENCE PREVENTION FOR HEALTH EDUCATORS (3) Development of effective violence prevention programs for future school and community health educators. Prerequisite: SOCI 358 or consent of instructor.

HLTH 411 [511] HEALTH AND LATER MATURITY—THE AGING PROCESS (3) An approach to the conservation of human resources with emphasis on understanding attitudes and practices related to health in later maturity. Designed for students with a personal or professional interest in the field. Prerequisite: 6 units of health and/or behavioral science or consent of instructor.

HLTH 421 FIELD WORK IN COMMUNITY HEALTH (1-6) Practical experience by participating in community health situations. May be repeated for a maximum of 6 units. Designed for dual concentration. Graded S/U. Prerequisite: Department consent.

HLTH 422 FIELD WORK IN COMMUNITY HEALTH (12) Supervised capstone experience in community health education. May be repeated for a maximum of 12 units. Designed for

community health concentration. Graded S/U. Prerequisite: Department consent, successful completion (grade "C" or better) of program requirements, associated prerequisites and requirements.

HLTH 425 INSTRUCTIONAL METHODS IN HEALTH EDUCATION (3) Focuses on methods used in community and school settings, emphasizing instructional techniques used for adolescents and adults. Prerequisite: HLTH 315.

HLTH 426 METHODS IN ELEMENTARY SCHOOL HEALTH EDUCATION (2) Focuses on instructional methods used in the delivery of health education in elementary schools. Prerequisite: SCED 341.

HLTH 430 ORGANIZATION, IMPLEMENTATION AND MANAGEMENT OF HEALTH EDUCATION PROGRAMS (3) Focuses on techniques for managing health programs in school and community settings. Prerequisite: HLTH 315.

HLTH 432 MEASUREMENT AND EVALUATION IN HEALTH EDUCATION (3) Focuses on the elements of courses and program evaluation design in health education, including data collection; instrument and test development; techniques for analyzing health courses/program data; and writing evaluation reports. Prerequisites: passed functional reading and writing test; HLTH 315.

HLTH 435 EPIDEMIOLOGICAL BASIS OF DISEASE AND ENVIRONMENTAL HEALTH (3) An examination of epidemiological investigation principles, chronic and communicable diseases; pollution, housing sanitation, and their interrelationships. Prerequisites: BIOL 190 or BIOL 201 or BIOL 202.

HLTH 451 [551] INTRODUCTION TO ENVIRONMENTAL HEALTH (3) An examination of the interrelationship between humans and their environment. Emphasis is placed upon health aspects of pollution, housing, sanitation, radiation, behavioral disorders and epidemiology. Prerequisite: BIOL 190 or BIOL 201 or BIOL 202.

HLTH 470-479 [570-579] HEALTH WORKSHOPS (3) For teachers, administrators and individuals concerned about health-related fields. Contemporary health aspects are considered with emphasis on implementation of positive behavior aimed at improving the health of the individual and the community. Enrollment is limited to 25. May be repeated for credit provided a different topic is covered. Prerequisite: HLTH 101 or consent of instructor.

HLTH 491 [591] HEALTH DIRECTED READINGS (1-3) Independent reading in health or health-related disciplines. Prerequisites: a minimum of 12 units in health and consent of department chair.

HLTH 494 [594] TRAVEL AND STUDY (3) An examination of various types of health care delivery in the countries and cities visited in comparison with that of the United States. For complete information, contact chair of the department. Prerequisite: HLTH 101 or consent of instructor and department chair.

HLTH 495 [595] INDEPENDENT STUDY (3) Directed study on specific problems in health and related fields. Prerequisite: consent of department chair.

HLTH 497 PROFESSIONAL DEVELOPMENT IN HEALTH EDUCATION (1) Provides students with the opportunity to select and work with faculty members in their areas of teaching and research expertise. Students select a faculty member whom they will assist in conducting projects. Students will complete a written summary of their professional development experience. Prerequisite: consent of instructor and department chair.

Graduate Division

See TU *Graduate Catalog* for course descriptions.

HEBREW (HEBR)

Lower Division

HEBR 101-102 ELEMENTS OF HEBREW I, II (3,3) An introduction to Hebrew. Speaking, reading and writing, the development of conversational ability, free composition, and translation from English to Hebrew. HEBR 101 is a prerequisite to HEBR 102.

HEBR 103 BIBLICAL HEBREW I (3) Introduction to Hebrew with an emphasis on grammar, vocabulary, syntax and style of Biblical Hebrew. The fundamentals of Hebrew language, preparation to read and translate classical Hebrew texts. Foundation for continued studies of the classical Hebrew of the Hebrew Bible and rabbinic texts as well as the Hebrew of the contemporary idiom.

HEBR 104 BIBLICAL HEBREW II (3) Review and further study of grammar, syntax and vocabulary needed to read and translate classical Hebrew texts. Prerequisite: HEBR 103 or equivalent.

HEBR 201-202 HEBREW INTERMEDIATE I, II (3,3) A continued review of grammatical structure with emphasis on conversational and reading fluency. Vocabulary building, composition and reading and discussion of selected outside readings. HEBR 102 is a prerequisite to HEBR 201 and HEBR 201 is a prerequisite to HEBR 202.

HEBR 203 BIBLICAL HEBREW III (3) Intermediate Biblical Hebrew course; concentration on complicated structures of Hebrew grammar, morphology, syntax, and vocabulary. Prerequisite: HEBR 104 or consent of instructor.

HEBR 204 BIBLICAL HEBREW IV (3) Review of elementary Biblical Hebrew language; advanced grammar, morphology, syntax and vocabulary needed to read and translate Hebrew prose and poetry. Prerequisite: HEBR 203 or equivalent.

HEBR 205 CONTEMPORARY HEBREW LITERATURE (3) Survey of selected short stories in English translation from the time of the czars in Russia to Israel today.

Upper Division

HEBR 301-302 HEBREW COMPOSITION AND CONVERSATION I, II (3,3) Intensive exercises in Hebrew composition and conversation beyond the intermediate level. Conducted in Hebrew. Prerequisites: HEBR 201-202 or equivalent or consent of instructor.

HEBR 370 SPECIAL TOPICS IN HEBREW (3) Specialized topics in Hebrew language and literature. Content varies. May be repeated once for a total of 6 units provided a different topic is covered. Prerequisite: HEBR 202 or HEBR 204 or equivalent, or consent of instructor.

HEBR 391 READINGS IN MODERN HEBREW LITERATURE (3) The reading and literature analysis of selected short stories by the major writers of Hebrew literature in Israel today. Conducted in Hebrew. Prerequisites: HEBR 201-202 or equivalent or consent of instructor.

HISTORY (HIST)

Lower Division

HIST 100 USING INFORMATION EFFECTIVELY IN HISTORY (3) Introduction to gathering, evaluating and communicating historical information using a collaborative approach to research.

HIST 101 INTRODUCTION TO ANCIENT CIVILIZATION (3) Political, social, economic and intellectual forces which shaped the pattern of Near Eastern and European life from the Stone Age through the decline of the Roman Empire.

HIST 102 HISTORY OF EUROPEAN CIVILIZATION THROUGH THE 17TH CENTURY (3) Political, social, economic and intellectual forces which shaped the pattern of European life from post-Roman times through the 17th century. Not open to students who have successfully completed HIST 241.

HIST 103 HISTORY OF EUROPEAN CIVILIZATION FROM THE 17TH CENTURY (3) Political, social, economic and intellectual forces which shaped the pattern of European life from the 17th century to the present. Not open to students who successfully completed HIST 242.

HIST 105 BYZANTINE EMPIRE AND BALKANS TO 1821 (3) Historical survey from the 4th century A.D. foundation of Constantinople to the outbreak of the Greek Revolution in 1821.

HIST 109 INTRODUCTION TO THE CIVILIZATION OF INDIA (3) Development of the culture of South Asia from earliest times and the emergence of the present nations of Bangladesh, Pakistan, India and Sri Lanka (Ceylon).

HIST 110 EAST ASIAN CIVILIZATION TO THE 19TH CENTURY (3) Comprehensive survey of the origins and development of Chinese, Korean and Japanese civilizations, focusing on China as the fountainhead of East Asian civilizations.

HIST 111 MODERN EAST ASIA SINCE THE 19TH CENTURY (3) Survey of China, Korea and Japan in modern times, tracing their responses to the West and their modern transformations in the 19th and 20th centuries.

HIST 117 ISLAMIC HISTORY: FROM THE RISE OF ISLAM TO THE RISE OF THE OTTOMANS (3) The classical period in the history of Islam from the rise of the Prophet Muhammad to the emergence of the Ottomans, who came to lead the Muslim world in the 14th century.

HIST 118 SURVEY OF MIDDLE EASTERN HISTORY: FROM THE OTTOMANS TO THE PRESENT (3) History of Islam and the modern Middle East, highlighting the history of the Ottoman Empire and the emergence of modern nation-states in the Middle East, examining political and historical questions about the modern Middle East, while also addressing social and cultural change in the region.

HIST 121 LATIN AMERICA: COLONIAL PERIOD (3) Political, economic and social developments in Portuguese and Spanish America from the pre-Columbian period to the movements for independence.

HIST 122 LATIN AMERICA: NATIONAL PERIOD (3) Struggle for political, economic and social stability, international relations and cultural patterns in the development of independent Latin America in the 19th and 20th centuries.

HIST 135 AFRICAN HISTORY AND CULTURE (3) Sub-Saharan Africa: including the evolution of traditional societies into Western-influenced states, supported by archaeological, anthropological, ecological, geographical, literary, artistic and musical evidence.

HIST 145 HISTORY OF THE UNITED STATES TO THE MID-19TH CENTURY (3) Political, economic, social and cultural forces which shaped the pattern of life in the United States from the founding of the colonies to 1865.

HIST 146 HISTORY OF THE UNITED STATES SINCE THE MID-19TH CENTURY (3) Continuation of HIST 145 from 1865 to the present.

HIST 148 HONORS HISTORY OF THE UNITED STATES SINCE THE MID-19TH CENTURY (3) Political, economic, social and cultural forces in American life since 1865; emphasis on student initiative and active participation in the learning process.

HIST 160 WORLD HISTORY BEFORE 1300 (3) Global trends in World History to 1300.

HIST 161 WORLD HISTORY SINCE 1300 (3) Global trends in World History since 1300.

HIST 162 HONORS AMERICAN INDIAN HISTORY (3) North American overview of Native history from the beginning of indigenous settlement to the present. Honors survey. Honors College course.

HIST 201 HISTORY OF IRELAND (3) Survey of Irish history emphasizing the demographic patterns and the cultural, religious, economic and political themes that have shaped the lives of the people of Ireland from the Iron Age to the present.

HIST 231 HISTORY OF RUSSIAN CIVILIZATION (3) Political, social, economic and intellectual forces of Russian life from the 9th through the 19th centuries.

HIST 275 THE HISTORY OF ANCIENT ISRAEL (3) Survey of the history and culture of the Israelites from Moses to the second Jewish revolt under Bar-Kokhba in 135 C.E.

HIST 277 A SURVEY OF JEWISH HISTORY (3) Political, cultural and socioeconomic experiences of world Jewry from the Diaspora to the present. Emphasis on the 19th and 20th centuries.

Upper Division

HIST 300 INTRODUCTION TO HISTORICAL STUDY (3) Survey of historical writings, the theory of history, introduction to research. Not open to those who successfully completed HIST 290. Prerequisite: ENGL 102 or ENGL 190.

HIST 301 [501] ANCIENT NEAR EASTERN CIVILIZATIONS (3) Civilizations of Mesopotamia and Egypt and the peripheral developments in Syria-Palestine and Asia Minor. Prerequisite: HIST 101 or consent of instructor.

HIST 302 ANCIENT NEAR EASTERN AND ANATOLIAN CIVILIZATIONS (3) Political, socio-economic and cultural history of the Ancient Near East and Anatolia from ca 3200 BCE to the conquest of Alexander the Great. Prerequisite: HIST 101 or consent of the instructor.

HIST 303 [503] ALEXANDER THE GREAT AND HIS SUCCESSORS (3) Conquests of Alexander the Great, culture and religion of Greece and Near East in the Hellenistic period. Prerequisite: HIST 101 or consent of instructor.

HIST 304 [504] ANCIENT GREEK CIVILIZATION (3) The civilization of classical Greece, including the Minoan and Mycenaean bronze age antecedents, to 323 B.C. Prerequisite: HIST 101 or consent of instructor.

HIST 305 [505] ROMAN CIVILIZATION (3) The civilization of ancient Rome from the foundation of the city to the collapse of the Roman Empire in the West. Prerequisite: HIST 101 or consent of instructor.

HIST 306 [506] WOMEN IN 20TH-CENTURY U.S. HISTORY (3) Multicultural perspective on politics, work, family and sexuality in women's lives. Prerequisite: HIST 146 or HIST 148 or WMST 231 or consent of instructor.

HIST 307 [514] THE ANDEAN REPUBLICS (3) Economic, social and political developments in Peru, Bolivia and Ecuador from independence to the present. Prerequisite: 6 units in history or 3 units in Latin American history.

HIST 310 20TH-CENTURY NATIONALISM IN EAST AND SOUTHEAST ASIA (3) Introduction to the contentious issue of nationalism and state-building through brief case studies of China, Japan, Vietnam and Indonesia. Prerequisite: 6 units in history or consent of instructor.

HIST 311 [509] TRADITIONAL INDIA: ITS HISTORICAL DEVELOPMENT (3) Development of the history and culture of India from prehistoric times until the beginnings of European dominance in the 18th century. Prerequisite: 6 units in history or consent of instructor.

HIST 312 [510] HISTORY OF MODERN INDIA (3) History of the Indian subcontinent since 1750, stressing the rise of British power, the colonial experiences, the development of nationalist movements and the problems of independence in present-day India, Pakistan and Bangladesh. Prerequisite: 6 units in history or consent of instructor.

HIST 313 [511] HISTORY OF MODERN SOUTHEAST ASIA (3) Development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam and the Philippines since 1500, with emphasis on the colonial experience and development of modern nationhood. Prerequisite: 6 units in history or consent of instructor.

HIST 314 [528] THE UNITED STATES AND VIETNAM 1945-75 (3) United States-Vietnamese political, diplomatic and military relations from the end of World War II, to the support of France and the direct U.S. involvement. Prerequisites: HIST 146 or HIST 148 or consent of instructor.

HIST 315 [512] IMPERIAL CHINA: THE LAST DYNASTY (3) Ching (Qing) dynasty, 1644-1912; focus on the 19th-century collision of imperial China and the West. Prerequisite: 6 units in history or consent of instructor.

HIST 316 [513] REVOLUTIONARY CHINA (3) The ongoing Chinese revolution from the overthrow of the imperial government through the Nationalist and Communist periods. Prerequisite: 6 units of history or consent of instructor.

HIST 319 [519] JAPAN, 1830 TO 1930 (3) Japan's transition from feudalism and national seclusion to emergence of a modern nation-state with an overseas empire and a parliamentary form of government. Prerequisite: 6 units of history or consent of instructor.

HIST 320 [520] JAPAN, 1930 TO PRESENT (3) Japan's transition from militarism and foreign aggression in the 1930s to postwar pacifism, democracy and dynamic economic growth. Prerequisite: 6 units of history or consent of instructor.

HIST 321 [521] HISTORY OF MEXICO: PRE-COLUMBIAN AND COLONIAL (3) Political, economic, social and cultural developments from early pre-Columbian civilizations to the movement for independence. Prerequisite: 6 lower-division units in history.

HIST 322 [522] HISTORY OF MEXICO: NATIONAL PERIOD (3) Political, economic, social and cultural developments from independence to the present. Prerequisite: 6 lower-division units in history.

HIST 324 [507] DEMOCRATIZATION IN LATIN AMERICA (3) Analysis of the failures and successes in building democratic political institutions in Latin America; emphasis on 1930s-present. Not open to those who successfully completed HIST 484 in fall 1993. Prerequisite: HIST 122 or consent of instructor.

HIST 329 [502] HISTORY OF SOUTH AFRICA (3) Social and cultural change in South Africa from early times to present. Prerequisite: HIST 135 or consent of instructor.

HIST 331 [531] AMERICAN MILITARY HISTORY 1898–1945 (3) Campaigns, tactics and institutional development of the armed forces in peace and war, seen in the context of politics and diplomacy; emphasis on World War II. Prerequisite: HIST 146 or HIST 148.

HIST 332 [532] AMERICAN MILITARY HISTORY SINCE 1945 (3) Campaigns, tactics and institutional development of the armed forces in peace and war, seen in the context of politics and diplomacy; emphasis on Korea and Vietnam. Prerequisite: HIST 146 or HIST 148.

HIST 334 TUDOR ENGLAND, 1485–1603 (3) Sixteenth-century English society, culture, politics and religion. Prerequisite: HIST 102 or consent of instructor.

HIST 335 [517] STUART ENGLAND, 1603–1714 (3) Seventeenth-century English society, culture, politics and religion. Prerequisite: HIST 102 or consent of instructor.

HIST 338 THE MIDDLE EAST: AN URBAN PERSPECTIVE (3) Exploration of identity and urban space in the Middle East during the 19th and 20th centuries. Prerequisite: HIST 117 or HIST 118 recommended.

HIST 339 THE MAKING OF THE MODERN MIDDLE EAST (3) Ethnic, religious, political and economic factors that have shaped the Middle East since 1798. Prerequisites: HIST 107 or 6 units in history or consent of instructor.

HIST 340 ISRAEL/PALESTINE: CONFLICTING PAST, CONFLICTING PRESENT (3) History of the Israeli-Palestinian conflict. Prerequisite: 6 units in HIST.

HIST 345 [533] THE AMERICAN COLONIES: 1492–1763 (3) Founding of and the political, economic and social development of the American colonies. Prerequisite: HIST 145 or HIST 102 or consent of instructor.

HIST 346 [534] THE AMERICAN REVOLUTIONARY PERIOD: 1763–1789 (3) From the end of the Seven Years' War to the ratification of the Constitution. Prerequisite: HIST 145 or HIST 102 or consent of instructor.

HIST 347 [535] THE EARLY NATIONAL PERIOD (3) The United States from the Constitutional Convention to the Election of 1820. The Federalist Decade and Jeffersonian Era. Prerequisite: HIST 145.

HIST 348 [536] THE JACKSONIAN ERA (3) The United States from 1815 to 1860; political, social and economic currents of the period. Prerequisite: HIST 145.

HIST 349 [537] THE CIVIL WAR (3) Sectionalism, the coming of the war and the war years. Emphasis on political, economic and social issues. Prerequisite: HIST 145.

HIST 351 [539] THE U.S. 1865–1901: AGE OF ENTERPRISE (3) Industrialization of the United States, the rise of big business and an examination of resulting problems in economic, social and political life. Prerequisite: HIST 145 or HIST 146 or HIST 148.

HIST 352 [540] THE U.S. 1892–1920: AGE OF REFORM (3) America's efforts to deal with the political, social and economic problems of industrial life; emphasis on the Populist movement; imperialism and the Spanish-American War; the administrations of Theodore Roosevelt,

William Howard Taft and Woodrow Wilson. Prerequisite: HIST 145 or HIST 146 or HIST 148.

HIST 354 [525] CONFLICT AND COOPERATION IN COLD WAR EAST ASIA (3) Cold war conflict and cooperation between China, Taiwan, N/S Korea, Japan, the Soviet Union and the United States. Prerequisite: Three units of non-Western history or consent of the instructor.

HIST 359 [541] THE F.D.R. ERA (3) History of the United States from the 1920s through World War II, with emphasis on the presidential years of Franklin D. Roosevelt. Prerequisite: HIST 146 or HIST 148.

HIST 360 [542] RECENT AMERICAN HISTORY: 1945–1975 (3) History of the United States from World War II through the mid-1970s, including political, social, economic and diplomatic developments. Prerequisite: HIST 146 or HIST 148.

HIST 361 [526] GAYS AND LESBIANS IN U.S. HISTORY (3) Multicultural perspectives on gay and lesbian cultures and communities and their struggles against institutionalized homophobia in education, the military, the media, medicine, religion and government. Prerequisite: 3 units in history or women's studies or consent of the instructor.

HIST 365 COMPARATIVE HISTORY OF THE MODERN FAMILY (3) Impact of economic, social and reproductive changes on family life and structure. Prerequisite: one course in HIST, SOCI or WMST.

HIST 366 [546] A HISTORY OF AMERICAN BUSINESS (3) Study of industry, finance, commerce and agriculture from the Civil War to the present. Prerequisites: 3 units in history and either consent of instructor or junior standing.

HIST 367 [547] THE DEVELOPMENT OF THE U.S. CONSTITUTION: 1787–1941 (3) Intellectual and political influences which produced the Constitution of 1787, the struggle between national supremacy and state sovereignty up to the Civil War, and the development of the new judicial review after 1870. Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 368 [548] THE BILL OF RIGHTS AND THE CONSTITUTION: 1941 TO THE PRESENT Interpretation of the Bill of Rights before and after the Warren Court. Prerequisite: HIST 146 or HIST 148.

HIST 370 [550] DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3) The role of the United States in modern warfare, worldwide economic and financial affairs, overseas expansion, the diplomatic impact of conflict in ideologies, and current international crisis. Prerequisite: HIST 145 or HIST 146 or HIST 148.

HIST 374 THE AMERICAN WEST (3) Study of the earliest Native settlements to the present, including Native cultures, the West as international crossroads, imperial conquests, the modern West and the mythological West. Prerequisite: HIST 145 or 146 or consent of instructor.

HIST 375 [553] THE CITY IN AMERICAN HISTORY (3) Development of the American city and its impact on society, culture, ethnicity, race relations, the roles of women, economics and politics. Prerequisite: 3 units in U.S. history.

HIST 378 [565] IMMIGRANTS AND IMMIGRATION IN THE UNITED STATES (3) Comparative social, cultural and economic history of selected ethnic groups and their relationship to the dominant culture. Emphasis on the late 19th and 20th centuries. Prerequisite: 3 units of U.S. history or consent of instructor.

HIST 379 HISTORY OF NATIVE AMERICANS: THE EAST (3) A history of Native peoples to 1900, including the plurality and diversity of the Native nations, the centrality of Native agency in their own history, and the perpetuation and vitality of dynamic Native cultures. Prerequisites: 3 units of American history or consent of instructor.

HIST 380 HISTORY OF NATIVE AMERICANS: THE WEST (3) Study of Native peoples from 1900 to the present, including the plurality and diversity of the Native nations, the centrality of Native agency in their own history, the perpetuation and vitality of dynamic Native cultures, and the persistence of Native people's nations into modern times. Prerequisite: 3 units of American history or consent of instructor.

HIST 381 [563] AFRICAN AMERICAN HISTORY TO THE MID-19TH CENTURY (3) The political, economic and social history of African Americans from their African origins through the antebellum period. Prerequisite: HIST 145.

HIST 382 [564] AFRICAN AMERICAN HISTORY FROM THE MID-19TH CENTURY (3) The political, economic and social history of African Americans from the Civil War through the Civil Rights Era. Prerequisite: HIST 146 or HIST 148.

HIST 385 [558] WORKERS AND WORK IN THE UNITED STATES (3) The changing nature of agricultural, domestic and industrial work; business-labor relations; labor unions and leaders; role of labor in mainstream and radical political movements. Emphasis on the late-19th and 20th centuries. Prerequisite: HIST 146 or HIST 148 or 3 units in economics.

HIST 389 ROOTS OF ROCK AND ROLL (3) The roots of rock and roll from Tin Pan Alley to the youth movements of the 1960s. Social, economic and cultural origins of rock and roll as a legitimate popular music. Prerequisite: HIST 146 or HIST 148 or consent of instructor.

HIST 397 [560] HISTORY OF MARYLAND FROM COLONIAL TIMES TO THE PRESENT (3) Major events and forces that have shaped the political, social, cultural and economic development of Maryland. Prerequisite: 3 units in U.S. history.

HIST 399 ORIGINS OF WRITING (3) Examination of the "invention" of writing in a global perspective and its relation with the emergence of complex societies. Prerequisite: HIST 101, HIST 160, or consent of instructor.

HIST 401 [567] THE EARLY MIDDLE AGES: 300–1050 (3) The rebuilding of Europe after the collapse of the Roman Empire. Emphasis on the Church fathers, the Germanic tribes, Carolingian culture, feudalism and the Vikings. Prerequisite: HIST 102 or consent of instructor.

HIST 402 [568] THE HIGH MIDDLE AGES: 1050–1350 (3) Medieval culture, emphasizing the role of the church, emergence of the national monarchies of western Europe, and the creation of towns and universities. Prerequisite: HIST 102 or consent of instructor.

HIST 403 [569] THE RENAISSANCE ERA: 1300–1500 (3) Political, economic, social and cultural changes in late medieval and Renaissance Europe. Prerequisite: HIST 102 or consent of instructor.

HIST 404 [570] THE REFORMATION: 1500–1648 (3) Religious, political, economic and social changes in Reformation and Counter Reformation Europe. Prerequisite: HIST 102 or consent of instructor.

HIST 405 VIKINGS IN THE MEDIEVAL WORLD: WARRIORS, EXPLORERS, POETS AND LAWMAKERS (3) A history of the Viking period (793–1066 CE) including the laws, literature, mythology and archeology of medieval Northern Europe.

HIST 406 [572] EUROPE: 1815–1914 (3) Economic, political, social and intellectual developments, emphasizing the industrial revolution, nationalism and imperialism, and the origins of World War I. Prerequisite: HIST 103 or HIST 108.

HIST 415 [576] DIPLOMATIC HISTORY OF EUROPE: 1815–1939 (3) Specific diplomatic crises, emphasizing their impact on the European balance of power. Prerequisite: HIST 103 or HIST 108.

HIST 416 [516] BRITISH HISTORY: 1760–1902 (3) Political change and transformation of British government from George III until emergence from Splendid Isolation. Explores growth of the imperial system. Prerequisite: HIST 103 or HIST 108.

HIST 420 [579] EUROPEAN IDEAS: FRENCH REVOLUTION TO THE PRESENT (3) Religious, scientific, political and social theories of the European intellectual class seen in their historical context from the French Revolution to the present. Prerequisite: HIST 103 or HIST 108 or consent of instructor.

HIST 421 [580] GREAT BRITAIN IN THE 20TH CENTURY (3) Political, social and economic developments in Great

Britain from 1897 to the present. Prerequisite: HIST 103 or HIST 108.

HIST 427 [527] EUROPEAN MILITARY HISTORY: 1871–1925 (3) Minor wars of 1871–1913, build-up to World War I, the war and its aftermath, seen in the context of diplomatic, political and socio-economic history. Not open to students who successfully completed HIST 413. Prerequisite: HIST 103 or HIST 108 or consent of the instructor.

HIST 429 [529] EUROPEAN MILITARY HISTORY: 1925–1945 (3) Military institutions of the Interwar Period, build-up to World War II, the European War in the context of diplomatic, political and socioeconomic history. Not open to students who successfully completed HIST 413. Prerequisite: HIST 103 or HIST 108 or consent of the instructor.

HIST 431 [581] FRANCE: 1763–1871 (3) Old Regime and the impact of successive revolutions on French society, emphasis on France's role in the growth of European liberalism and nationalism. Prerequisite: HIST 103.

HIST 439 THE EXOTIC, THE EROTIC AND THE ROMANTIC: ORIENTALISM AND WESTERN CONSTRUCTIONS OF THE MIDDLE EAST (3) European and American perceptions and constructions of Middle Eastern peoples during the 19th and 20th centuries. Prerequisite: HIST 117 or HIST 118, or consent of instructor.

HIST 441 [582] GERMANY: 1871–1945 (3) Analysis of the Bismarckian Empire, Weimar Republic and the Third Reich, emphasizing the interrelationships between internal developments and Germany's role in Europe and the world. Prerequisite: HIST 103.

HIST 452 [584] RUSSIA/SOVIET UNION: 1894–1953 (3) Political, ideological, economic and cultural factors influencing the fall of the monarchy, the Bolshevik Revolution, Leninism and Stalinism. Prerequisite: HIST 231 or HIST 103 or consent of instructor.

HIST 453 [585] HISTORY OF SOVIET RUSSIA FROM KRUSCHEV TO GORBACHEV (3) Topical analysis of political history and theory, economic development, foreign affairs, social changes, and cultural and literary trends. Prerequisite: HIST 231 or HIST 103 or consent of instructor.

HIST 462 [588] THE HOLOCAUST IN HISTORICAL AND COMPARATIVE PERSPECTIVE (3) Origins, implementation and aftermath of the genocide; motivations of the perpetrators; responses of bystanders; and victims' experiences. Prerequisite: HIST 103. Must have completed 6 units of course work in modern European History, including HIST 103.

HIST 475 PUBLIC HISTORY: THEORY AND PRACTICE (3) Approach, theoretical understanding and methodology of professional historians in representing history to the broader public. Prerequisites: HIST 300 and 6 additional history units.

HIST 477 [586] EUROPE IN THE THIRD WORLD: THE AGE OF HIGH IMPERIALISM (3) Impact of modern European Colonialism on the societies of the Third World, chiefly Africa and Asia. Primary emphasis on the 19th and 20th centuries. Prerequisite: HIST 103 or consent of instructor.

HIST 478 AN ENVIRONMENTAL HISTORY OF THE MODERN WORLD, 1492 TO THE PRESENT (3) A history of the global relationship between humans and nature from the European voyages of exploration to the present.

HIST 482 [590] INTERPRETIVE PROBLEMS IN HISTORY (3) In-depth study of historical interpretations of selected topics. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: 12 units in history appropriate to topic.

HIST 483 [591] BIOGRAPHICAL STUDIES IN HISTORY (3) Study of selected historical figures who have shaped or reflected the past. Figures to be selected by the instructor. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: 6 units in history appropriate to topic.

HIST 484 [592] HISTORICAL THEMES (3) Study through lectures and discussions of a historical topic selected by the instructor. May be repeated for a maximum of 6 units

provided a different topic is covered. Prerequisite: 6 units in history appropriate to topic.

HIST 486 HISTORY SEMINAR (3) Research and writing in a specific period and area of history to be selected by the instructor. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: consent of instructor and 15 units in history, including HIST 300.

HIST 487 [596] COLLOQUIUM (3) Group discussion of reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with broad periods, topics, problems or comparative developments selected by the instructor(s). May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: consent of instructor and 15 units in history or 9 units in history and 6 units in the related discipline.

HIST 493 INTERNSHIP (3–6) Experience designed to combine the research and content of history with work in historical libraries, museums, archival depositories and similar agencies. No more than 6 units to be earned with any one agency. May be repeated for a maximum of 6 units. Graded S/U. Prerequisites: 27 units in history and consent of department chair. (Not for graduate credit.)

HIST 494 [594] TRAVEL AND STUDY (3–6) Countries and topics to be selected by the departments and instructors sponsoring the program. For complete information, write the chair of the department early in the fall of the academic year preceding the term of intended study. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: junior/senior status and consent of instructor.

HIST 496 [593] DIRECTED INDIVIDUAL RESEARCH (2–4) Research and reading dealing with a historical topic to be selected by the instructor and student; considerable attention to methodology. May be repeated for a maximum of 6 units. Prerequisites: 15 units in history and a minimum average of 3.00 in history, and consent of instructor and department chair.

HIST 497 [597] DIRECTED READING (2–4) Independent reading in history or related disciplines approached from a viewpoint that is primarily historical and dealing with specific periods, topics, problems or comparative developments selected by the student in consultation with the instructor(s). May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: 15 units in history or 9 units in history and 6 units in the related discipline and a minimum GPA of 3.00 in history and the related discipline and consent of department chair.

HIST 498 HONORS DIRECTED READING (2–4) Independent reading in history or related disciplines on a topic selected by the student in consultation with the instructor(s). May be repeated for a maximum of 6 units. Prerequisite: admission to the Departmental Honors Program.

HIST 499 HONORS THESIS IN HISTORY (4–8) Research and the writing of a thesis, to be directed by a faculty member in a chosen area of specialization. Prerequisite: admission to Departmental Honors Program. (Not for graduate credit.)

Graduate Division

See *TU Graduate Catalog* for course descriptions.

HONORS COLLEGE (HONR)

Lower Division

HONR 225 HONORS SEMINAR IN CREATIVITY AND CREATIVE DEVELOPMENT (3) The practice of expression and technique in a specific art form, including the study of theory, history, aesthetics, form and composition, techniques and/or pedagogy. Honors College course.

HONR 227 HONORS SEMINAR IN BIOLOGICAL AND PHYSICAL SCIENCES (3) Explore scientific issues of current importance to society within scientific, technological, historical, societal and ethical contexts. Honors College course.

HONR 229 HONORS SEMINAR IN METROPOLITAN PERSPECTIVES (3) Exploration of characteristic features of a metropolis and the persistent problems, institutional transformations, and creative expression that may emerge from this environment. Interpretation, evaluation, comparison,

and critique of the views and experiences of particular social, economic, and cultural groups in the metropolis. Honors College course.

HONR 230 HONORS SEMINAR IN UNITED STATES AS A NATION (3) Exploration of one or more major issues that characterize the United States as a nation either through consideration of American culture and society primarily as a distinctive tradition or through comparison and contrast with other societies and cultures. Honors College course.

HONR 235 HONORS SEMINAR IN ARTS AND HUMANITIES (3) Cultural traditions in art, literature, or music as expressed in the cultural heritage of a particular group, culture, or society. Honors College course.

HONR 237 HONORS SEMINAR IN SOCIAL AND BEHAVIORAL SCIENCES (3) Examination of contemporary ethical or social issues using relevant social and behavioral science methodologies. Honors College course.

HONR 240 HONORS SEMINAR IN DIVERSITY AND DIFFERENCE (3) Exploration of the ways in which group distinctiveness is defined in social contexts and the challenges and opportunities presented by the existence of diversity and difference. Honors College course.

HONR 243 HONORS SEMINAR IN GLOBAL PERSPECTIVES (3) Exploration of the influences of major forces of global change such as social, cultural, religious, economic, political, and technological processes and patterns in the world and how our own society relates to the global context. Honors College course.

HONR 245 HONORS SEMINAR IN ETHICAL ISSUES AND PERSPECTIVES (3) Exploration of the ethical dimensions of significant issues or dilemmas. Honors College course.

HONR 270 HONORS SEMINAR SPECIAL TOPICS (3) Course content varies with topic. Designed to enhance the Honors College experience. May be repeated provided a different topic is covered. Honors College course.

HONR 279 HONORS INDEPENDENT STUDY (3) This course provides first-year and sophomore students with an introductory experience in research/scholarly activity in any academic discipline at the university. Honors College course.

Upper Division

HONR 370 HONORS SEMINAR ADVANCED TOPICS (3) Course content varies with topic. Designed to enhance the Honors College experience. May be repeated provided a different topic is covered. Honors College course.

HONR 379 HONORS INDEPENDENT STUDY (1–6) This course provides junior and senior students with an advanced experience in research/scholarly activity in any academic discipline at the university. May be repeated for a maximum of 6 units. Honors College Course.

HONR 490 HONORS STUDY ABROAD PROGRAM (3–6) Travel and study abroad. Countries, topics, issues, programs, projects and/or facilities will be selected by the faculty sponsoring the program. Honors College course.

HONR 493 HONORS INTERNSHIP (1–6) Supervised experiential learning in a variety of work settings which provide honors students the opportunity to apply their classroom learning and skills outside the academic world. Students receive 1 unit for 4 hours of work per week. May be repeated for a maximum of 6 units. Prerequisite: Junior or senior undergraduate students in good academic standing in the Honors College. Honors College course.

HONR 495 HONORS DIRECTED READINGS (1–6) Survey of relevant scholarly literature under the guidance of a faculty member who will direct the student's research. Honors College course.

HONR 497 HONORS INDEPENDENT INVESTIGATION (1–6) Supervised research and investigation leading to a formal paper or project report. The use of a proposal and well-defined objectives are required. Honors College course.

HONR 499 HONORS THESIS (3) Supervised research and writing of a thesis directed by a faculty member in a chosen area of specialization. Honors College course.

INFORMATION TECHNOLOGY (ITEC)

Lower Division

ITEC 231 FUNDAMENTALS OF WEB TECHNOLOGIES (3) Introduction to web systems and technologies, including the fundamentals of design, implementation and evaluation of web-based applications including related software, databases, interface and digital media. Social, ethical and security issues related to web-based systems are also explored. Prerequisites: COSC 236, CIS 211.

Upper Division

ITEC 315 DATA AND INFORMATION MANAGEMENT (3) Introduction to data and information management, including the collection, organization, modeling, transformation, presentation, safety and security of data and information. Prerequisites: COSC 236, CIS 211.

ITEC 325 SYSTEM ADMINISTRATION AND MAINTENANCE (3) Essentials for effective administration and maintenance of applications, operating systems and networks, including IT system documentation, policies and procedures, and the education and support of the users of these systems. Prerequisite: COSC 236, CIS 211.

ITEC 397 INFORMATION TECHNOLOGY INTERNSHIP (3) Opportunity to develop knowledge and skills in information technology by working in a local computing facility with on-site and faculty supervision. May be repeated for a maximum of 6 units. S/U Grading. Prerequisites: 6 units of upper-level ITEC, CIS or COSC courses and consent of instructor.

ITEC 411 SYSTEM ARCHITECTURE AND INTEGRATION (3) Architecture and integration of systems. Gathering requirements, sourcing, evaluating and integrating components into a single system. It also covers the fundamentals of project management and the interplay between IT applications and organizational processes. Prerequisites: ITEC 315, ITEC 325.

ITEC 470 SPECIAL TOPICS IN INFORMATION TECHNOLOGY (3) Studies in selected areas of information technology. May be repeated for a maximum of 6 units provided a different topic is taken. Prerequisites: 12 units of ITEC, CIS or COSC courses and consent of instructor.

ITEC 485 INFORMATION TECHNOLOGY CAPSTONE (3) Design and implement an IT project with consideration for real-world issues including cost, safety, efficiency and suitability for the intended user. Display ability to integrate and apply critical technical skills with a variety of management concepts, principles, techniques and practices, while effectively managing people, information, information and communication technologies, and business processes for the organizational strategic goals. Prerequisites: ITEC 411, senior standing in Information Technology.

ITEC 495 INDEPENDENT STUDY IN INFORMATION TECHNOLOGY (3) Directed study in selected areas of Information Technology for which there is no regular course offered. The use of a proposal with well-defined objectives and a formal paper or project is required. Prerequisites: Senior standing in Information Technology and consent of instructor.

INTERDISCIPLINARY COURSES (IDFA, IDHP, IDHS, IDLA AND IDNM)

Lower Division

IDFA 201 AMERICAN VISION: BALTIMORE VISUAL AND PERFORMING ARTS (3) American culture through experiencing visual and performing arts of Baltimore. Includes field trips.

IDFA 202 HONORS AMERICAN VISION: BALTIMORE VISUAL AND PERFORMING ARTS (3) American culture through experiencing visual and performing arts of Baltimore. Includes field trips. Honors College course.

IDFA 203 CREATIVITY IN THE FINE ARTS (3) An application of the creative process through the arts.

IDFA 207 APPLIED ETHICS AND AESTHETICS IN FINE ARTS AND COMMUNICATIONS (3) Ethical issues and dilemmas encountered by consumers and practitioners of the arts and communication, specifically music, dance, theater, art, electronic media, film, mass communication and communication studies. Not open to students who successfully completed IDFA 205.

IDFA 401 MOTION DESIGN (3) Directed lab experience on the computer in concept and application of design for broadcast design, motion graphics and multimedia. Prerequisites: ART 217 or EMF 275.

IDHP 100 USING INFORMATION EFFECTIVELY: WELLNESS (3) Introduction to research techniques, problem solving, critical thinking, communication skills, ethical issues and technology application using the interdisciplinary theme of wellness.

IDHP 110 INFORMATION UTILIZATION IN THE HEALTH PROFESSIONS (3) Introduction to how information is identified, stored, accessed, verified, utilized and conveyed.

IDHP 111 HONORS INFORMATION UTILIZATION IN HEALTH PROFESSIONS (3) Introduction to how information is identified, stored, accessed, verified, utilized and conveyed. Not open to those who have successfully completed IDHP 110. Honors College course.

IDNM 101 USING INFORMATION EFFECTIVELY IN SCIENCE (4) Introduction to information processing, problem-solving techniques, critical thinking skills, communication skills, team building and professional ethics in a scientific environment. Emphasis will be placed on the use of information technology and primary research literature to retrieve, filter, process and evaluate data and information. This course is intended for freshmen CSM students.

Upper Division

IDFA 470-471 INTERDISCIPLINARY FINE ARTS SPECIAL TOPICS SEMINAR (3) An in-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of 9 units. Prerequisite: consent of instructor.

IDFA 493 INTERDISCIPLINARY FINE ARTS INDEPENDENT STUDY (1-6) Directed study through readings, projects, papers and/or seminars. May be repeated for a total of no more than 12 units. Graded S/U. Prerequisite: consent of instructor.

IDHP 301 [501] HIV/AIDS: TESTING AND CONFIDENTIALITY IN THE 21ST CENTURY (3) Explores societal factors, resources, policies, health care delivery, legal ethical issues and counseling. Students will be prepared for Maryland State Certification as HIV Testing Counselors. Prerequisites: HLTH 101 or NURS 406, PSYC 101, SOCI 101 and one of the following: BIOL 213, BIOL 215, HLTH 207 or NURS 204 or consent of instructor.

IDNM 305 ETHICS, SCIENCE AND SOCIETY (3) Integrity of scientific information, responsibilities of scientists and citizens for the conduct and use of science and technology, limits of technological solutions. Principles and case studies. Not open to those who successfully completed WRIT 335, CHEM 301 or CHEM 335. Prerequisites: two courses in BIOL, CHEM, GEOL, PHYS or PHSC, at least one with laboratory; and ENGL 102.

IDNM 307 WOMEN, GENDER AND SCIENCE (3) Understanding women in the context of the natural sciences, including historical and contemporary contributions by women scientists; critique of science education and research design; professional and educational discrimination; career challenges and options; guidelines for non-sexist research design.

IDNM 309 WOMEN, SOCIETY AND RADIATION SCIENCE (3) Gender bias in contemporary physical science using the feminist critique; impact of research in radiation science on society and women's lives. Three lecture hours. One laboratory course in BIOL, CHEM, GEOL, PHYS or PHSC.

IDNM 311 HUMAN GENETICS (3) Information flow, cell division and gamete formation, transmission of genes, molecular genetics, mutations, biotechnology, genetic basis of behavior, genetic basis of disease, nature vs. nurture debate and social implication of human genetic studies on society. Prerequisite: BIOL 112, BIOL 115, BIOL 190 or BIOL 201.

IDNM 312 HONORS HUMAN GENETICS (3) Topics include: information flow, cell division and gamete formation, transmission of genes, molecular genetics, mutations, biotechnology, genetic basis of behavior, genetic basis of disease, nature vs. nurture debate and social implication of human genetic studies on society. Prerequisite: BIOL 112, BIOL 115, BIOL 190 or BIOL 201. Honors College course.

IDNM 313 PLAGUES AND PEOPLE (3) Biological basis of infectious disease and how those principles can be applied for a better understanding of historical events, current issues facing society and future perspectives. Prerequisite: BIOL 115 or BIOL 190.

IDNM 314 COMPARATIVE SOCIAL BEHAVIOR OF HUMANS AND NONHUMAN PRIMATES: ETHICS AND ISSUES (3) Human and non-human primate behavior from a psychological, anthropological and zoological perspective. Topics to be discussed include: kinship, food sharing, altruism and reciprocity, aggression and dominance, reconciliation, culture, personality, sexuality, parenting, tool use, conservation and ethics. Prerequisite: One laboratory course in BIOL, CHEM, GEOL, PHYS or PHSC.

IDNM 315 NETWORKS: THE SCIENCE OF CONNECTIONS (3) Understanding networks in diverse areas such as the Internet, cancer, infectious diseases, ecosystems, management practices and economics. Prerequisite: One laboratory course in BIOL, CHEM, GEOL, PHYS or PHSC.

INTERDISCIPLINARY STUDIES (IDIS)

IDIS 470-479 SPECIAL TOPICS (3) Survey of literature and practical application of interdisciplinary issues. Field work may be required. Topics will vary. May be repeated for a maximum of 9 units provided a different topic is covered. Graded S/U.

IDIS 494 TRAVEL AND STUDY IN INTERDISCIPLINARY STUDIES (3) Countries and topics to be selected by the sponsoring Interdisciplinary Studies program and instructor. For complete information, contact director of sponsoring Interdisciplinary Studies program. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: consent of instructor.

IDIS 495-498 INTERNSHIP IN INTERDISCIPLINARY STUDIES (3) Supervised experience in a work setting to facilitate students' understanding of their concentration. May be repeated for a maximum of 6 units. Can be applied toward major requirements only with approval of concentration's coordinator. Graded S/U.

INTERNATIONAL STUDIES (INST)

Lower Division

INST 100 THE WORLD TODAY (3) Effectively access, evaluate and use the best sources of information available from the Internet, the library and other resources.

Upper Division

INST 493 INTERNSHIP IN INTERNATIONAL STUDIES (1-6) Experiential learning through working with government, nonprofit or business private organizations involved with international affairs. No more than 6 units can be counted toward the International Studies major.

INST 494 INTERNATIONAL STUDIES ABROAD (3) Independent study of the culture, history, economy and society of the country students intend to visit. Taught in three segments over three terms (including one term abroad). Fulfills one requirement for the International Credential. Prerequisites: students must be registered in an approved study abroad program, experiential learning abroad program or international internship; COMM 379 and permission of coordinator of International Studies.

INST 496 INTERNATIONAL RESEARCH (3) Independent research, taught over two terms with one term abroad. Prerequisites: students must be registered in an approved study abroad program, experiential learning abroad program or international internship; COMM 379 and permission of coordinator of International Studies.

INSTRUCTIONAL TECHNOLOGY (ISTC)

Lower Division

ISTC 201 USING INFORMATION EFFECTIVELY IN EDUCATION (3) An introduction to gathering, evaluating and communicating information. Emphasis will be on using team collaboration and problem solving to examine current issues in education. \$25 lab/class fee.

ISTC 202 HONORS USING INFORMATION EFFECTIVELY IN EDUCATION (3) An introduction to gathering, evaluating and communicating information. Emphasis will be on using team collaboration and problem solving to examine current issues in education. Honors College course. \$25 lab/class fee.

Upper Division

ISTC 301 [501] INTEGRATING INSTRUCTIONAL TECHNOLOGY (3) Materials, devices, techniques and settings are presented in an overview of the field of instructional technology. Laboratory experiences are provided in the operation of instructional hardware. Prerequisite: junior/senior standing or departmental approval. \$25 lab/class fee.

ISTC 441 [541] FOUNDATIONS OF INSTRUCTIONAL TECHNOLOGY (3) Exploratory course concerned with the rationale for and use of computers in learning and related administrative matters. Techniques are examined for the organization, storage, processing and retrieval of data. Applications include the computer for instruction, the management of instruction, simulation, generation of graphics, and accounting for software and hardware. (Note: The course will not prepare students for occupations in computer science.) Prerequisite: junior/senior standing.

ISTC 495 INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (1-3) Individual and supervised study of research problems and special projects in specific areas of instructional technology. Prerequisites: junior/senior standing and special permit.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

ITALIAN (ITAL)

Lower Division

ITAL 101 ITALIAN ELEMENTS I (3) Principles of Italian grammar; drills in pronunciation; elementary conversation; composition; readings. Not open to native or heritage speakers without consent of instructor.

ITAL 102 ITALIAN ELEMENTS II (3) Review of further study of grammar principles; pronunciation; conversation; composition; readings. Not open to native or heritage speakers without consent of instructor. Prerequisite: ITAL 101.

ITAL 201 ITALIAN INTERMEDIATE I (3) Review of grammar and pronunciation; conversation; reading of cultural texts; oral and written exercises in language lab. Conducted in Italian. Prerequisite: ITAL 102 or equivalent.

ITAL 202 ITALIAN INTERMEDIATE II (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in Italian. Prerequisite: ITAL 201 or equivalent.

Upper Division

ITAL 301 ITALIAN COMPOSITION AND CONVERSATION I (3) Reading, conversation and composition on topics of cultural and literary interest; grammar and syntax. Conducted in Italian. Prerequisite: ITAL 202 or equivalent.

ITAL 302 ITALIAN COMPOSITION AND CONVERSATION II (3) Reading, conversation and composition on topics of cultural and literary interest; review of grammar and syntax as needed. Conducted in Italian. Prerequisite: ITAL 202 or equivalent.

ITAL 321-322 SURVEY OF ITALIAN LITERATURE I, II (3,3) A thorough examination of Italian literature from the 13th century to the present. Conducted in Italian. Prerequisites: ITAL 201-202.

ITAL 370-379 SPECIAL TOPICS IN ITALIAN (3-6) Specialized topics in language and culture. Content varies. May be repeated once for 6 units provided a different topic is covered. Prerequisite: ITAL 202 or equivalent.

ITAL 494 TRAVEL STUDY ABROAD (3-6) Italian language, culture, civilization and literature at approved study abroad sites in Italy. Prerequisite: approval of department chair.

JAPANESE (JPNS)

Lower Division

JPNS 101 JAPANESE ELEMENTS I (3) Development of elementary vocabulary and sentences, forms of written language, conversation, composition and translation. Uses the techniques of programmed instruction. Not open to native or heritage speakers without consent of instructor.

JPNS 102 JAPANESE ELEMENTS II (3) Development of elementary vocabulary and sentences, forms of written language, conversation, composition and translation. Uses the techniques of programmed instruction. Prerequisite: JPNS 101. Not open to native or heritage speakers without consent of instructor.

JPNS 201 JAPANESE INTERMEDIATE I (3) Review of elementary Japanese; intermediate Kanji; conversation and prose composition; translations; outside readings commensurate with the ability of the individual student. Uses the techniques of programmed instruction. Prerequisite: JPNS 102.

JPNS 202 JAPANESE INTERMEDIATE II (3) Review of elementary Japanese; intermediate Kanji; conversation and prose composition; translations; outside readings commensurate with the ability of the individual student. Uses the techniques of programmed instruction. Prerequisite: JPNS 201.

Upper Division

JPNS 301 JAPANESE COMPOSITION AND CONVERSATION I (3) Composition and conversation beyond the intermediate level. Conducted in Japanese. Prerequisites: JPNS 201-202 or equivalent.

JPNS 302 JAPANESE COMPOSITION AND CONVERSATION II (3) Composition and conversation beyond the intermediate level. Conducted in Japanese. Prerequisites: JPNS 201-202 or equivalent.

JPNS 492 DIRECTED READINGS IN JAPANESE (1-3) Independent reading in sources written in Japanese. Prerequisites: JPNS 301-302 or equivalent, consent of department chair.

JPNS 494 JAPANESE TRAVEL AND STUDY ABROAD (3-16) Study of language, literature and/or culture at a Japanese university. Contact department chair and Office of International Education. Prerequisites: consent of Japanese Study Abroad Program and department chair.

KINESIOLOGY (KNES)

Lower Division

KNES 100 WATER AEROBICS (2) Aerobic aquatic activities designed to improve knowledge, understanding and performance levels of cardiorespiratory fitness, muscular strength and endurance, flexibility, body composition and stress management.

KNES 102 SELF DEFENSE (2) Development of student competence in personal assault prevention and street safety awareness.

KNES 103 RHYTHM AND STEP AEROBICS (2) Development of sufficient competency to promote active lifestyle, and improve knowledge and performance levels of cardiorespiratory fitness, agility, strength, endurance and flexibility.

KNES 104 BALLROOM DANCE (2) Development of sufficient competence for active lifestyle through ballroom dance.

KNES 110 RACQUETBALL, SQUASH, HANDBALL (2) Development of sufficient competence to promote active lifestyle through playing of wall games. Not open to students who successfully completed PHEA 223.

KNES 140 TRACK AND FIELD (1) Basic instruction of all track and field events and their application across the K-12 curriculum. Open to PHEC majors only.

KNES 150 PERSONAL DEFENSE/WRESTLING (1) Skills, strategies and developmentally appropriate activities for personal defense and wrestling. Open to PHEC majors only.

KNES 156 GYMNASTICS (1) Basic instruction of gymnastics and its application across the K-12 curriculum. Open to PHEC majors only.

KNES 165 BASIC SWIMMING (1) Designed to teach a non-swimmer, beginner, or advanced beginner to develop intermediate level swimming and diving skills. Strokes presented include: front crawl; elementary backstroke; back crawl; and breast stroke.

KNES 182 FIELD/COURT I (1) Skills, strategies and developmentally appropriate activities for the sports of soccer, basketball and team handball. Open to PHEC majors only.

KNES 184 FIELD/COURT II (1) Skills, strategies and developmentally appropriate activities for the sports of hockey (field and floor), lacrosse and ultimate Frisbee. Open to PHEC majors only.

KNES 196, 296, 396, 496 INDEPENDENT STUDY (.5-3) Designed to permit students to take courses which they cannot arrange within the regular term schedule. All work will be under the direct supervision of an assigned faculty member. May be repeated for a maximum of 6 units. Prerequisite: consent of department chair.

KNES 202 NET/WALL GAMES (1) Skills, strategies and developmentally appropriate activities for the sports of tennis, badminton and volleyball. Open to PHEC majors only.

KNES 217 FUNCTIONAL ANATOMY FOR EXERCISE SCIENCE (3) Investigates the musculoskeletal system from a functional anatomical viewpoint. Focus is the characteristics of the skeletal and muscular systems, including bones, joints and muscles, and how they function collectively to create coordinated movement. In addition, analysis of movements in a physical activity or exercise setting is conducted. Prerequisites: BIOL 213; KNES 297 or KNES 291; academic major: EXSC or ATTR.

KNES 235 PHYSICAL WELLNESS FOR A HEALTHY AMERICA (3) The national health goals and objectives released by the U.S. Department of Health and Human Services in Healthy People: 2020 that are applicable to physical wellness are explored. Students will research the national health objectives of the United States and benefits of a healthy and active lifestyle and issues surrounding lifelong physical health. Fitness principles related to the achievement of the U.S. national health objectives will be further explored through laboratory activities.

KNES 239 PHYSICAL FITNESS ACTIVITIES (1) Development, administration and evaluation of fitness activities for selected populations. Prerequisite: Physical Education major.

KNES 247 OFFICIATING I (2) A study of the art of officiating through lectures, films, discussions and practical application. Covers swimming, volleyball, wrestling, football, basketball and field hockey.

KNES 248 OFFICIATING II (2) A study of the art of officiating through lectures, films, discussions and practical application. Covers track, softball, lacrosse, baseball, tennis and gymnastics.

KNES 251 [551] HISTORY OF SPORT IN AMERICA (3) Explores the history of American sport, emphasizing its interactions with political, economic, social and cultural forces; and introduces aspects of historical methodology.

KNES 255 ADVANCED INDIVIDUALIZED FITNESS (3) Structure and function of the physiological components of large muscle activity and their relationship to the development and maintenance of fitness. Prerequisite: one beginning-level fitness course.

KNES 263 SCUBA DIVING (1) For description and prerequisites, consult the Department of Kinesiology.

KNES 269 LIFEGUARD TRAINING (2) An advanced course in lifeguarding techniques for swimming pools and open-water beach areas. Prerequisites: KNES 165 and HLTH 103 or equivalent.

KNES 270-275 SPECIAL TOPICS IN PHYSICAL EDUCATION (1-3) Designed for study of special topics of current interest in physical education, athletics and their related fields. Objectives and content for each topic are reviewed and approved by the physical education faculty. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: consent of instructor.

KNES 280 INTRODUCTION TO SPORTS INDUSTRY (3) Trends, challenges and opportunities in the sports industry. Open to SPMT majors only.

KNES 281-282 PHYSICAL EDUCATION FOR ELEMENTARY EDUCATION STUDENTS I, II (1,1) Designed for the teacher of elementary school children to gain an understanding of and develop a basic ability in the basic skills of children's activities. Provides opportunity to become familiar with methods of learning skills and to appreciate the needs of the individuals in motor learning and analysis of group behavior.

KNES 283 PHYSICAL EDUCATION ACTIVITIES FOR THE YOUNG CHILD (1) Provides Physical Education majors with practical knowledge of appropriate movement experiences for use in a developmental program of physical education for children in grades K-3. Open to PHEC majors only.

KNES 284 ADVENTURE-BASED EDUCATION ACTIVITIES (1) Adventure curriculum approach to experiential education including initiatives, problem-solving activities, and low- and high-ropes course elements. Open to PHEC majors only.

KNES 285 SPORT: CROSS-CULTURAL PERSPECTIVE (3) Systematic study of sport from an anthropological perspective.

KNES 290 INTRODUCTION TO TEACHING PHYSICAL EDUCATION (2) An introduction to the field of teaching in physical education; the student program of study; the profession of physical education; the school physical education program and evaluation. Open to PHEC majors only.

KNES 291 INTRODUCTION TO ATHLETIC TRAINING (3) Theory, laboratory and clinical experiences designed to provide students with formal instruction and evaluation about the allied health profession of Athletic Training. Competencies and clinical proficiencies related to the practice of athletic training and prevention and immediate care of orthopedic related injuries are covered. Prerequisite: Pre-Athletic Training major.

KNES 297 FOUNDATIONS OF EXERCISE SCIENCE (3) Examination of the historical and cultural aspects of the discipline of exercise science, including an introduction to the general knowledge base of the major sub-disciplines of exercise science. Professional organizations, certifications, graduate school options and employment opportunities pertaining to each sub-discipline are also addressed. Prerequisite: EXSC major.

KNES 298 HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION (3) Foundations of physical education.

Upper Division

KNES 301 INTRODUCTION TO RECREATION AND LEISURE (3) Recreation and leisure related to individuals, special populations and society. The impact of recreation and leisure concepts and theories on time and work. Out-of-class experiences required.

KNES 305 OUTDOOR EDUCATION: PHILOSOPHY AND METHODS (3) Examination of the rationale and basic structure of outdoor education programs. An investigation of effective teaching techniques and procedures for outdoor education. Field experiences are required (students may have to provide their own transportation and equipment).

KNES 307 TEACHING APPRENTICESHIP (.5-1) Students with a high degree of competency may request to be assigned to assist a faculty master teacher in class instruction and evaluation. May be repeated for a maximum of 1 unit. Prerequisites: junior/senior status; advanced skill level; approval of chair of kinesiology, director of major program and faculty member concerned.

KNES 309 TESTS AND MEASUREMENTS (3) This course describes elementary statistical procedures as applied to exercise science and physical education measurement. Prerequisite: MATH 109 or higher, except MATH 204.

KNES 311 BIOMECHANICS (3) Mechanical and anatomical analysis of movement in relation to human performance. Prerequisites: BIOL 213 and 214.

KNES 313 PHYSIOLOGY OF EXERCISE (3) Application of principles of physiology to large muscle activity, with special emphasis on the interrelations of muscular, nervous, circulatory and respiratory functions during exercise. Prerequisites: BIOL 213 and BIOL 214.

KNES 315 CARE AND PREVENTION OF ATHLETIC INJURIES (3) Lecture and practical experiences in the study of modern theories and principles of athletic training mechanisms, nature and causes of the most common sports-related injuries.

KNES 316 LOWER EXTREMITY AND SPINE EVALUATION (4) Designed to provide the athletic training student with a foundation to effectively assess musculoskeletal injuries to the upper extremity and spine; fundamentals of determining injury severity, proper management and the ability to make an appropriate referral to other sports medicine professionals. Prerequisite: KNES 291, Athletic Training major.

KNES 321 THE SCIENCE OF SPORTS SUCCESS: CONTRIBUTIONS OF GENETICS AND PRACTICE (3) Study of elite athletic performance within broad scientific and societal contexts; ethics of identifying, classifying and training athletes; approaches to the problems inherent in evaluating decisions emerging from scientific study of sport. Prerequisite: BIOL 190.

KNES 324 TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOL (3) Responsibilities of the elementary school physical education teacher, including class organizational procedures, a variety of teaching methods, lesson and unit plan development, and content appropriate for the elementary school child. Includes observation and teaching experiences with elementary school children at various ages. Prerequisites for PHEC majors: KNES 290, KNES 283, KNES 284 and passing scores on Praxis I, SAT, ACT or GRE.

KNES 325 TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOL (3) Responsibilities of the secondary school physical education teacher, including class organizational procedures, variety of teaching methods, lesson and unit planning, and topics resulting from the observation/participation experience in a secondary school. Prerequisites: KNES 324 and four of the following KNES courses: 140, 150, 156, 182, 184, 202, 239 and 327.

KNES 327 TEACHING CULTURAL DANCE FORMS AND CREATIVE MOVEMENT FOR PHYSICAL EDUCATION (3) Study and performances of basic skills required in various dance styles and creative movement using different teaching methodologies. Open to PHEC majors only.

KNES 331 PRINCIPLES OF COACHING (3) Develops within each student an educationally sound philosophy of coaching. Emphasis on learning and understanding the principles and guidelines of good coaching and the application of human psychology as it relates to the coach and athlete in their unique relationship. Prerequisites: PSYC 101 or consent of instructor.

KNES 333 SPORT MANAGEMENT (3) Managing an organization providing sport/fitness activities products or services. Prerequisites: ACCT 201 and ACCT 202.

KNES 337 ADVANCED TECHNIQUES AND ANALYSIS OF COACHING IN SELECTED TOPICS (3) Theoretical and practical application of principles and techniques of coaching offensive and defensive techniques; strategy, scouting, organizing practice and utilizing staff. Prerequisite: KNES 331.

KNES 341 CONCEPTS OF MOTOR LEARNING (3) Study of effects of sensation and perception, reaction time, knowledge of results, retention, transfer, physical and mental practice, and motivation on learning and performing motor skills. Prerequisite: PSYC 101.

KNES 349 THE MODERN OLYMPIC GAMES (3) A socio-historically based interpretation of the modern Olympic Games as athletic festival, social construction, cultural symbol, philosophic movement and worldstage phenomenon.

KNES 351 PHILOSOPHY: THE SPORT EXPERIENCE (3) Philosophy of sport and the body, including the major philosophical schools of thought and their implications on physical education. Prerequisite: PHIL 101 or PHIL 111 or consent of instructor.

KNES 353 SPORT AND SOCIETY (3) Explores relationships between sport and social institutions. Prerequisite: ENGL 102 and junior/senior standing.

KNES 354 HONORS SPORT AND SOCIETY (3) Explores relationships between sport and social institutions. Honors College course.

KNES 355 PSYCHOLOGY OF SPORT (3) Designed to study the psychological correlates of sport. The approach will be one of understanding and application of the literature and research design of sport psychology publications. Prerequisite: PSYC 101.

KNES 357 SPORT IN FILM (3) Meaning of sport in 20th-century Western culture through film. Prerequisite: ENGL 102/190.

KNES 359 PSYCHOLOGY OF SPORT INJURY (3) Application of psychological research and theory to sport injury and sport injury rehabilitation. Prerequisite: PSYC 101.

KNES 361 EXERCISE PSYCHOLOGY (3) Contemporary research and theory, including exercise and fitness motives, psychological effects, theoretical models of exercise behavior, motivating behavior, cognitive and behavioral change strategies. Prerequisite: PSYC 101.

KNES 363 NUTRITION FOR EXERCISE AND SPORT (3) Critical and practical aspects of nutrition related to exercise and sport. Prerequisites: BIOL 213 and BIOL 214.

KNES 365 EXERCISE TESTING AND PRESCRIPTION (3) Theoretical concepts and application skills; includes assessment of components of fitness, exercise prescription for apparently healthy and special-concerns populations. Prerequisite: KNES 313, concurrent with KNES 369.

KNES 369 CLINICAL COMPETENCIES AND FIELDWORK IN EXERCISE SCIENCE (4) Examination of the clinical skills and competencies needed to perform a complete physical fitness assessment. Supervised opportunities to both observe and apply these skills and competencies will take place in a variety of professional settings. Prerequisites: KNES 313; concurrent with KNES 365. \$25 lab/class fee.

KNES 372 PRACTICAL AND INSTRUCTIONAL SKILLS IN EXERCISE LEADERSHIP (3) Assessment, design and instruction for individual and group fitness programs. Professional responsibilities of the fitness instructor will also be addressed. Prerequisites: KNES 217; KNES 297.

KNES 381 BASIC CLINICAL ATHLETIC TRAINING I (2) Observation and performance of professional skills under the supervision of a certified athletic trainer; focuses on psychomotor competencies and clinical proficiencies introduced in KNES 291. Prerequisite: concurrent with KNES 316, Athletic Training major. Graded S/U. \$25 lab/class fee.

KNES 382 BASIC CLINICAL ATHLETIC TRAINING II (2) Observation and performance of professional skills under the supervision of a certified athletic trainer; focuses on psychomotor competencies and clinical proficiencies from KNES 316. Prerequisite: KNES 316, concurrent with KNES 415, Athletic Training major. Graded S/U.

KNES 385 INTERMEDIATE CLINICAL ATHLETIC TRAINING I (2) Observation and performance of professional skills under the supervision of a certified athletic trainer; focuses on Competencies and Proficiencies from KNES 415. Prerequisite: KNES 415, concurrent with KNES 427, Athletic Training major. Graded S/U.

KNES 386 INTERMEDIATE CLINICAL ATHLETIC TRAINING II (2) Observation and performance of professional skills under the supervision of a certified athletic trainer; focuses on

skills related to therapeutic modalities. Prerequisite: KNES 427, concurrent with KNES 428, Athletic Training major. Graded S/U.

KNES 388 ADVANCED CLINICAL ATHLETIC TRAINING I (2) Application in a laboratory and clinical setting of the knowledge and skills introduced in KNES 427. Prerequisite: KNES 427, Athletic Training major. Graded S/U.

KNES 389 ADVANCED CLINICAL ATHLETIC TRAINING II (2) Observation and performance of professional skills under the supervision of a BOC Certified Athletic Trainer; focuses on competencies and proficiencies covered in KNES 432 and KNES 417. Prerequisite: Senior status Athletic Training major. Graded S/U. \$25 lab/class fee.

KNES 392 ELEMENTARY STUDENT TEACHING (6) Practical experiences in observation, participation and student teaching in elementary public schools under the guidance of master teachers and a university supervisor. Not open to those who successfully completed ELED 392. Prerequisite: approval of coordinator of PHEC Student Teaching and director of Center for Professional Practice.

KNES 393 A WORLD HISTORY OF SPORT TO 1900 (3) Explores sport and physical education in context of social, economic and political influences. Focuses upon Greece, Rome, Western Europe to circa 1900. Prerequisite: one history course.

KNES 394 SECONDARY STUDENT TEACHING (6) Practical experience in observation, participation and student teaching in secondary public schools under the guidance of master teachers and a university supervisor. Not open to those who successfully completed SCED 392. Prerequisite: approval of coordinator of PHEC Student Teaching and director of Center for Professional Practice.

KNES 395 KINESIOLOGY INTERNSHIP (3) Internship in Sport Management. May be repeated for a maximum of 6 units. Graded S/U. Prerequisites: junior/senior standing; special permit required.

KNES 396 INDEPENDENT STUDY (1-3) Designed to permit students to take courses which they cannot arrange within the regular term schedule. All work will be under the direct supervision of an assigned faculty member. May be repeated for a maximum of 6 units. Prerequisite: consent of department chair.

KNES 397 INTERNSHIP IN CAMPING OR OUTDOOR EDUCATION (3) Allows academic and practical experience for students in the camp program or outdoor education area of their choice. Students will participate as a volunteer, aide or staff member. Seminars will be held to discuss experiences. Students should expect to pay for their transportation, meals and lodging during the practicum experience. The course will be offered primarily during the minimester and summer sessions. May be repeated for a maximum of 6 units. Prerequisite: KNES 245 or KNES 305 or consent of instructor.

KNES 398 EXERCISE SCIENCE INTERNSHIP (3-6) Opportunity to integrate knowledge and skills learned during course work and through on-campus experiences in actual practice situations. The 120-hour minimum exercise science internship must be at an approved site in settings, such as a hospital-based wellness or cardiac rehabilitation program, a corporate fitness center. Prerequisites: KNES 365; KNES 369; cum GPA 2.50 or higher; academic major EXSC.

KNES 399 DIFFERENTIATED STUDENT TEACHING IN PHYSICAL EDUCATION (1-6) An experience in student teaching in addition to the regular student teaching experience. May be repeated for a maximum of 6 units.

KNES 403 ORGANIZATION AND ADMINISTRATION OF INTRAMURALS (3) Permits students to acquire the skills of administration necessary in the development and organization of intramural programs in schools and colleges.

KNES 405 [505] BEHAVIOR MANAGEMENT TECHNIQUES IN THE CLASSROOM (3) Causes of misbehavior in preschools, elementary and secondary schools; crisis prevention; preventative, supportive and directive strategies and their practical application. Class rules, reinforcers, assessment and legal issues. Not available for credit if student successfully completed SPED 429. Prerequisite: PSYC 201 or equivalent.

KNES 406 EXERCISE PRESCRIPTION AND PROGRAMMING FOR SPECIAL POPULATIONS (3) The impact of chronic disease, co-morbidity, age and pregnancy on exercise prescription methodology and exercise program development. Prerequisites: KNES 365; KNES 369.

KNES 407 ADVANCED PRINCIPLES OF STRENGTH AND CONDITIONING (3) Theory and laboratory course dealing with strength training activities and program design for various populations. Measurement of physiologic factors related to strength and conditioning and the development and delivery of sport-specific strength and conditioning training programs to improve athletic performance will be addressed. Prerequisites: KNES 311; KNES 313.

KNES 409 [509] STRESS MANAGEMENT, TENSION CONTROL AND HUMAN PERFORMANCE (3) Presents information about the manifestation of stress and systematic programs for tension control. The correlates surrounding progressive muscle relaxation and biofeedback are explored in detail, as well as the neurological responses that produce tension responses. Lectures are combined with laboratory experiences in an effort to understand and practice relaxation techniques. Prerequisite: one psychology and/or biological sciences course. Prerequisites: PSYC 101 and BIOL 214.

KNES 415 UPPER EXTREMITY AND SPINE EVALUATION (4) Designed to provide the athletic training student with a foundation to effectively assess musculoskeletal injuries to the upper extremity and spine; fundamentals of determining injury severity, proper management and the ability to make an appropriate referral to other medical professionals. Prerequisite: KNES 316, Athletic Training major.

KNES 417 ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING (3) Analysis and application of organizational skills and administrative structure of the athletic training profession, including record keeping, budgeting and a history of athletic training. Prerequisite: KNES 381, KNES 415, senior status in Athletic Training major.

KNES 418 SPORT FACILITY MANAGEMENT AND OPERATIONS (3) Indoor and outdoor facilities; budget, design, maintenance, operations, planning, renovations, scheduling and staffing.

KNES 420 ADVANCED EXERCISE PHYSIOLOGY (3) Application of principles of physiology to study: a) the effect of aging, obesity and exercise on the skeletal muscle, cardiovascular systems and metabolic systems and b) the effect of training and environment on performance. Prerequisite: KNES 313.

KNES 423 [523] ADAPTIVE PHYSICAL EDUCATION (3) Recognition of pupils with physical deviations and use of special or modified physical education activities. Prerequisites: KNES 324 or KNES 325.

KNES 425 ADAPTED PHYSICAL EDUCATION FOR SPECIAL EDUCATION MAJORS (3) Preparation, implementation and evaluation of developmentally appropriate activities and lessons for students with disabilities, preschool through 21 years. Prerequisite: KNES 281.

KNES 426 [526] MOTOR DEVELOPMENT: INFANTS TO ADULTS (3) Research of literature in motor development and performance of the individual from infancy through adulthood. Impact of motor development on cognitive, affective and psychomotor development. Prerequisites: BIOL 213 and 214.

KNES 427 THERAPEUTIC EXERCISE IN ATHLETIC TRAINING (4) Analysis and application of comprehensive therapeutic exercise techniques and the development of rehabilitation programs for physically active individuals. Prerequisite: KNES 382, KNES 415, Athletic Training major.

KNES 428 THERAPEUTIC MODALITIES IN ATHLETIC TRAINING (4) Analysis and application of modalities in the treatment and rehabilitation of musculoskeletal injuries. Prerequisite: KNES 385, KNES 427, Athletic Training major.

KNES 431 SEMINAR IN ATHLETIC TRAINING (3) Analysis and application of athletic training knowledge, skills, attributes and decision-making proficiency; assessment of clinical applications of knowledge and skills pertaining to the athletic training education domains. Prerequisite: KNES 417, senior status Athletic Training major.

KNES 432 GENERAL MEDICAL ASPECTS (4) Study of pharmacotherapeutic agents and general medical conditions, disabilities, abnormalities and diseases of physically active individuals; prevention, recognition, physical examination, management and referral of common general medical conditions. Prerequisite: KNES 420, Athletic Training major.

KNES 433 APPLIED SPORT AND EXERCISE PSYCHOLOGY (3) Applications of sport and exercise psychology theory to sport and exercise settings. Prerequisite: KNES 355 or KNES 361.

KNES 435 [535] PROGRAMS IN OUTDOOR EDUCATION (3) Examines the varied programs in outdoor education offered within the state, nation and selected foreign countries. Traditional and innovative programs will be reviewed. Concepts revealed will be contrasted with meeting educational objectives. Several field trips are required. Open to Education majors. Prerequisite: 6 units of physical education, recreation or education.

KNES 437 SPORT AND THE MEDIA (3) Symbiotic relationship between sport and electronic/print media. Prerequisite: KNES 353.

KNES 441 [541] THE AMERICAN WOMAN IN SPORT (3) Historical, physiological, psychological, sociological and philosophical perspectives and societal attitudes toward women who participate in sport. Prerequisite: PSYC 101 or SOCI 101 or WMST 231.

KNES 449 LEADERSHIP FOR SPORT PROFESSIONALS (3) Development of effective, personal leadership skills for coaches, athletic directors, managers and others in the sport industry. Prerequisite: PSYC 101 or SOCI 101.

KNES 452 SPORT MARKETING (3) Fundamental marketing theories and principles applied to the selling of sports: focusing on the concepts and practices forming the knowledge base for effective marketing strategies in sports. Prerequisite: MKTG 341.

KNES 454 SPORT SALES AND SPONSORSHIP (3) Selling and negotiating within the sport-business climate. Development, implementation and evaluation of a sport sponsorship deal. Prerequisite: KNES 333 or KNES 452.

KNES 455 [555] PHYSICAL ACTIVITY PROGRAMMING FOR THE OLDER ADULT (3) Application of physiological, psychological, sociological and motor learning principles to the development of physical activity programs for older adults. Prerequisite: PSYC 203 or consent of instructor.

KNES 456 GOVERNANCE, POLICY AND LEGAL ISSUES OF SPORT (3) Critical strategic analysis of how sport governance and policy are formulated in the United States and internationally. Prerequisite: KNES 333.

KNES 457 PHYSIOLOGY OF AGING (3) Interaction of physical, psychological, social and environmental systems in the aging process from the late-middle to old age. Prerequisites: PSYC 101, KNES 313.

KNES 460 CULTURAL ECONOMY OF SPORT (3) A theoretically intensive investigation of the cultural significance and economic formations of contemporary sport in the context of a 21st-century global marketplace. Prerequisite: KNES 333.

KNES 469 RESEARCH METHODS IN EXERCISE SCIENCE (3) Prepares students to read and interpret research in exercise science. Topics include scientific process, research questions and theories, literature review, research methods and measurement, data analysis and reporting. Prerequisites: ENGL 102/190, KNES 309 and senior status in exercise science major.

KNES 470-479 [570-579] SELECTED TOPICS IN PHYSICAL EDUCATION (1-3) Workshop designed for study of special topics of current interest in physical education and athletics. Content varies and will focus on substantive material or operational problems. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: consent of workshop director and/or graduate program director.

KNES 480 SEMINAR IN TEACHING PHYSICAL EDUCATION (1) Discussion and analysis of selected topics during the student teaching term. Prerequisite: concurrent with KNES 392 and 394.

KNES 494 [594] TRAVEL STUDY (3) Study of selected physical education programs, practices or facilities. Study group will be accompanied by TU Department of Kinesiology faculty member. Prerequisites: as specified in course outline and consent of instructor.

KNES 496 [596] INDEPENDENT STUDY (1-3) Designed to permit students to take courses which they cannot arrange within the regular term schedule. All work will be under the direct supervision of an assigned faculty member. No more than 3 units may be earned in Independent Study unless permission of department chair is obtained.

Graduate Division

See TU *Graduate Catalog* for course descriptions.

LATIN (LATN)

Lower Division

LATN 101 LATIN ELEMENTS I (3) Principles of Latin grammar and syntax; drills in morphology and translation; introduction to Roman culture as appropriate; elementary composition; readings.

LATN 102 LATIN ELEMENTS II (3) Review and further study of grammar and syntax; drills in morphology and translation; discussion of Roman culture as appropriate; composition; readings. Prerequisite: LATN 101.

LATN 201 LATIN INTERMEDIATE I (3) Review of elementary grammar and syntax, continuing to advanced structures; composition; study of Roman culture as appropriate. Prerequisite: LATN 102 or equivalent.

LATN 202 LATIN INTERMEDIATE II (3) Review of elementary grammar and syntax and introduction to most advanced structures; composition; study of Roman culture as appropriate; introduction to Latin stylistics through study of longer passages from ancient authors. Prerequisite: LATN 201 or equivalent.

Upper Division

LATN 301 ADVANCED READINGS IN LATIN (3) Study and translation of selected texts from Latin authors with special attention to review of grammar, syntax and vocabulary. Prerequisite: LATN 202 or equivalent.

LATN 302 ADVANCED READINGS IN LATIN (3) Study and translation of selected texts from Latin authors with special attention to Roman history and culture. Discussion of varying approaches to translation. Prerequisite: LATN 301 or equivalent.

LATIN AMERICAN STUDIES (LAST)

Lower Division

LATN 100 LATIN AMERICA: ISSUES AND APPROACHES (3) Multiple disciplinary approaches to leading issues in recent Latin America. Access, evaluate and use information.

Upper Division

LATN 385 MODEL ORGANIZATION OF AMERICAN STATES (3-6) Structure and function of OAS, the inter-American system and U.S. Latin American policy. Students represent member states of the OAS in a mock General Assembly in Washington, D.C. May be repeated for a maximum of 6 units. Prerequisites: sophomore standing and written consent of instructor.

LATN 484 SPECIAL TOPICS IN LATIN AMERICAN AND LATINO/A STUDIES (3) Study through lectures and discussions of interdisciplinary topics selected by the instructor. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor. Junior or senior standing.

LATN 491-492 DIRECTED READINGS IN LATIN AMERICAN AND LATINO/A STUDIES (3) Independent reading in Latin and Latino/a American studies in a topic selected by the student in consultation with the instructor(s). May be

repeated for a maximum of 6 units. Prerequisites: advanced undergraduate standing, junior or senior standing, and consent of instructor.

LAST 497 INTERNSHIP IN LATIN AMERICAN AND LATINO/A STUDIES (3-6) Training and experience with public and private organizations. May be repeated for a maximum of 6 units. Graded S/U. Prerequisites: 27 upper-division units, junior or senior standing, and consent of instructor.

LAW AND AMERICAN CIVILIZATION (LWAC)

Upper Division

LWAC 491 THESIS SEMINAR IN LAW AND AMERICAN CIVILIZATION (3) Using Internet technology and traditional instruction, students will research and write on some aspect of law in American society and civilization. Prerequisites: open only to majors who have completed at least 24 units in the major; consent of instructor.

LWAC 497 PRACTICUM IN LAW AND AMERICAN CIVILIZATION (3) Practicum in a law firm, in a court or in business. Prerequisite: open only to students majoring in Law and American Civilization who have earned a cumulative GPA of 3.00.

LWAC 498 DIRECTED READINGS IN LAW AND AMERICAN CIVILIZATION (3) Readings and research in preparation for the writing of an honors thesis under the supervision of the director or one member of one of the participating departments. Prerequisites: open only to majors who have completed at least 30 units in the major and have earned a cumulative GPA of 3.25 and a GPA of 3.50 in the major, consent of instructor.

LWAC 499 HONORS THESIS IN LAW AND AMERICAN CIVILIZATION (3) Research and writing of an honors thesis guided by the director or a member of one of the participating departments. Prerequisites: open only to majors who have completed at least 33 units in the major and have earned a cumulative GPA of 3.25 and a GPA of 3.50 in the major, consent of instructor.

LEGAL STUDIES (LEGL)

Lower Division

LEGL 225 LEGAL ENVIRONMENT OF BUSINESS (3) Sources of law and our legal system, emphasis on court jurisdiction, procedure, tort and criminal law, contracts, sales, anti-trust law, and workers compensation and consumer, environmental and international law. Not open to those who successfully completed BULA 225.

LEGL 226 BUSINESS LAW (3) Law of agency, partnership, corporations, real and personal property, estates, bankruptcy, commercial paper and secured transactions. Not open to those who successfully completed BULA 226. Prerequisite: BULA 225 or LEGL 225.

Upper Division

LEGL 325 SPORTS LAW (3) Review of legal background of sports and recreation, analyzing torts, contracts, anti-trust issues, constitutional and labor law. Prerequisites: BULA 225 or LEGL 225, junior major standing.

LEGL 326 ELDER LAW (3) Court systems, guardianships, estates and trusts, asset planning, and Medicare/Medicaid implications. Prerequisite: junior major standing.

LEGL 328 CYBER LAW: THE LAW OF THE INTERNET (3) An introduction to the law of the Internet including security, online transactions, rights in electronic information, regulating information content and regulating online conduct. Not open to students who successfully complete EBUS 328. Prerequisite: junior major standing.

LEGL 470-479 SPECIAL TOPICS IN LEGAL STUDIES (3) Topics include: employment law, real estate law, administrative law, white-collar crime, international law, environmental law, women and the law, contemporary legal issues, internship. May be repeated for credit provided a different topic is covered. Prerequisite: junior major standing.

LESBIAN, GAY, BISEXUAL AND TRANSGENDER STUDIES (LGBT)

Lower Division

LGBT 101 INTRODUCTION TO LESBIAN, GAY, BISEXUAL AND TRANSGENDER STUDIES (3) Interdisciplinary and cross-cultural examination of sexual orientation. Course topics include institutionalized heterosexism and homophobia, Lesbian, Gay, Bisexual and Transgender (LGBT) identities, communities, culture and political activism. Not open to students who have successfully completed IDIS 101 or LGBT 101.

Upper Division

LGBT 381 [581] READINGS IN LGBT STUDIES (3) Research on relevant literature under the guidance of a faculty staff member. May be repeated for a maximum of 6 units. Prerequisite: 6 units of course work in LGBT minor or consent of instructor.

LGBT 470-479 [570-579] SPECIAL TOPICS IN LGBT STUDIES (3) Survey and critical examination of current research and literature in LGBT studies. May be repeated for a maximum of 9 units with a different topic. Prerequisite: 6 units in the LGBT minor or consent of instructor.

LGBT 485 INTERNSHIP IN LGBT STUDIES Supervised internship experience in the field of LGBT Studies under the direction of a faculty member. May be repeated for a maximum of 9 units, but only 6 units can be applied to the LGBT minor. Prerequisite: 6 units of course work in the LGBT minor or consent of instructor.

LGBT 491 [591] INDEPENDENT INVESTIGATIONS IN LGBT STUDIES (3) Research problems under the direction of a faculty member. May be repeated for a maximum of 6 units. Prerequisite: 6 units in the LGBT minor or consent of instructor.

MANAGEMENT (MNGT)

Upper Division

MNGT 361 PRINCIPLES OF MANAGEMENT (3) Explaining and understanding management functions and processes in terms of planning, organizing, leading and controlling, including management history, international management, diversity management and organizational culture. Not open to students who have completed MNGT T61. Prerequisite: Junior major standing.

MNGT 375 INTERNATIONAL BUSINESS: THEORY AND PRACTICE (3) The global dimensions and interdependencies of business: political environments, cultural context, international firms' strategies and market entry. Elements of international finance including international monetary systems, foreign exchange and global trade theory. Prerequisites: Junior major standing, BUSX 301 (may be taken concurrently).

MNGT 381 HUMAN RESOURCE MANAGEMENT (3) Techniques and issues in acquiring, developing, motivating and maintaining a competent work force. Topics include equal employment opportunity, human resource planning, recruitment and selection, training and development, performance evaluations, motivation, compensation and benefits, labor relations, and safety and health. Prerequisites: junior major standing, MNGT 361.

MNGT 421 MANAGEMENT OF ORGANIZATIONAL BEHAVIOR (3) Organizational behavior as a means to understand, explain and improve human behavior and interactions: job performance, work motivation, job attitudes, trust and justice, work teams, power/politics and influence, leadership stress/well-being at work, career management, decision making, and organizational effectiveness. Prerequisites: MNGT 361 and junior/major standing.

MNGT 425 ORGANIZATION THEORY AND DEVELOPMENT (3) Analysis and design of learning organizations emphasizing real life situations, including internal and external organizational environments, knowledge management, innovation and change, organizational growth and life cycles, size and complexity, intergroup relations and conflict, values and culture, and decision making processes. Prerequisites: senior major standing, MNGT 361.

MNGT 433 COMPENSATION AND BENEFITS (3) The role of compensation administration in HRM, including procedures for designing and administering a compensation system, the special aspects of pay-for-performance systems as well as indirect compensation (benefits). Prerequisites: senior major standing, ECON 306, MNGT 381.

MNGT 438 MULTINATIONAL MANAGEMENT AND CULTURE (3) Global strategy, management and organization of multinational enterprises; cultural differences and their influence on business interactions, modes of entry and ethics. Global alliances, structure, control systems, staffing and leadership. Prerequisites: MNGT 361 and MNGT 375; senior major standing.

MNGT 452 STAFFING AND RETENTION (3) Staffing and retention process in organizations, including job analysis, legal compliance, recruitment, selection, matching the person with the organization, and retaining valuable employees. Prerequisites: senior major standing; MNGT 361; MNGT 381.

MNGT 453 CONFLICT RESOLUTION IN BUSINESS (3) Resolving disputes in business operations through negotiations, mediation and arbitration as alternatives to litigation. Buyer/seller disputes, management salary negotiations, service contractor disputes and real estate issues. Prerequisites: senior major standing, MNGT 361.

MNGT 463 ORGANIZATIONAL LEADERSHIP (3) An array of leadership theories, research findings and practical applications covering participatory leadership, followership, power and influence, contingency perspectives, and leadership in decision making groups, charismatic and strategic leadership in organizations. Prerequisites: major standing, MNGT 361.

MNGT 470 SPECIAL TOPICS IN MANAGEMENT (3) Course content varies with each topic. In-depth study of contemporary business issues as they affect current management practices. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: consent of instructor. Special permit only.

MNGT 481 BUSINESS STRATEGY AND POLICY (3) Integrating operational skills and theories and emphasizing managerial decision making as it relates to strategic management and business policy in domestic and international operations. Topics include strategic management process, sustainable competitive advantage, external analysis, internal analysis, business-level competitive strategy, corporate-level competitive strategy, international strategy, corporate governance, sustainability, and ethics, strategic control, strategic organization design, and strategic leadership. Not open to students who have successfully completed Business Policy. Prerequisites: senior standing, completion of FIN 331, MKTG 341/342, MNGT 361, EBTM 365, and BUSX 301.

MNGT 482 BUSINESS ETHICS AND SUSTAINABILITY (3) The interaction between business organizations and noneconomic environments including ethical reasoning, stakeholder analysis, corporate social responsibility, business in the political process. Prerequisites: junior/senior major standing, MNGT 361.

MNGT 483 STRATEGIC HUMAN RESOURCE MANAGEMENT (3) The critical role of human resource management in achieving an organization's strategic objectives. Techniques for developing a holistic, integrated approach towards the various human resource functions aligned with the organization's strategy, and comparison and contrast of traditional human resource management models. Prerequisites: MNGT 381; senior standing.

MNGT 491 DIRECTED READINGS (1-3) Assigned readings in selected areas of management. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the management area of study. Prerequisites: consent of the instructor, a minimum of 3.00 cumulative GPA, completion of all 200- and 300-level management core requirements, and a special permit.

MNGT 494 STUDY ABROAD IN MANAGEMENT (3) On-site course of study of the culture history, economy, society and political structure of the country and region visited. Study group will be accompanied by TU Department of

Management faculty member. Prerequisites: Majors only; junior standing; must be registered in an approved study abroad program; and consent of the department chair.

MNGT 495 INDEPENDENT RESEARCH (1-3) Directed research in specific areas of management. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the management area of study. Prerequisites: consent of the instructor, a minimum of 3.00 cumulative GPA, completion of all 200- and 300-level management core requirements, and a special permit.

MNGT 497 MANAGEMENT INTERNSHIP (3) Students are required to work in government or industry for a minimum of 120 hours to gain practical experience in the application of management concepts. All positions have been reviewed and approved by management faculty. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the management area of study. Prerequisites: consent of the instructor, a minimum 3.00 cumulative GPA, completion of MKTG 341/342, MNGT 361 and FIN 331, and special permit.

MNGT 498 PRACTICUM IN MANAGEMENT (3) Synthesis of management knowledge, skills and attitudes through professional responsibilities in employment, internship or comparable experience. Prerequisite: senior standing.

MARKETING (MKTG)

Upper Division

MKTG 341 PRINCIPLES OF MARKETING (3) Design, distribution pricing and promotion of goods, services, places, people and causes of both national and international markets. Included is an introduction to strategic and tactical applications of marketing. Prerequisites: junior standing; majors and eligible pre-major and BUAD majors.

MKTG 342 DEPARTMENT HONORS PRINCIPLES OF MARKETING (3) National and international concepts of the design, distribution and promotion of goods and services, places, people and causes. Strategic and tactical applications of marketing. Students should expect to participate in corporate visits. Not open to students who successfully completed MKTG 341. Prerequisites: junior standing, cumulative GPA of 3.25 or higher. Honors College course.

MKTG 345 MANAGING INTEGRATED MARKETING COMMUNICATIONS (3) This course focuses on planning and managing the integrated marketing communications (IMC) program of an organization. Topics include advertising, direct marketing, consumer and trade promotions, and public relations. Emphasis will be placed on strategic planning to effectively use promotional tools to meet marketing goals. Various regulatory, social and economic factors that affect an organization's IMC program will be examined. Prerequisite: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 347 SERVICES MARKETING (3) Examines the marketing of services. The uniqueness of services marketing will be analyzed along with the similarities to product marketing. Selected topics among the following services will be examined: health care, museums, government services, travel, transportation, food, education, banking and legal services. The service aspects of product marketing will also be analyzed. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 349 PRODUCT MANAGEMENT (3) Development of new goods and services, including idea generation, concept evaluation, test marketing and product launch. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 355 RETAIL MANAGEMENT (3) Provides students with an in-depth knowledge of marketing activities at the retail level in the business environment. Different types of retail institutions are examined as to the types of strategies employed in the performance of major functions, such as buying, merchandising, selling, advertising and physical operation. Key issues, such as market segmentation, geographical location and internal organization, are analyzed. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 357 MARKETING CHANNELS (3) Processes and interdependent institutions for transfer of product ownership from seller to buyer; structure, functions and activities of traditional and contemporary channels. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 361 MARKETING FOR NONPROFIT ORGANIZATIONS (3) Analyzing marketing management approaches and techniques for nonprofit sector; market-driven organizations; developing resources; designing and implementing the marketing mix. Prerequisite: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 425 CONSUMER BEHAVIOR ANALYSIS (3) An examination of the buying behavior of individual and organizational buyers with regards to the decision process utilized when purchasing goods and services and the resulting consequences in the development of marketing strategies by business firms and other organizations. Prerequisites: MKTG 341/342 (PSYC 209 recommended). Concurrent enrollment in MKTG 441 is recommended. Majors only. Junior/senior standing.

MKTG 431 MARKETING INFORMATION FOR DECISION MAKING (3) The purpose of this course is to assemble, manipulate and synthesize internal and external secondary data to develop sophisticated situation analyses, empirical-based customer segmentation classifications and behavioral analyses, and metrics by which firms can evaluate their marketing strategies and dynamics. Prerequisites: MKTG 341/342, EBTM 306 or ECON 306. Majors only. Junior/senior standing.

MKTG 441 MARKETING RESEARCH AND FORECASTING (3) Message formulation, advertising testing and product development by examining the behavior and psychological disposition of market participants as related to marketing decision making. Prerequisites: EBTM 306 or ECON 306, MKTG 341/342. Majors only. Junior/senior standing.

MKTG 442 MARKETING HONORS SEMINAR (3) Decision-making skills and the formulation of strategies and policy. Market segmentation, consumer behavior, pricing, product line strategy and promotion. Prerequisites: senior standing and consent of instructor. Prerequisite: MKTG 341/342.

MKTG 445 INTERNATIONAL MARKETING (3) Impact of international marketing environments on pricing, product, channels of distribution, advertising and promotion. Problems and obstacles related to market surveys and development of policies. Regional studies. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 451 PERSONAL SELLING AND SALES MANAGEMENT (3) Successful selling, presenting and negotiating are core activities of boundary-spanning marketing positions. This course presents the principles of personal selling and fundamentals of managing a sales force. Prerequisites: MKTG 341/342. Majors only. Junior/senior standing.

MKTG 470-479 SPECIAL TOPICS IN MARKETING (3) Course content varies with each topic. In-depth study of contemporary business issues and how they affect current marketing practices. May be repeated for credit provided a different topic is covered. Prerequisites: MKTG 341/342 and consent of instructor. Special permit only.

MKTG 485 STRATEGIC MARKETING (3) Capstone course emphasizing management of marketing activities and the development and implementation of product, pricing, promotion and distribution strategies within an interdisciplinary context. Prerequisites: MKTG 341/342 and 6 additional units in required Marketing courses. Majors only. Senior standing.

MKTG 491 DIRECTED READINGS (1-3) Assigned readings in selected functional or conceptual areas of marketing. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the marketing area of study. Prerequisites: consent of the instructor, a minimum of 3.00 cumulative GPA, completion of all 200- and 300-level BUAD core requirements, two additional Marketing courses and a special permit.

MKTG 494 MARKETING STUDY ABROAD (3) On-site course of study of the culture, history, economy, society and related business activities. This course may be structured as a study group accompanied by a TU Department of

Marketing faculty member or a course with an approved affiliated study abroad program. Prerequisites: MKTG 341/342. Marketing majors only. Junior/senior standing. Must be registered in approved study abroad program. Consent of department chair.

MKTG 495 INDEPENDENT RESEARCH (1-3) Directed research on specific problems in a functional area of marketing. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the marketing area of study. Prerequisites: consent of the instructor, a minimum of 3.00 cumulative GPA, completion of all 200- and 300-level BUAD core requirements, two additional Marketing courses and department consent.

MKTG 497 MARKETING INTERNSHIP (1-3) Students are required to work a minimum of 40 hours per unit in an actual business environment to gain practical application of marketing concepts. Upon completion, a formal portfolio presentation of the internship experience is required. A total of 6 units for any combination of directed readings, independent study and internship is allowed in the marketing area of study. S/U grading. Prerequisites: consent of instructor, consent of the department, completion of all 200- and 300- level BUAD requirements and either 1) a minimum of 3.00 cumulative GPA and completion of two 400-level Marketing courses or 2) a minimum of 3.20 GPA and completion of one 400-level Marketing course.

MASS COMMUNICATION (MCOM)

Lower Division

MCOM 100 USING INFORMATION EFFECTIVELY IN MASS COMMUNICATION (3) Effective and ethical gathering, evaluation, application and presentation of information in the study of mass communication. Prerequisite: freshmen and sophomores only.

MCOM 101 INTRODUCTION TO MASS COMMUNICATION (3) Issues, theories and structures of mass communication and careers in the mass media.

MCOM 102 HONORS INTRODUCTION TO MASS COMMUNICATION (3) Issues, theories and structures of mass communication and careers in the mass media. Honors College course.

MCOM 214 PRINCIPLES OF ADVERTISING (3) Review of contribution made by advertising to the U.S. economy and of the principles and practices as applied to mass media. Prerequisites: COMM 131 and MCOM 101.

MCOM 253 PRINCIPLES OF STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATION (3) Research, theory, techniques: strategy, planning and management of public relations programs. Law, ethics and professionalism are covered. Prerequisites: COMM 131 and MCOM 101.

MCOM 255 NEWSWRITING (3) Newswriting from the standpoint of style, structure and readability. Prerequisites: MCOM 101 and ENGL 102 or ENGL 190.

MCOM 257 JOURNALISM/NEW MEDIA I (3) An introduction to the writing skills required in print, broadcast and online journalism, and emerging news media formats. This course is designed for students choosing the Journalism/New Media track in the Mass Communication major. Prerequisite: MCOM 101.

MCOM 258 JOURNALISM/NEW MEDIA II (3) Advanced skills in writing, interviewing, reporting and editing required in print, broadcast and online journalism, and emerging news media formats. Prerequisite: MCOM 257.

Upper Division

MCOM 323 ADVERTISING MEDIA PLANNING (3) Application of advertising media principles to the development of a media plan that involves objectives, strategy and execution of electronic, print and new media. Prerequisites: MCOM 214; majors only. \$25 lab/class fee.

MCOM 325 ADVERTISING COPYWRITING (3) Creative process and production of copy for various media: print, broadcasting, direct mail and billboards. Prerequisites: MCOM 214; majors only. \$25 lab/class fee.

MCOM 341 DIGITAL PUBLISHING (3) Computer technology to create publications for delivery in print and online. Prerequisite: MCOM 257. \$25 lab/class fee.

MCOM 350 MEDIA LAW (3) Examination of libel, slander, invasion of privacy and copyright. Legal considerations in reporting on judicial and governmental activities. Prerequisites: MCOM 101/102; majors only. Junior/senior standing.

MCOM 352 MEDIA CRITICISM (3) Theory and practice of media criticism intended for various audiences, including consumer-oriented criticism, social criticism and scholarly criticism. Prerequisite: MCOM 101 or EMF 140 or COMM 201.

MCOM 356 FEATURE WRITING (3) Researching and writing journalistic articles for publication in newspapers, magazines and other media. Prerequisite: MCOM 255 or MCOM 258.

MCOM 357 PUBLIC RELATIONS WRITING (3) Composing, editing and producing media materials for both internal and external audiences. Prerequisite: MCOM 253.

MCOM 358 NEWS EDITING (3) Practice in editing and headline writing for print and online media. Prerequisite: MCOM 258. \$25 lab/class fee.

MCOM 359 MAGAZINE PUBLISHING (3) Examination of the principles, practices, problems and trends in magazine publishing through tracing the process of a magazine from copy to bindery. Steps in periodical production stressing emphasis on layout factors. Intensive analysis of magazine markets and case studies of magazine publishing problems. Prerequisite: MCOM 356.

MCOM 381 BROADCAST JOURNALISM I (3) Theory and practice of broadcast journalism. The gathering, writing and presentation of news for audio-only and audio-visual media. Ethical standards for broadcast journalism will be analyzed. Prerequisites: MCOM 258; junior/senior standing. \$25 lab/class fee.

MCOM 383 NEWS REPORTING (3) Experience in reporting. Coverage of specific news beats on- and off-campus and general assignment work. Consideration of news-gathering techniques, including direct and participant observation, use of survey research data and use of official records. Prerequisite: MCOM 258.

MCOM 385 MASS MEDIA AND SOCIETY (3) Seminar on current issues and effects of mass communication. Prerequisite: MCOM 101 or EMF 140.

MCOM 388 CYBERSPACE AND COMMUNICATION (3) Seminar of the social, cultural, technical and behavioral effects and implications of new media and online communication. Prerequisite: MCOM 101 or EMF 140.

MCOM 391 PHOTOJOURNALISM I (3) Photography for the mass media. History, aesthetics and ethics are covered. Prerequisite: MCOM 258 or consent of instructor. \$25 lab/class fee.

MCOM 402 SPORTS WRITING (3) Researching and writing news and feature articles and opinion columns focusing on local, state and national sports. Prerequisite: MCOM 356.

MCOM 407 (507) WRITING FOR NEW MEDIA (3) Research and create multimedia news and feature articles incorporating hypertext, graphics, photographs, audio and video elements. Prerequisites: MCOM 356 and MCOM 341 or consent of instructor. \$25 lab/class fee.

MCOM 409 LITERARY JOURNALISM (3) Literary technique and dramatic structure for print and online journalistic media. Prerequisite: MCOM 356.

MCOM 411 COMMUNICATION PROCESS (3) Prominent theories and research on mass media and human communication. Prerequisites: 9 units of MCOM/COMM including COMM 131 and junior standing.

MCOM 415 MASS MEDIA GRAPHICS (3) Communication potential of design elements in a variety of graphics using computer technology. Prerequisites: MCOM 101 and junior/senior standing.

MCOM 431 [550] PUBLIC OPINION AND THE PRESS (3) Journalistic aspects of public opinion and propaganda; the

impact of mass communication media on the formation of public opinion. Techniques of polling and testing public opinion. Prerequisites: MCOM 101 and junior/senior standing.

MCOM 433 [543] MEDIA ETHICS (3) Ethical principles, issues, dilemmas in mass communication; professional codes; personal, interpersonal, small group, organizational and societal factors affecting ethical, mediated communication. Prerequisites: MCOM 101/102, and majors only. Junior/senior standing.

MCOM 440 ADVERTISING MEDIA SALES (3) Procedures for selling media space and time: strategy, training and preparation. Prerequisites: MCOM 214 and junior/senior standing.

MCOM 443 [572] INTERNATIONAL ADVERTISING AND PUBLIC RELATIONS (3) Role of advertising and public relations in the world marketplace. Consideration of global and local perspectives, key decisions in agency operations, creative aspects and media. Prerequisites: MCOM 214 or MCOM 253, and junior/senior standing.

MCOM 447 [547] ADVERTISING CAMPAIGNS (3) Application of advertising principles and practices to the development of campaigns and the preparation of a plans book. Prerequisites: MCOM 323 and MCOM 325; majors only.

MCOM 451 [551] PUBLIC RELATIONS FOR NONPROFIT ORGANIZATIONS (3) Fundraising and development, implementing and evaluating public relations campaigns for nonprofit organizations. Practical experience lab sessions. Prerequisite: MCOM 357.

MCOM 453 [553] STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATION CAMPAIGNS (3) Research, planning, implementing and evaluating programs and campaigns. Prerequisites: MCOM 357; majors only.

MCOM 457 PHOTOJOURNALISM II (3) Color photography for the mass media, including electronic imaging. Prerequisite: MCOM 391.

MCOM 459 [559] PROFESSIONAL ISSUES IN STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATION (3) Technical, managerial, legal, ethical and accreditation issues and concerns involved in the practice of public relations and integrated communications. Prerequisite: COMM 419 or MCOM 453 or MCOM 447.

MCOM 460 INTERNSHIP IN MASS COMMUNICATION (1-6) Under faculty supervision, students work as interns with a professional in the field of mass communication. Graded S/U. May be repeated for a maximum of 9 units, but only 6 units will apply to the major. Prerequisites: junior/senior standing; cumulative GPA of 2.75 and 3.00 in the major; completion of appropriate courses determined by the department; majors only.

MCOM 477 SPECIAL TOPICS IN MASS COMMUNICATION (3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: junior/senior standing or consent of instructor.

MCOM 478 SPECIAL TOPICS IN ADVERTISING AND PUBLIC RELATIONS (3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: junior/senior standing or consent of instructor.

MCOM 479 SPECIAL TOPICS IN JOURNALISM (3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: junior/senior standing or consent of instructor.

MCOM 481 BROADCAST JOURNALISM II (3) Advanced news and feature writing, interviewing, reporting and editing for broadcast and new media. Prerequisites: MCOM 381, or (EMF 373 and consent of instructor). Majors/minors only. \$25 lab/class fee.

MCOM 490 MASS COMMUNICATION RESEARCH (3) Survey of methods and uses of research in mass media fields. Prerequisite: majors and seniors only.

MCOM 496 INDEPENDENT STUDY IN MASS COMMUNICATION (1-6) Directed study through readings, projects and papers in a specific area of joint faculty/student interest. May be repeated for a maximum of 6 units. Prerequisites: junior/senior standing and approval of planned project by the instructor.

MCOM 499 HONORS THESIS IN MASS COMMUNICATION (3) Intensive research paper or media production project in the areas of newspaper/magazine journalism, photojournalism, public relations, advertising or new media as chosen by the student in consultation with the thesis adviser. Restricted to candidates for Departmental Honors in Mass Communication. Prerequisites: 3.50 GPA in major, 3.20 GPA overall and junior standing.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

MATHEMATICS (MATH)

Lower Division

MATH 102 INTERMEDIATE ALGEBRA (3) Intended primarily for students who will use algebraic skills in future mathematics courses. Topics include: factoring of polynomials, rational expressions and equations, graphs, relations and functions, radicals and exponents, and quadratic equations. Graded S/U. Prerequisite: qualifying score on placement test or DVMT 101.

MATH 103 TRANSITION TO MATH IDEAS (3) This course has two parts. Part one is DVMT 110 and part two is MATH 105. Successful completion of part one is required for entry into part two. Open only to students in the developmental math program. Not open to students who have completed DVMT 110. Prerequisite: competency test score or DVMT 101.

MATH 105 MATHEMATICAL IDEAS (3) Basic concepts and ideas in mathematics are selected to explore the aesthetics and utility of mathematics. Topics are chosen from sets, counting methods, mathematical systems, basic rules of probability, statistics, logic, finance, geometry, numeration systems and modeling. Not counted toward nor required for Early Childhood Education or Elementary Education majors. Not open to those who successfully completed MATH 101 or MATH 106. Prerequisites: two years of algebra or DVMT 110 or MATH 109, and one year plane geometry.

MATH 106 INTRODUCTION TO CONTEMPORARY MATHEMATICS (3) Contemporary applications are explored to illustrate the nature of mathematics, its role in society, and its practical and abstract aspects. Topics are chosen from networks and graphs, the traveling salesman problem, scheduling problems, collecting and describing data, coding information, voting systems, fair division, fractal geometry, and growth and symmetry. Not open to students who successfully completed MATH 105. Prerequisites: two years of algebra or DVMT 110 or MATH 109, and one year plane geometry.

MATH 109 TRANSITION TO ALGEBRA FOR APPLICATIONS (3) Intended primarily for students in business, economics, psychology and the social sciences. This course has two parts. Part one is DVMT 110 and part two is MATH 111. Successful completion of part one is required for entry into part two. Open only to students in the developmental math program. Not open to students who have completed DVMT 110. Prerequisite: competency test score or DVMT 101.

MATH 111 ALGEBRA FOR APPLICATIONS (3) Intended primarily for students in business, economics, psychology and the social sciences. Applications of finite mathematics: linear equations, matrices, linear programming using graphical methods and the simplex algorithms, sets and counting, elementary probability. Not open to those who successfully completed MATH 109, MATH 115 or MATH 119. Prerequisites: two years of algebra or DVMT 110, and one year plane geometry.

MATH 115 BASIC MATHEMATICS FOR THE SCIENCES (3) Intended primarily for students in biology, natural sciences, environmental studies, medical technology and

nursing. Functions and equations: linear, quadratic, exponential, trigonometric. Applications of concepts and skills to the life and physical sciences are stressed. Not open to those who successfully completed MATH 119. Prerequisites: two years of algebra or DVMT 110 or MATH 109, and one year plane geometry.

MATH 119 PRE-CALCULUS (4) The concept of function, exponential, logarithmic, circular and trigonometric functions, systems of linear equations, vectors in two space, lines, conic sections and polar coordinates. Prerequisites: two years algebra or DVMT 110, one year plane geometry, one-half year trigonometry.

MATH 204 MATHEMATICAL CONCEPTS AND STRUCTURES I (4) Problem solving, sets, systems of numeration, development of numeration system through rational numbers, arithmetic operations and algorithms, number theory and use of appropriate technology. (Required of all Early Childhood and Elementary Education majors.) Prerequisites: two years of high school algebra or DVMT 110 and one year of plane geometry.

MATH 205 MATHEMATICAL CONCEPTS AND STRUCTURES II (4) Statistical concepts and applications (experimental design issues, graphical representations, center and spread of one-variable data; analysis and display of bivariate data), basic probability concepts (including simulations and conditional probability), normal distribution, functions and graphs with an emphasis on real-world applications. Additional topics to be chosen from elementary counting techniques, binomial distribution, odds and expected value. Appropriate technology is integrated throughout. Required of all Early Childhood and Elementary Education majors. Prerequisite: MATH 204.

MATH 211 CALCULUS FOR APPLICATIONS (3) Intended primarily for students in biology, business, economics, psychology and the social sciences. Elements of differential and integral calculus from an intuitive standpoint with emphasis on the use of calculus in the above fields. Exponential and logarithmic functions, partial derivatives included. Not open to mathematics majors or minors. Prerequisite: MATH 109 or MATH 111 or MATH 119.

MATH 225 ALGEBRA AND NUMBER CONCEPTS FOR MIDDLE SCHOOL TEACHERS (3) Content includes pre-algebra concepts/skills, proportional reasoning, functions, inequalities, linear regression, transformations, exponential and quadratic models. Prerequisite: Two years of high school algebra or DVMT 110 or MATH 109, or permission of the department.

MATH 230 COMPUTER LAB FOR BEGINNING STATISTICS (1) A statistical package is used to do computer lab assignments on data manipulation, descriptive statistics, one- and two-sample inference, and linear regression. Intended only for students who transfer basic statistics course without a computer lab component. Prerequisite: beginning statistics course without a computer component. Graded S/U.

MATH 231 BASIC STATISTICS (3) Frequency distributions and graphical methods, percentiles, measures of central tendency and variability, probability emphasizing binomial and normal distributions, sampling distributions, point and interval estimation, one- and two-sample hypothesis tests, simple linear regression. MINITAB or an equivalent computer package is introduced as a computational tool. Practical applications of statistics. Prerequisite: MATH 111 or MATH 115 or equivalent. \$25 lab/class fee.

MATH 233 HONORS BASIC STATISTICS (3) Frequency distributions and graphical methods, percentiles, measures of central tendency and variability, probability, emphasizing binomial and normal distributions, sampling distributions, point and interval estimation, one- and two-sample hypothesis tests, simple linear regression. MINITAB or an equivalent computer package is introduced as a computational tool. Practical applications of statistics. Prerequisite: MATH 111 or MATH 115 or equivalent. Honors College course. \$25 lab/class fee.

MATH 235 STATISTICS AND PROBABILITY FOR THE MIDDLE SCHOOL TEACHER (4) Topics from data analysis, probability and inferential statistics, including recent methodologies and standards for the middle school level. The

course integrates activities using the graphing calculator and an inquiry-based computer learning environment. Prerequisites: two years high school algebra or DVMT 110 or MATH 109, or permission of the Mathematics Department.

MATH 237 ELEMENTARY BIOSTATISTICS (4) Elementary statistical concepts and their application to the biological and health sciences. Descriptive statistics, estimation techniques, hypothesis testing, analysis of enumerative data, and one-way analysis of variance and simple linear regression and correlation analysis. A statistical package such as MINITAB is introduced as a computational tool. Not open to those who successfully completed MATH 231 or MATH 330 or to Mathematics majors. Prerequisite: two years high school algebra or DVMT 110 or MATH 109. \$25 lab/class fee.

MATH 251 ELEMENTS OF GEOMETRY (4) Geometric vocabulary, relationships, concepts and skills in two and three dimensions using techniques of synthetic, coordinate and transformational geometries, measurement and use of appropriate technology. Required of all Early Childhood and Elementary Education majors. Not open to Mathematics majors. Prerequisite: MATH 205.

MATH 255 GEOMETRY FOR MIDDLE SCHOOL TEACHERS (3) Content includes angle relationships, parallel lines, triangle congruence and similarity, quadrilaterals, circles, and area and perimeter of such figures. Also included is the pedagogy of using the van Hiele Model of Geometric Thought. Prerequisite: MATH 225.

MATH 263 DISCRETE MATHEMATICS (3) Sets, logic, induction, functions, relations, sequences, recursion, combinatorics, graphs and trees, matrices with an emphasis on applications in computer science. Prerequisite: four years of high school mathematics or MATH 119.

MATH 265 ELEMENTARY LINEAR ALGEBRA (4) Matrix calculations and determinants, vector spaces over the real numbers, linear transformations, eigenvalues, eigenvectors, and inner products with emphasis on applications. Not open to those who successfully completed MATH 365 or MATH 463. Prerequisite: MATH 211 or MATH 273.

MATH 267 INTRODUCTION TO ABSTRACT MATHEMATICS (4) Sets, mappings, relations, logic, mathematical induction, properties of the integers, Fundamental Theorem of Arithmetic, polynomials and elementary analytic concepts. Prerequisite: MATH 273.

MATH 273 CALCULUS I (4) Functions, limits and continuity, differentiation of algebraic and trigonometric functions; mean value theorem; differentials; introduction to integration; applications. Four lecture hours and one laboratory hour per week. Prerequisite: MATH 119 or calculus course in high school or adequate score on placement test. \$25 lab/class fee.

MATH 274 CALCULUS II (4) Differentiation and integration of exponential logarithmic and inverse trigonometric functions; techniques of integration and applications; indeterminate forms; improper integrals; sequences and series of numbers; power series. Prerequisite: MATH 273. \$25 lab/class fee.

MATH 275 CALCULUS III (4) Vectors in two and three dimensions, differential and integral calculus of functions of several variables. Prerequisite: MATH 274. \$25 lab/class fee.

MATH 283 HONORS CALCULUS I (4) Functions, limits and continuity; differentiation of algebraic and trigonometric functions; mean value theorem; differentials; introduction to integration; applications. Prerequisite: MATH 119 or calculus course in high school or adequate score on placement test. Honors College course.

MATH 284 HONORS CALCULUS II (4) Differentiation and integration of exponential, logarithmic and inverse trigonometric functions; techniques of integration and applications; indeterminate forms; improper integrals; sequences and series of numbers; power series. Prerequisite: MATH 273 or MATH 283. Topics will be covered in more depth and detail than in Calculus II. Several extended projects on related material will be given. Honors College course.

MATH 293 HONORS SEMINAR IN MATHEMATICS (3) A problem-solving seminar designed for students who have shown talent in mathematics but have not yet been exposed to advanced mathematics courses. Techniques of problem solving and the solution of challenging problems involving elementary mathematics, such as probability, number theory, graph theory and counting. Qualified students will usually take this course during their freshman or sophomore year. Honors College course.

Upper Division

MATH 301 [501] HISTORY OF MATHEMATICS (3) Development of mathematics emphasizing mathematical concepts and contributions of individuals and societies. Major credit only toward Secondary Education Concentration. Prerequisites: MATH 263 or MATH 265, and MATH 274.

MATH 305 CHANCE (3) Role of chance in a variety of contemporary scientific, social and ethical issues. No credit toward a mathematics major. Prerequisites: one college-level mathematics course and one college-level science course; junior standing or by permission.

MATH 312 THEORY OF INTEREST (3) Mathematical theory and applications of key financial management concepts and procedures including term structure of interest rates; force of interest; interest rate sensitivity; annuity; perpetuity; amortization; stocks; bonds. Mathematical theory of modern financial economics and analysis, at an introductory level, involving basic derivative contracts (forwards, futures, options, swaps). Prerequisite: MATH 274.

MATH 314 [COSC 314] INTRODUCTION TO CRYPTOGRAPHY (3) A broad introduction to cryptography and its mathematical foundations. The course will also cover applications to computer-network security services and mechanisms (confidentiality, integrity, authentication, electronic cash and others), and to various protocols in distributed computation. Prerequisites: COSC 236, and either MATH 263 or MATH 267, and junior standing or permission of instructor.

MATH 315 APPLIED COMBINATORICS (3) General counting methods, pigeon-hole principle, generating functions, partitions, recurrence relations, inclusion-exclusion principle, Polya's enumeration, introduction to graph theory. Prerequisite: MATH 263 or MATH 265 or MATH 267.

MATH 321 TEACHING MATHEMATICS IN EARLY CHILDHOOD EDUCATION (3) Materials of instruction and methods of presentation with emphasis on the discovery approach. No credit toward a Mathematics major or minor. Prerequisites: MATH 204 (or MATH 206) and MATH 205 (or MATH 207).

MATH 323 TEACHING MATHEMATICS IN ELEMENTARY SCHOOL (3) Nature of instruction, organization of units of instruction, provisions for developing understandings, new programs and research findings, and techniques and evaluation. Required of all elementary education majors. No credit toward a Mathematics major or minor. Prerequisites: MATH 204 (or MATH 206), MATH 205 (or MATH 207) and MATH 251.

MATH 324 SUPERVISED OBSERVATION/PARTICIPATION IN ELEMENTARY SCHOOL MATHEMATICS (2) Application of methodology for developing and conducting classroom activities in mathematical concepts and skills at local elementary schools. Co-requisite: MATH 323. Graded S/U.

MATH 325 MATHEMATICAL PROBLEM SOLVING FOR MIDDLE SCHOOL TEACHERS (3) A problem solving seminar designed for students who have not yet been exposed to advanced mathematics courses. Problem solving strategies will be applied to a variety of challenging problems, related to topics from middle and high school mathematics curricula. An important focus of the course is oral and written justifications of solutions. No credit toward a Mathematics major or minor. Prerequisites: MATH 225, MATH 273.

MATH 326 THE MATHEMATICS OF INFORMATION SCIENCE (3) Encoding information introducing metrics, isometries, equivalence relations, modular arithmetic, base 2 arithmetic, matrix algebra, probability and combinatorics, including

binary codes, bar codes, check digits, internal computer representations of information, and logic gates. Students cannot earn credit for both COSC 326 and MATH 326. No credit toward a Computer Science major or minor.

MATH 330 INTRODUCTION TO STATISTICAL METHODS (4) An introductory course for students with mathematics and computing backgrounds emphasizing statistical ideas and techniques. Descriptive statistics, probability, estimation and sampling, hypothesis testing, regression and correlation, and analysis of variance. A statistical package such as MINITAB is introduced as a computational tool. Prerequisite: MATH 274.

MATH 331 [531] PROBABILITY (4) Probability in sample spaces, discrete and continuous random variables, distribution theory, Chebyshev's Theorem, Central Limit Theorem, expected values and moments. Prerequisite: MATH 274.

MATH 332 [532] MATHEMATICAL STATISTICS (3) Sample theory and distributions, point estimation, confidence intervals, tests of hypothesis, regression, correlation and analysis of variance (offered only in the spring term). Prerequisite: MATH 331.

MATH 333 [533] APPLIED REGRESSION AND CORRELATION ANALYSIS (3) Relationships among variables emphasizing linear regression with one or more independent variables, methods of estimating parameters and testing hypotheses, selection of independent variables and other topics. Prerequisite: one course in elementary statistics.

MATH 334 [534] NONPARAMETRIC STATISTICAL METHODS (3) Applied study of popular nonparametric tests, procedures utilizing data from a single sample and two or more independent and related samples, Chi-square tests of independence, homogeneity and goodness-of-fit; rank correlation and other measures of association. Prerequisite: one course in elementary statistics.

MATH 335 [545] SAMPLING TECHNIQUES (3) Simple random, stratified, systematic cluster and double sampling. Sampling for proportions, averages and totals, and sample size determination. Prerequisite: one course in elementary statistics.

MATH 336 [546] STATISTICAL METHODS IN QUALITY CONTROL (3) Statistical process control including principles of control charts, control charts for attributes and variables, and special control charts. Methods for quality improvement. Acceptance sampling including single, double, multiple and sequential attribute sampling, and acceptance sampling by variable. Prerequisite: one course in elementary statistics.

MATH 337 [533] APPLIED REGRESSION AND TIME SERIES ANALYSIS (4) Simple and multiple regression, least squares estimates, hypothesis testing, confidence intervals and prediction intervals, model building methods and diagnostic checking. Non-seasonal time series models: autoregressive, moving-average and/or autoregressive integrated moving-average models, parameter estimation and forecasting. Minitab or a similar software is used for real data analysis. Prerequisites: MATH 231 or equivalent and MATH 265 or equivalent.

MATH 339 [539] BIostatISTICS II (3) Probability and random variables, estimation and hypothesis testing, nonparametric methods, categorical data analysis, multiple regression, analysis of variance, and design techniques for epidemiological study. Minitab or a similar software will be used for data analysis. Prerequisites: MATH 237 or equivalent and MATH 273 or equivalent.

MATH 353 EUCLIDEAN AND NON-EUCLIDEAN GEOMETRIES (3) Review of synthetic Euclidean geometry, non-Euclidean geometries, finite geometries and systems of axioms, classical theorems and elementary transformations. Prerequisites: MATH 251 or MATH 265, and MATH 273.

MATH 363 MATHEMATICAL STRUCTURES FOR COMPUTER SCIENCE (4) Basic mathematical concepts utilized in computer science: proof techniques, propositional and predicate logic, elements of combinatorics, discrete probability, basic number theory, sequences and series, elements of the theory of computation. No credit toward mathematics major. Course restricted to COSC graduate students. Prerequisite: special permit.

MATH 369 INTRODUCTION TO ABSTRACT ALGEBRA (3) Elementary number theory, congruencies, groups up to and including the isomorphism theorems, commutative rings, polynomials, unique factorization, irreducibility, finite fields. Prerequisites: MATH 265, MATH 267 and MATH 274.

MATH 374 [574] DIFFERENTIAL EQUATIONS (3) Theory and application of linear ordinary differential equations. Solutions of non-linear ordinary differential equations of the first order. Prerequisite: MATH 274.

MATH 377 [575] MATHEMATICAL MODELS (3) Developing appropriate mathematical models and techniques to solve mathematical problems in sociology, psychology, economics, management science and ecology. Prerequisites: MATH 265, MATH 274, COSC 236 and at least junior standing.

MATH 378 [COSC 378] SCIENTIFIC MODELING AND SIMULATION (3) Interdisciplinary introduction to scientific simulation. Mathematical modeling, numerical analysis and object-oriented computer programming. Not open to students who have successfully completed COSC 378. Prerequisites: MATH 274, COSC 236.

MATH 379 [579] ADVANCED CALCULUS (3) Fourier series, orthogonal functions, partial differential equations, and boundary value problems. The Fourier integral and applications. Prerequisite: MATH 275.

MATH 390 INTRODUCTION TO ACTUARIAL MATHEMATICS (3) Introduction to actuarial science, insurance and risk management. Problem-oriented review of fundamental probability tools for quantitatively assessing risk. The application of these tools to problems encountered in actuarial science, insurance and risk management is emphasized. Prerequisites: MATH 265 and MATH 275.

MATH 397 INTERNSHIP IN MATHEMATICS (3) Students will be assigned to work on a mathematics project for a local business or industry under the direction of the industry supervisor and a member of the mathematics faculty. May be repeated for a maximum of 6 units. No credit toward a Mathematics major or minor. Prerequisites: junior standing and 6 units of upper-division mathematics courses. Graded S/U.

MATH 420 APPLICATIONS OF TECHNOLOGY FOR SECONDARY SCHOOL TEACHERS (3) Utilization of instructional technology, including graphing calculators and their accessories, The Geometer's Sketchpad, the CBL and CBR, the Internet, Fathom, and Equation Editor or Math Type, in topics from the areas of algebra, geometry, trigonometry and calculus. Prerequisites: MATH 330 and MATH 353.

MATH 421 [521] APPLICATIONS OF MATHEMATICS FOR SECONDARY SCHOOL TEACHERS (3) Examines a series of applications of mathematics that may be used to enrich the secondary mathematics curriculum. No credit toward a Mathematics major. Prerequisite: teaching experience in mathematics or science or consent of instructor.

MATH 423 TEACHING MATHEMATICS IN THE SECONDARY SCHOOLS (3) Examination of courses of study and textbooks, study of methods of teaching. Open only to students in the student teaching block. This course will be offered only in the spring term to be followed by MATH 426 during the fall. Prerequisites: MATH 267 and MATH 353, or consent of instructor.

MATH 424 SCHOOL-BASED METHODS FOR MIDDLE SCHOOL MATHEMATICS TEACHING (3) Application of methodology for developing and conducting classroom activities in mathematical concepts and skills relevant at the middle school level of instruction. No credit toward a Mathematics major or minor. Prerequisites: MATH 225, MATH 235 and MATH 255 (or consent of instructor); MATH 325 is recommended. Co-requisite: MATH 425.

MATH 425 MATHEMATICAL TEACHING IN THE MIDDLE SCHOOL (3) Best practices for delivery and assessment of mathematical concepts and skills relevant to the middle school level of instruction. No credit toward a Mathematics major or minor. Prerequisites: MATH 225, MATH 235, and MATH 255 (or consent of instructor); MATH 325 is recommended.

MATH 426 STUDENT TEACHING IN SECONDARY EDUCATION-MATHEMATICS (12) Field experience in public school classrooms under the guidance of master teachers and a university supervisor. Prerequisites: PSYC 201, SCED 319 or SCED 341, SCED 460, SPED 301, MATH 423, and written permission from the Center for Professional Practice. Graded S/U.

MATH 427 [527] READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3) Directed study for the teacher of elementary school mathematics. No credit toward a Mathematics major. Prerequisites: MATH 321 or MATH 323 and approval of instructor.

MATH 428 SENIOR SEMINAR MATHEMATICS EDUCATION (2) Integration of mathematical knowledge and pedagogical issues in secondary schools. Prerequisites: senior standing and MATH 423, which may be taken concurrently. Graded S/U.

MATH 429 [529] READINGS IN MATHEMATICS EDUCATION FOR THE SECONDARY SCHOOL TEACHER (1-3) Directed study for the teacher of secondary school mathematics. No credit toward a Mathematics major. Prerequisite: consent of instructor.

MATH 433 [543] APPLIED ANALYSIS OF VARIANCE (3) Single and multifactor models, inference for factor level means, multiple comparison methods for factor level means, test of additivity, tests of homogeneity, regression approach to analysis of variance. Prerequisite: MATH 333.

MATH 435 [535] NUMERICAL ANALYSIS I (3) Error analysis, interpolation, numerical differentiation and integration, numerical solution of algebraic equations, direct and iterative techniques for solving linear systems of algebraic equations. Mathematical and comparable computer algebra systems will be used. Prerequisites: MATH 265, MATH 274 and COSC 236.

MATH 436 [536] NUMERICAL ANALYSIS II (3) Numerical solution of differential equations. Least squares and its applications, linear programming and extension of the concepts of MATH 435. Mathematical and comparable computer algebra systems will be used. Prerequisite: MATH 435.

MATH 437 [537] OPERATIONS RESEARCH (3) Introduction to linear and integer programming, the simplex method and duality theory; dynamical formulation of deterministic decision process problems, applications to problems of equipment replacement, resource allocation and scheduling, Poisson processes, and birth and death processes. Prerequisites: MATH 265 and MATH 331.

MATH 438 [538] ACTUARIAL MODELS (3) Theory of actuarial models and the application of the models to insurance and other financial risks. Survival models, life table, contingent payment models, contingent annuity models, funding plans of contingent contracts, contingent contract reserves, models dependent on multiple survivals, multiple contingencies with applications. Prerequisite: MATH 331.

MATH 439 COMPUTATIONAL PROBABILITY MODELS (3) Markov chains, exponential distribution, Poisson process, continuous time Markov chains, Brownian motion and stationary processes. Prerequisite: MATH 331.

MATH 442 [542] ACTUARIAL MODEL CONSTRUCTION (4) Introduction to modeling in actuarial mathematics. Construction of frequency-severity models with coverage modifications, aggregate loss models and discrete-time ruin models. Construction of empirical models using estimators and parametric methods. Introduction to credibility theory. Prerequisite: MATH 332.

MATH 451 [551] GRAPH THEORY (3) Hamiltonian and Eulerian graphs, coloring graphs, planar and non-planar graphs, connectivity problems; isomorphic graphs and advanced topics. Prerequisite: MATH 263 or MATH 267.

MATH 457 [557] DIFFERENTIAL GEOMETRY (3) Curvatures of curves and surfaces in three-dimensional Euclidean space, geodesics, invariants, mappings and special surfaces. Prerequisite: MATH 275 and MATH 265.

MATH 463 [563] LINEAR ALGEBRA (3) Vector spaces over arbitrary fields, linear transformations, eigenvalues, eigenvectors, inner products, bilinear forms, direct sum decompositions and the Jordan form. Not open to those who

successfully completed MATH 365. Prerequisites: MATH 265 and MATH 267.

MATH 465 [565] THEORY OF NUMBERS (3) Topics include congruences, polynomial congruences, primitive roots, residues and multiplicative functions. Prerequisite: MATH 369.

MATH 467 [568] ALGEBRAIC STRUCTURES (3) Topics include groups; solvability and insolubility of polynomials, principal ideal, Euclidean and unique factorization domains. Prerequisite: MATH 369.

MATH 473 [576] INTRODUCTORY REAL ANALYSIS (4) An introduction to mathematical analysis. Sequences, series, continuity, differentiation, integration and uniform convergence. Prerequisites: MATH 267 and MATH 275.

MATH 475 [577] COMPLEX ANALYSIS (3) Complex number system, analytic functions, Cauchy's integral theorem and integral formula, Taylor and Laurent series, isolated singularities, Cauchy's residue theorem and applications. Prerequisite: MATH 275.

MATH 477 [578] TOPOLOGY (3) Basic concepts of point set topology, separation axioms, compact and connected spaces, product and quotient spaces, convergence, continuity and homeomorphisms. Prerequisites: MATH 267 and MATH 275.

MATH 480-483 [580-583] SELECTED TOPICS IN MATHEMATICS AND STATISTICS (1-4) Topics will be chosen from different areas in mathematics and statistics. Content will be determined so as to complement course offerings as well as the needs and desires of students. MATH 480 through MATH 483 may not be counted toward a Mathematics major. May be repeated for a maximum of 9 units provided a different topic is covered. Prerequisites will vary from topic to topic.

MATH 485 [585] MATHEMATICAL FINANCE (3) Mathematical theory, computation and applications of financial derivatives in managing financial risk. Parity and option relationships, binomial option pricing, the Black-Scholes equation and formula, option Greeks, market-making and delta-hedging, exotic options, lognormal distribution, Brownian motion and Ito's lemma, interest rate models. Computer laboratory activities throughout. Prerequisite: MATH 331.

MATH 486 [586] RISK MANAGEMENT AND FINANCIAL ENGINEERING (3) Cash flow engineering, Monte Carlo methods, statistical analysis of simulated data, risk measures, framework for fixed income engineering, portfolio management, change of measures, and Girsanov Theorem and tools for volatility engineering. Computer laboratory activities throughout. Prerequisite: MATH 485.

MATH 487-489 TOPICS IN STATISTICS AND APPLIED MATHEMATICS (1-4) Overview of risk management process and use of Greek functions. Mathematical theory and applications of value at risk, estimating volatilities and correlations, volatility smiles, credit risk and engineering of new risk management products. Computer laboratory activities throughout.

MATH 490 SENIOR SEMINAR IN MATHEMATICS (3) Selected mathematical topics and their applications. Prerequisite: senior standing.

MATH 491 [591] READINGS IN MATHEMATICS (1-3) Independent reading in selected areas of mathematics. May be repeated for a maximum of 6 units. Prerequisites: consent of instructor and senior status.

MATH 492 RESEARCH IN MATHEMATICS (1-3) Supervised original work in pure or applied mathematics. Formal written report required. May be repeated for 6 units. Graded S/U. Prerequisite: consent of instructor.

MATH 493 DIRECTED READINGS IN MATHEMATICS (HONORS) (3) Individual reading and background research under direction of a faculty member in preparation for writing an honors thesis. Prerequisite: admission to department honors program.

MATH 494 INDEPENDENT STUDY: RESEARCH IN MATHEMATICS EDUCATION (1-3) Supervised original work in mathematics education. May be repeated once for up to 6 units. Graded S/U. Prerequisite: consent of instructor.

MATH 495-496 APPLIED MATHEMATICS LABORATORY I, II (3,3) Investigation by a team of students under faculty direction

of a problem of mathematical and/or computational nature, chosen from proposals submitted by clients in the university or local industry. Team involvement may include literature searches, model definition, collection and analysis of data, and model verification. Restricted to invited students. Prerequisites: 9 units of mathematics and/or computer science, at least junior standing, and consent of instructor.

MATH 499 HONORS THESIS IN MATHEMATICS (3-6) Writing of an honors thesis based on individual research. May be repeated for a maximum of 6 units. Open only to advanced honors candidates. Prerequisite: permission of department Honors Committee.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

METROPOLITAN STUDIES (MTRO)

MTRO 101 INTRODUCTION TO METROPOLITAN STUDIES (3) Interdisciplinary introduction to metropolitan development. Discusses how the contemporary urban and suburban landscape was created. Explores alternatives for future community and metropolitan growth.

MTRO 470-479 SPECIAL TOPICS IN METROPOLITAN STUDIES (3) Examination of current topics in metropolitan studies. May be repeated for a maximum of 9 units provided a different topic is covered for each 3-unit course. Prerequisite: consent of instructor.

MTRO 497 METROPOLITAN STUDIES INTERNSHIP (3) Placement in positions in the public, nonprofit and private sectors related to urban planning, metropolitan growth, economic development, community development, or the formation and implementation of policies aimed at addressing key challenges facing metropolitan areas. May be repeated for a maximum of 6 units. Prerequisite: open to juniors or seniors with 3.00 cumulative GPA or higher.

MOLECULAR BIOLOGY, BIOCHEMISTRY AND BIOINFORMATICS (MBBB)

Upper Division

MBBB 301 INTRODUCTION TO BIOINFORMATICS (4) Fundamental principles of bioinformatics, including searching genomic and protein databases, sequence alignment, multiple sequence alignment, protein structural analysis, graphical tools for studying protein structures, RNA databases and RNA structure prediction, functional genomics, including analysis of DNA microarrays. Prerequisite: BIOL 309 or CHEM 351.

MBBB 315 GENOMICS (3) The study of genes, their expression within a cell and how they interact with cellular components. An overview that details how genes within living systems operate and affect living populations. Topics include sequencing of genomes, genome organization, evolution and genomic changes, genomic identification and annotation, gene and genome circuits, synthetic biology, proteomics and systems biology. Pre- or co-requisite: MBBB 301 or consent of instructor.

MBBB 401 ADVANCED BIOINFORMATICS (3) Advanced topics in bioinformatics, and the use of computational tools in simulation, animation, modeling and visualization of biological data. Techniques such as statistical analysis, data mining, databases and data warehousing are covered. Prerequisite: MBBB 301.

MBBB 490 HONORS RESEARCH IN MBBB (2) Individual research under the direction of a faculty member, culminating in an honors thesis. Prerequisites: open only to advanced honors candidates and by consent of MBBB program director. May be repeated for a total of 4 units applied toward the major.

MBBB 493 SEMINAR IN BIOETHICS (1) Ethical and legal issues associated with current trends in molecular biological, biochemical and bioinformatics research. Prerequisite: BIOL 309.

MBBB 499 HONORS THESIS IN MBBB (2) Writing of an honors thesis based on individual research done under the direction of a faculty member. Prerequisites: open to

advanced honors candidates and by consent of MBBB program director.

MUSIC APPLIED (MUSA)

Lower Division (100 and 200 level) and Upper Division (300 and 400 level)

APPLIED CONDUCTING LESSONS (1-2)

Private applied lessons in conducting including study of repertoire as well as preparation and implementation of all aspects of musical leadership and instruction to a musical ensemble (one-half hour for one unit, one hour for 2 units and one hour master class per week). May be repeated for a maximum of 4 units. Prerequisites: MUSC 329 (Instrumental Conducting or equivalent) or MUSC 327 (Choral Conducting or equivalent); consent of instructor and special permit. Fees: additional fees apply. Contact the department for the policy, 410-704-2836.

PRIVATE COMPOSITION LESSONS (1-2)

Instruction in composition: individual lesson (1/2 hour for 1 unit, one hour for 2 units) and one-hour group composition seminar. The Department of Music Applied Music Handbook lists criteria for acceptance and standards for each level. Successful completion of an upper-division jury is required before registering at the 300-level. By department consent only. Fees: additional fees apply. Contact the department for fee policy, 410-704-2836.

PRIVATE VOCAL OR INSTRUMENTAL LESSONS (1-2)

Instruction in vocal or instrumental technique and performance: individual lesson (1/2 hour for 1 unit, one hour for 2 units) and one-hour group master class. The Department of Music Applied Music Handbook lists criteria for auditions and performance standards for each level. Successful completion of a jury examination is required at the end of each term. An upper-division jury is required before registering at the 300-level. May be repeated for credit depending on concentration. Prerequisites: audition and by department consent. Fees: additional fees apply. Contact the department for fee policy, 410-704-2836.

Composition

MUSA 100, 200, 300, 400

Voice

MUSA 103, 203, 303, 403

Keyboard

Piano MUSA 105, 205, 305, 405
Organ MUSA 106, 206, 306, 406
Harpsichord MUSA 107, 207, 307, 407

Percussion

Snare Drum MUSA 110, 210, 310, 410
Mallets MUSA 111, 211, 311, 411
Timpani MUSA 112, 212, 312, 412
Percussion MUSA 113, 213, 313, 413

Brass

Trumpet MUSA 120, 220, 320, 420
Trombone MUSA 121, 221, 321, 421

French Horn
Tuba

MUSA 122, 222, 322, 422
MUSA 123, 223, 323, 423

Woodwinds

Flute
Clarinet
Oboe
Bassoon
Saxophone

MUSA 125, 225, 325, 425
MUSA 126, 226, 326, 426
MUSA 127, 227, 327, 427
MUSA 128, 228, 328, 428
MUSA 129, 229, 329, 429

Strings

Violin
Viola
Cello
String Bass
Harp

MUSA 130, 230, 330, 430
MUSA 131, 231, 331, 431
MUSA 132, 232, 332, 432
MUSA 133, 233, 333, 433
MUSA 134, 234, 334, 434

Guitar

Classical Guitar
Other fretted
instruments

MUSA 135, 235, 335, 435
MUSA 136, 236, 336, 436

Jazz/Commercial

Guitar
String Bass
Piano
Drums
Trumpet
Saxophone
Trombone
Electric Bass
Voice
Miscellaneous

MUSA 140, 240, 340, 440
MUSA 141, 241, 341, 441
MUSA 142, 242, 342, 442
MUSA 143, 243, 343, 443
MUSA 144, 244, 344, 444
MUSA 145, 245, 345, 445
MUSA 146, 246, 346, 446
MUSA 147, 247, 347, 447
MUSA 148, 248, 348, 448
MUSA 149, 249, 349, 449

Conducting - MUSA 479

Section 101 - Band Conducting
Section 102 - Orchestral Conducting
Section 103 - Choral Conducting
Section 104 - Jazz Ensemble Conducting

Ensembles (1)

The study and performance of literature for the designated ensemble. Open to all students by audition or permission of the instructor. May be repeated for credit depending on concentration. (UG)

Vocal Ensembles

MUSA 150, 350 Choral Society
(no audition required)
MUSA 251, 451 Chorale
MUSA 252, 452 Chamber Singers
MUSA 253, 453 Music for the Stage
MUSA 254, 454 Music Theater Chorus
MUSA 268, 468 Early Music Ensemble
MUSA 284, 484 Jazz Vocal Ensemble

Large Instrumental Ensembles

MUSA 160, 360 Marching Band
(no audition required)
MUSA 261, 461 Symphonic Band
MUSA 262, 462 Orchestra
MUSA 263, 463 Opera Orchestra
MUSA 264, 464 Music Theater Orchestra
MUSA 265, 465 Wind Ensemble

Small Instrumental Ensembles

MUSA 170/370 World Music Ensemble
(no audition required)
(Graded S/U)

MUSA 176

MUSA 266, 466
MUSA 267, 467
MUSA 268, 468
MUSA 269, 469
MUSA 270, 470
MUSA 271, 471
MUSA 272, 472
MUSA 273, 473
MUSA 274, 474

MUSA 275, 475
MUSA 276, 476

Jazz Ensembles

MUSA 281, 481
MUSA 282, 482
MUSA 283, 483
MUSA 284, 484
MUSA 285, 485
MUSA 286, 486

GROUP LESSONS (1)

Class instruction on the designated instrument:

MUSA 190 Piano Class I
MUSA 191 Piano Class II
MUSA 192 Guitar Class I
MUSA 193 Guitar Class II
MUSA 290 Piano Class III:
Keyboard Harmony

RECITALS (1)

MUSA 399 **Junior Recital for Bachelor of Music Degree** Preparation and performance of the junior recital. Prerequisites: successful completion of upper-division jury and consent of instructor. Must be concurrently enrolled in 300-level applied lessons. Graded S/U.

MUSA 497 **Senior Recital for Bachelor of Science in Music Degree** Preparation and performance of the senior recital. Prerequisites: successful completion of upper-level applied lesson requirements and consent of instructor. Must be concurrently enrolled in upper-level applied lessons. Graded S/U.

MUSA 498 **Senior Recital for Music Education Majors** Preparation and performance of the senior recital. Prerequisites: successful completion of 300-level applied lesson requirements for the B.S. in Music Education and permission of instructor. Must be concurrently enrolled in 400-level applied lessons. Graded S/U.

MUSA 499 **Senior Recital for Bachelor of Music Degree** Preparation and performance of the senior recital. Prerequisites: successful completion of 300-level applied lesson requirements and permission of instructor. Must be concurrently enrolled in 400-level applied lessons. Graded S/U.

MUSIC (MUSC)

Lower Division

MUSC 100 USING INFORMATION EFFECTIVELY IN MUSIC (3) Traditional and electronic information, sources, methods and technology to retrieve, critically assess and integrate information.

MUSC 101 INTRODUCTION TO MUSIC OF THE WESTERN HERITAGE (3) Masterworks of European and American art music from the perspective of contemporary society through lecture, listening and discussion. Open to non-music majors; does not satisfy major requirement.

MUSC 105 MUSIC THEORY FOR NON-MAJORS (3) Theoretical concepts through practical experiences with notation, meter, scales, intervals and chord structures. Open to non-majors and Music minors. \$25 lab/class fee.

MUSC 106 HONORS INTRODUCTION TO MUSIC OF THE WESTERN HERITAGE (3) Masterworks of European and American art music from the perspective of contemporary society. Open to non-music majors; does not satisfy major requirement. Honors College course.

MUSC 110 HONORS INTRODUCTION TO WORLD MUSIC (3) Musical traditions of the world, including understanding of musical languages and development of listening skills for appreciation of diverse musical cultures. Honors College course.

MUSC 111 INTRODUCTION TO MUSIC IN THE U.S. (3) Traditional, popular and classical music in the U.S. from the colonial period to the present.

MUSC 112 WORLD MUSIC: THE AMERICAS, AFRICA AND WEST EUROPE (3) Traditional and popular music in the Americas, Africa and West Europe. Different functions and meanings of music in various societies.

MUSC 113 WORLD MUSIC: EAST EUROPE, ASIA AND THE MIDDLE EAST (3) Traditional and popular music in East Europe, Asia and the Middle East. Different functions and meanings of music in various societies.

MUSC 114 MUSIC TECHNOLOGY IN AMERICAN SOCIETY (3) The role of technology in helping to shape the development of contemporary American music.

MUSC 116 SONGWRITING: BASIC COMPOSITION FOR NON-MAJORS (3) Develop techniques of basic music composition utilizing software that supports songwriting and audio production. Soundtrack, Pop, folk, hip hop and R&B songwriting genres. Music majors are not permitted to satisfy their Core 10 or Core 14 requirements with this course. \$25 lab/class fee.

MUSC 120 MUSIC FUNDAMENTALS FOR DANCE MAJORS (3) Basic musical skills, concepts and repertoire appropriate for dance performance and dance education. Prerequisite: Dance majors only. Special permit required.

MUSC 123 JAZZ HISTORY FOR NON-MAJORS (3) Stylistic survey of major currents in the history of jazz. Explores importance of this musical tradition in American culture.

MUSC 125 HONORS JAZZ HISTORY FOR NON-MAJORS (3) An examination of major currents in the history of jazz. Explores the importance of this musical tradition in American culture through discussion, analysis, listening and independent study. Honors College Course.

MUSC 127 ELEMENTS AND HISTORY OF ROCK MUSIC (3) Contributions to rock music through basic musical elements.

MUSC 131 MUSIC THEORY I (2) Concepts and elements of musical design, including a study of timbre, rhythm, pitch, texture and principles of form. Special permit required. Taken concurrently with MUSC 133. \$25 lab/class fee.

MUSC 132 MUSIC THEORY II (2) A concentrated study of diatonic harmony, conventional voice leading practice and basic reductive analytic techniques. Prerequisites: MUSC 131 and MUSC 133. Taken concurrently with MUSC 134. \$25 lab/class fee.

MUSC 133 MUSICIANSHIP I (2) Mastery of pitch and rhythm in combination with the development of aural skills through sight singing, dictation, improvisation and

keyboard applications. Special permit required. Taken concurrently with MUSC 131.

MUSC 134 MUSICIANSHIP II (2) Development of aural skills through sight singing, dictation, improvisation and keyboarding applications. Taken concurrently with MUSC 132. Prerequisites: MUSC 133 and MUSC 131.

MUSC 201 MUSIC IN THE UNITED STATES: ANALYTIC EMPHASIS (3) Analysis of traditional, popular and art music of the United States. Prerequisite: MUSC 131 and 133 or MUSC 105, and sophomore standing.

MUSC 205 WOMEN IN WESTERN MUSIC (3) Roles and contributions of women composers and performers from ancient Greece to contemporary American society.

MUSC 206 CREATIVE MUSIC INSTRUMENT AND SYSTEM PROGRAMMING (3) An introduction to specialized music programming languages with applications in developing musical performance instruments or sound installation works. No prior programming experience is required.

MUSC 231 MUSIC THEORY III (2) Analysis of form and chromatic harmony, including tonicization, modulation and Neapolitan chords. Department consent required. Prerequisite: MUSC 132. \$25 lab/class fee.

MUSC 232 MUSIC THEORY IV (2) Capstone study of chromatic harmony and large-scale traditional forms. Department consent required. Prerequisite: MUSC 231. \$25 lab/class fee.

MUSC 233 MUSICIANSHIP III (2) Aural skills through sight singing, dictation, improvisation, ear training software and keyboard applications. Correlated with MUSC 231. Normally taken concurrently with MUSC 231. Department consent required. Prerequisite: MUSC 134.

MUSC 234 MUSICIANSHIP IV (2) Aural skills through sight singing, dictation, improvisation, use of computer programs and keyboard applications. Correlated with MUSC 232. Normally taken concurrently with MUSC 232. Department consent required. Prerequisite: MUSC 233.

MUSC 245 DICTION FOR SINGERS I (ENGLISH AND ITALIAN) (2) Using the International Phonetic Alphabet as a basis for pronunciation, this course introduces singers to the fundamentals of English and Italian diction. Prerequisite: voice major or consent of instructor.

MUSC 246 DICTION FOR SINGERS II (FRENCH AND GERMAN) (2) Using the International Phonetic Alphabet as a basis for pronunciation, this course introduces singers to the fundamentals of French and German diction. Prerequisites: voice concentration and MUSC 245 or consent of instructor.

MUSC 281 RECORDING TECHNIQUES I (3) A course in recording techniques involving the history, concepts and mechanics of the recording process. Designed to train students for the recording of live concerts, this course acquaints students with acoustical principles, recording hardware and recording procedures. Includes laboratory work assisting in the recording studio during concerts. Prerequisites: MUSC 101, MUSC 201 or MUSC 106, and consent of instructor. \$50 lab/class fee.

Upper Division

MUSC 301 WESTERN MUSIC TO 1750 (3) Development of Western music from ancient Greece to the end of the Baroque period. Emphasis is placed on stylistic analysis of the music. Prerequisites: MUSC 201 and MUSC 231.

MUSC 302 WESTERN MUSIC FROM 1750-1914 (3) Development of Western music from the classical era to 1914, emphasizing stylistic analysis of the music and principles of scholarly writing. Prerequisites: Completion of MUSC 201, MUSC 232, MUSC 301, and ENGL 102 or ENGL 190; or consent of instructor.

MUSC 305 SURVEY OF THE MUSIC INDUSTRY (3) Publishing, copyright law, licensing, managers and agents, arts administration, concert promotion, music merchandising, recording and selling.

MUSC 313 KEYBOARD HARMONY AND SIGHT READING I (2) Beginning aural, reading and practical keyboard harmony skills, including ensemble experiences. Prerequisite: consent of instructor.

MUSC 314 KEYBOARD HARMONY AND SIGHT READING II (2) Advanced aural, reading and practical keyboard harmony skills, including ensemble experiences. Prerequisite: MUSC 313.

MUSC 320 JAZZ THEORY AND IMPROVISATION I (3) Fundamental theoretical study of rhythm, harmony, melody, repertoire, performers, improvisational techniques and historical styles of jazz; practical application through improvisational performance and aural dictation. Prerequisites: MUSC 231 and MUSC 233 or consent of the instructor.

MUSC 322 JAZZ THEORY AND IMPROVISATION II (3) Advanced theoretical study of rhythm, harmony, melody, repertoire, improvisational techniques and historical styles of jazz; practical application through improvisational performance and aural dictation. Prerequisite: MUSC 320 or consent of instructor.

MUSC 327 CHORAL CONDUCTING (3) Group instruction in basic conducting techniques and interpretation with relation to choral organizations. Prerequisites: MUSC 232 and MUSC 234 or consent of instructor; Music Education majors: junior standing, successful completion of Keyboard Proficiency examination; Performance and Composition majors: junior standing, successful completion of MUSA 290.

MUSC 329 INSTRUMENTAL CONDUCTING (3) Group instruction in basic conducting techniques and interpretation with relation to instrumental organizations. Prerequisites: MUSC 232 and MUSC 234 or consent of instructor; Music Education majors: junior standing, successful completion of Keyboard Proficiency Examination; Performance and Composition majors: junior standing, successful completion of MUSA 290.

MUSC 335 CHORAL AND INSTRUMENTAL ARRANGING (3) Composition and arranging techniques for voices and/or instruments. Prerequisite: MUSC 232 or consent of instructor.

MUSC 336 COMPUTER APPLICATIONS IN MUSIC (3) Introduction to the concepts and skills needed for creative use of computer applications in music with a focus on the design and creative use of computer music systems for composition and performance. Prerequisite: MUSC 132 (Music Theory II). This course cannot be repeated.

MUSC 402 [502] MUSIC OF THE BAROQUE PERIOD (3) Study of the development of musical styles, forms and compositional techniques from 1600 to about 1750. Prerequisites: completion of MUSC 232 and MUSC 301; or consent of instructor.

MUSC 403 [503] MUSIC OF THE CLASSICAL PERIOD (3) Styles, forms and techniques from 1750-1820. Particular emphasis is placed on such instrumental categories as the string quartet, sonata, symphony and concerto as illustrated in the works of Haydn, Mozart and Beethoven. Attention is given to operatic and sacred compositions masters. Prerequisite: MUSC 302 or consent of instructor.

MUSC 404 [504] MUSIC OF THE ROMANTIC PERIOD (3) Musical styles, forms and techniques of the 19th century with special attention to the intellectual foundations of the Romantic movement. Prerequisite: MUSC 302 or consent of instructor.

MUSC 405 WESTERN MUSIC FROM 1914 TO PRESENT (3) Styles, forms and techniques of Western music since 1914. Prerequisites: MUSC 302 or consent of instructor.

MUSC 406 [506] SURVEY OF SOLO VOICE LITERATURE (3) A musical survey of the art-song from circa 1750 to the present. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 409 [509] HISTORY AND LITERATURE OF GUITAR, LUTE AND VIHUELA (3) A survey of the history of and literature written for or readily adaptable to the guitar. Includes study of tablatures and transcriptions to modern notation. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 411 [511] SURVEY OF OPERA (3) Study of opera literature of various periods and styles. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 413 [513] SYMPHONIC LITERATURE (3) Survey of orchestral music from the Classical Period to the present. Includes symphony, overture and symphonic poem. Prerequisite: MUSC 302 or consent of instructor.

MUSC 414 [514] COUNTERPOINT (3) Principles of species counterpoint, using examples from all style periods and writing of counterpoint in all five species. Prerequisite: completion of music theory sequence or consent of instructor.

MUSC 419 [519] KEYBOARD LITERATURE (3) Literature for keyboard instruments from 1450 to present. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 421 [521] MUSIC IN THE U.S. (3) Music from the Colonial Period to the present. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 425 [525] JAZZ REPERTOIRE (3) Study and performance of standard jazz literature for small, varied instrumental groups or vocalists. Prerequisite: MUSC 232 or consent of instructor.

MUSC 426 [526] JAZZ HISTORY (3) Survey of jazz from its origins to the present day. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 427-428 [527-528] JAZZ ARRANGING I,II (3,3) Study and practice of arranging of standard material for jazz ensembles. Prerequisite: MUSC 232 or consent of instructor.

MUSC 431 [531] ADVANCED CHORAL AND INSTRUMENTAL ARRANGING (3) Advanced arranging techniques including the scoring of works for various combinations of instruments and/or voices. Prerequisite: MUSC 335 or consent of instructor.

MUSC 437 ADVANCED COMPUTER APPLICATIONS (3) Creative use of computer applications: sequencing, notation, synthesis applications, digital audio recording, editing, synchronization with film/music. Prerequisite: MUSC 135. \$50 lab/class fee.

MUSC 442 [542] VOCAL PEDAGOGY (3) Theory and practice of the teaching of singing by national styles, historical approaches and the physiology of the voice. Prerequisites: MUSA 203 or consent of instructor, MUSC 245 and MUSC 246.

MUSC 443 [543] INSTRUMENTAL PEDAGOGY (1) The art and science of teaching musical instruments in the applied setting. Prerequisite: upper-division status or instructor approval.

MUSC 460 [560] PIANO PEDAGOGY (3) Teaches the goals and steps in the art of teaching beginner, elementary and intermediate piano.

MUSC 462 [562] GUITAR PEDAGOGY (3) Art and science of teaching guitar, historical and current practices; observations. Private studio organization and administration. Prerequisite: 200-level guitar private lessons or consent of instructor.

MUSC 463 (563) MUSIC IN LATIN AMERICA (3) Genres and styles of art and popular music in Latin America from colonial times to today. The role of music in processes of political, social and cultural change in Latin America including issues of colonialism, nationalism, music and identity, and globalization. Prerequisite: MUSC 232 or consent of the instructor.

MUSC 471 SPECIAL TOPICS (1-3) Consideration of a central topic in music with a different topic each term. May be repeated for a maximum of 9 units provided a different topic is covered. Prerequisites: Completion of MUSC 201 and MUSC 232; or consent of instructor.

MUSC 482 [582] RECORDING TECHNIQUES II (3) Advanced subjects in audio engineering: ProTools, recording and mixing in surround sound; advanced MIDI applications and professional mastering techniques. Includes regular studio work. Prerequisites: MUSC 281; junior/senior status or consent of instructor. \$50 lab/class fee.

MUSC 493 INDEPENDENT RESEARCH IN MUSIC (1-3) Supervised research in a selected topic in music culminating in an extended paper. May be repeated for credit provided a

different topic is covered. May be taken for a maximum of 3 elective units only by successful petition to the department chairperson. Prerequisites: MUSC 302 and consent of department chair.

MUSC 495 SENIOR THESIS/PROJECT IN MUSIC FOR THE BACHELOR OF SCIENCE DEGREE IN MUSIC (3) Supervised research in a selected topic in music culminating in a Thesis/Project for the B.S. in Music degree. Prerequisites: Departmental approval for capstone experience in B.S. in Music.

MUSC 497 INTERNSHIP IN MUSIC BUSINESS (1-6) Field experience with working professionals. Prerequisite: consent of Music internship coordinator and minimum GPA requirement of 2.50 overall and 2.75 in music courses (including classes, ensembles and private lessons). S/U grading.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

MUSIC EDUCATION (MUED)

METHODS CLASSES

MUED 201 BRASS CLASS I (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 202 BRASS CLASS II (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. Prerequisite: MUED 201. \$25 lab/class fee.

MUED 203 LOWER STRING CLASS (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 204 UPPER STRING CLASS (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 205 WOODWIND CLASS I (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 206 WOODWIND CLASS II (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. Prerequisite: MUED 205. \$25 lab/class fee.

MUED 207 PERCUSSION CLASS I (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 208 PERCUSSION CLASS II (1) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated. \$25 lab/class fee.

MUED 209 TEACHING GUITAR IN THE CLASSROOM (2) Class instruction for Music Education majors on the designated instrument. All classes are one (1) unit unless otherwise designated.

MUED 210 VOICE CLASS (1) Class instruction for Music Education majors on the designated voice. All classes are one (1) unit unless otherwise designated. May be repeated for a maximum of 2 units.

Lower Division

MUED 220 PERCUSSION WORKSHOP (1) Performance and teaching concepts on all percussion instruments; class-type lessons on auxiliary percussion; learning to maintain and repair mallets and instruments; learning to "custom make" beaters, holders, etc.; learning to write for percussion; rehearsing and conducting percussion solo and ensemble literature. Prerequisite: open to percussion students only.

Upper Division

MUED 301 MARCHING BAND TECHNIQUES (0.5) Organization and administration of marching bands; show design, music programming, field preparation and rehearsal techniques.

MUED 304 METHODS OF TEACHING MUSIC IN EARLY CHILDHOOD EDUCATION (2) Methods and materials in music education for children ages three through eight in a laboratory setting. Early Childhood Education majors only. Concurrent pre-primary curriculum ECED 341. Not open

to those who successfully completed MUED 307. Prerequisite: MUSC 101.

MUED 305 METHODS OF TEACHING MUSIC IN ELEMENTARY EDUCATION (2) Methods and materials for teaching music in elementary school presented in a laboratory setting. Elementary Education majors only. Not open to those who successfully completed MUED 307. Prerequisite: MUSC 101.

MUED 306 METHODS OF TEACHING INSTRUMENTAL MUSIC IN ELEMENTARY SCHOOLS (4) Role of instrumental music in elementary school. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 329; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 308 and 310.

MUED 307 METHODS OF TEACHING VOCAL-GENERAL MUSIC IN THE ELEMENTARY SCHOOL (4) Vocal-general programs in elementary schools: Orff, Kodaly and Dalcroze techniques and principles and current trends; additional pre-K emphasis. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 327; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 309, 310 and 337.

MUED 308 METHODS OF TEACHING INSTRUMENTAL MUSIC IN SECONDARY EDUCATION (2) Methods and materials for the instruction of instrumental music. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 329; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 306 and 310.

MUED 309 METHODS OF TEACHING VOCAL-GENERAL MUSIC IN SECONDARY SCHOOLS (2) Methods and materials for instruction of general music. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 327; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 307, 310 and 337.

MUED 310 INTRODUCTION TO MUSIC IN SPECIAL EDUCATION (3) Curriculum materials and activities address needs of students with disabilities; development and adaptation of lesson plans and individual education programs are emphasized. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 329; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 306 and 308 (instrumental majors) or MUED 307, 309 and 337 (vocal-general majors).

MUED 337 TEACHING CHORAL MUSIC IN THE ELEMENTARY AND THE SECONDARY SCHOOL (2) Examination of materials, methods and procedures in organizing school choral groups and in teaching choral music to elementary and secondary students. Taken as part of the Fall MUED Intensive Term and Field Experience preceding enrollment in the following Spring Student Internship term; requires two full-day field experiences per week. Prerequisites: ELED 324; MUSC 327; admission to the Music Teacher Education Program; concurrent enrollment in fall term MUED Intensive Term and Field Experience—MUED 307, 309 and 310.

MUED 391 STUDENT INTERNSHIP IN ELEMENTARY SCHOOL — MUSIC (6) Full-time field experience in public school music classrooms under guidance of mentor teachers and university supervisor. Spring term only. Prerequisites: ELED 324, MUSC 327 or 329; successful completion of preceding fall term MUED Intensive Term and Field

Experience (MUED 306 and 308 for instrumental majors, or MUED 307, 309 and 337 for vocal-general majors and MUED 310); concurrent enrollment in MUED 392 and 401. Graded S/U.

MUED 392 STUDENT TEACHING IN SECONDARY SCHOOL — MUSIC (6) Full-time field experience in public school music classrooms under guidance of mentor teachers and university supervisor. Spring term only. Prerequisites: ELED 324, MUSC 327 or 329; successful completion of preceding fall term MUED Intensive Term and Field Experience (MUED 306 and 308 for instrumental majors, or MUED 307, 309 and 337 for vocal-general majors and MUED 310); concurrent enrollment in MUED 391 and 401. Graded S/U.

MUED 401 ENHANCING LITERACY IN THE MUSIC CLASSROOM (3) Children's literature, content area reference materials, music performance, and reading/writing strategies combine to integrate literacy into P-12 music education classrooms, concurrent with spring enrollment in MUED 391 and MUED 392. Prerequisites: ELED 324; MUSC 327 or 329; successful completion of preceding fall term MUED Intensive Term and Field Experience—MUED 306 and 308 (instrumental majors) or MUED 307, 309 and 337 (vocal-general majors), MUED 310; concurrent enrollment in MUED 391 and 392.

NURSING (NURS)

Upper Division

NURS 323 [523] CRISIS AND STRESS MANAGEMENT (3) Integrated, comprehensive, multicomponent approach to crisis intervention in a variety of individuals, groups and settings. Prerequisite: PSYC 101 or HLTH 101.

NURS 330 PROFESSIONAL NURSING: BRIDGE (3) Conceptual framework of Department of Nursing, including health, health promotion and maintenance for clients throughout the life span. Prerequisite: admission to Nursing major, RN in the state of Maryland.

NURS 332 PROFESSIONAL NURSING I: INTRODUCTION TO NURSING (3) Introduces students to the profession of nursing including the historical and theoretical basis of nursing and current issues facing the nursing profession. Prerequisite: Admission to major or sophomore standing with permission of the Department of Nursing.

NURS 333 PROFESSIONAL NURSING II: ISSUES (3) Advanced writing course for nursing that focuses on social policy and the contemporary issues and challenges of the health-care system and nursing. Prerequisite: Completion of all junior level, first-term nursing courses.

NURS 340 PATHOPHARMACOLOGY (5) This comprehensive course focuses on human pathophysiological and pharmacological concepts as a basis for nursing practice.

NURS 347 HEALTH ASSESSMENT ACROSS THE LIFE SPAN (3) Acquisition of skills for physical and psychosocial health assessment across the life span. Prerequisite: admission to the major.

NURS 349 HEALTH ASSESSMENT AND HEALTH PROMOTION ACROSS THE LIFE SPAN (4) Major concepts of health, health promotion and maintenance, and therapeutic communication. Focuses on the acquisition of skills for physical and psychosocial assessment across the life span. Prerequisites: Admission to the Nursing major.

NURS 350 NURSING AND HEALTHCARE I: FOUNDATIONS (5) Utilizes the nursing process to guide the student in providing care in a variety of settings building upon theoretical, psychomotor and interpersonal concepts. Prerequisites: Admission to the nursing major, NURS 332, NURS 340, NURS 347. The above courses may be taken concurrently with NURS 350. NURS 350 may not be taken in advance of other required junior year, first-term nursing courses.

NURS 352 NURSING AND HEALTHCARE III: MENTAL HEALTH (4) Focus on the nursing care of patients experiencing alterations in psychological and social behaviors that centers on application of therapeutic nursing interventions in a variety of community based environments. Prerequisites: junior level, first-term nursing courses.

NURS 353 NURSING PRACTICE II: ADULT HEALTH (5) Nursing care of adults experiencing alterations in health. Application of critical thinking skills and therapeutic nursing interventions in a variety of community-based environments. Prerequisite: completion of all courses in junior year, first term.

NURS 354 NURSING AND HEALTHCARE II: ADULT HEALTH AND ILLNESS (5) Through the use of the nursing process common health issues related to the adult client are examined. Emphasis is placed on the implementation of evidenced-based practice in the care of the adult client throughout the lifespan. Prerequisites: All junior-level, first-term nursing courses.

NURS 355 NURSING PRACTICE III: CHILDBEARING FAMILIES (5) Nursing care of childbearing families. Application of critical thinking skills and therapeutic nursing interventions in a variety of community-based environments. Prerequisite: completion of all courses in junior year, first term.

NURS 404 HEALTH CARE: AN INTERDISCIPLINARY APPROACH (3) Health care in America, exploring societal factors, resources, social policy, health care delivery, legal and ethical issues. Prerequisite: junior/senior status.

NURS 410 [510] SPIRITUALITY, HEALTH AND NURSING PRACTICE (3) Application of theory and research in spiritual care of diverse client populations across the life span and development of spiritual self-care plan of the provider. Prerequisites: one clinical course in nursing, RN status or consent of instructor.

NURS 416 CULTURAL DIVERSITY IN HEALTH CARE (3) Transcultural health care principles, focusing on cultural influences on biological, psychological, sociological, intellectual and spiritual dimensions of individuals. Historical perspective to contemporary cultural health care. Prerequisite: Junior-level standing or permission of the instructor.

NURS 431 PROFESSIONAL NURSING II: RESEARCH (2) Nursing research through preparation of a proposal; qualitative and quantitative approaches and ethical issues. Prerequisites: completion of all courses in the junior level; MATH 231, MATH 237, PSYC 212 or ECON 205.

NURS 433 PROFESSIONAL NURSING III: ISSUES (3) Transition from student to registered nurse; contemporary issues and challenges of professional nursing. Prerequisite: completion of all courses in the senior year, first term. Advanced Writing Course.

NURS 451 NURSING PRACTICE IV: PSYCHIATRIC AND MENTAL HEALTH (5) Nursing care of adults experiencing alterations in psychological and/or social behaviors. Application of critical thinking skills and therapeutic nursing interventions in a variety of community-based environments. Prerequisite: completion of all courses in the junior level.

NURS 453 NURSING PRACTICE V: CHILD HEALTH (5) Nursing care of children experiencing alterations in health. Application of critical thinking skills and therapeutic nursing interventions in a variety of community-based environments. Prerequisite: completion of all courses in the junior level.

NURS 455 NURSING PRACTICE VI: COMMUNITY HEALTH (5) Role of the professional nurse as provider and coordinator of care for complex families, aggregates and communities. Prerequisite: completion of all courses in the senior year, first term.

NURS 457 NURSING PRACTICE VII: CLINICAL PRACTICUM (2) Provider role of the nurse in a selected clinical environment. Application of critical thinking and therapeutic nursing interventions. Graded S/U. Prerequisite: completion of all courses in the senior year, first term.

NURS 459 NURSING PRACTICE VIII: LEADERSHIP AND MANAGEMENT (4) Leadership roles and management functions of the nurse as coordinator of care for clients across the life span in a variety of health care environments. Prerequisite: completion of all courses senior year, first term; NURS 433, NURS 455, NURS 457 (can be taken concurrently).

NURS 491 DIRECTED READINGS (1-3) Independent reading designed to explore topics and/or issues of special interest to the practice of nursing. Prerequisites: completion of all

300-level nursing courses and permission of chair of the department. NURS 433, NURS 455, NURS 457 (can be taken concurrently).

NURS 493 INDEPENDENT STUDY (1-3) Directed study designed to provide an in-depth educational experience in nursing. Topics related to theory and practice of nursing. Prerequisites: completion of all 300-level nursing courses or equivalent and permission of chair of department.

NURS 494 [594] TRAVEL STUDY IN NURSING (3-9) Historical and contemporary socio-political factors that guide the delivery of health care to various population groups in other countries. May be repeated for a maximum of 9 units. Prerequisite: consent of instructor.

OCCUPATIONAL THERAPY (OCTH)

Lower Division

OCTH 103 LEISURE AND HEALTH ISSUES IN CONTEMPORARY SOCIETY (3) The history and meaning of leisure activity, contemporary issues and the importance of leisure to health maintenance. Strategies for personally healthy activity.

OCTH 205 ALTERNATIVE AND COMPLEMENTARY HEALTH CARE (3) Comparison of Western and non-Western health practices. Cultural and ethical issues impacting health care. Legislative and reimbursement influence.

OCTH 211 PHILOSOPHY OF OCCUPATIONAL THERAPY (3) The relation of occupation to health, concentrating on a variety of types of occupation, and illustrating the effects of health and ill health on occupational behavior.

OCTH 213 SMALL GROUP DYNAMICS (3) A study of small groups used in therapeutic or health education settings. Lectures will examine group members' and leaders' roles, stages of a group's life, theory of developmental groups, and the structure and function of a variety of small groups used in therapy, education and community settings. Participatory experiences will supplement lectures to promote personal communication and effectiveness in groups. Prerequisites: SOCI 101, PSYC 101.

OCTH 216 LIFE SPAN ADAPTATION AND OCCUPATIONS (4) Interactions of biological, sensorimotor and psychosocial aspects of development with environmental and cultural factors; occupational roles and processes of change. Prerequisites: BIOL 190, PSYC 101, SOCI 101, ENGL 102.

OCTH 217 ANALYSIS OF OCCUPATIONAL PERFORMANCE I (4) Beginning development of occupational performance skills necessary for clinical practice. Prerequisites: PSYC 101 and SOCI 101. \$25 lab/class fee.

OCTH 218 ANALYSIS OF OCCUPATIONAL PERFORMANCE II (3) Laboratory experience to develop students' knowledge of the skills necessary in therapeutic media, technology application, job analysis and health maintenance. Prerequisites: OCTH 213, OCTH 216, OCTH 217. \$50 lab/class fee.

OCTH 221 CLINICAL KINESIOLOGY (3) Principles of biomechanics, muscle physiology, joint structure and muscle function, emphasizing palpation of anatomical structures and analysis of movement. Prerequisite: BIOL 213. Prerequisite or co-requisite: PHYS 202 or PHYS 211.

Upper Division

OCTH 301 GENETICS, HEALTH AND SOCIETY (3) Sociopolitical, economic and ethical issues of the Human Genome Project and genetic research. Health effects of genetic disorders and impact on lifestyles and occupation. Prerequisite: BIOL 115 or BIOL 190.

OCTH 305 DISABILITY, THE INDIVIDUAL AND SOCIETY (3) An overview of the nature, meaning and consequences of the construct of disability on individuals and society. Prerequisite: SOCI 101.

OCTH 313 ADULT NEUROLOGICAL OCCUPATIONAL THERAPY (3) Examination of the etiology, clinical course, management and prognosis of neurological conditions and other influences on people's engagement in occupations. Fundamentals of occupational therapy theory and practice applied to people with neurological conditions.

Prerequisites: OETH 211, OETH 218, OETH 221; BIOL 214, BIOL 427; consent of department.

OETH 314 PRINCIPLES OF PSYCHOSOCIAL OCCUPATIONAL THERAPY PRACTICE (5) Psychosocial aspects of human functioning and occupational implications of clinical conditions. Occupational therapy theory and practice applied to mental health. Prerequisites: OETH 211 or OETH 600, OETH 218 or OETH 600, OETH 213 or OETH 601, PSYC 361; to be taken concurrently with OETH 320. Prerequisite or co-requisite: BIOL 427.

OETH 317 ADULT MUSCULOSKELETAL OCCUPATIONAL THERAPY (3) Etiology, clinical course, management and prognosis of musculoskeletal conditions. Theory and practice applied to clients. Prerequisites: OETH 211, OETH 218, OETH 221; BIOL 214, BIOL 427, PHYS 202; to be taken concurrently with OETH 319. \$50 lab/class fee.

OETH 318 INDEPENDENT STUDY (1-6) Directed independent study designed to provide students with an in-depth investigation of an area or problem specific to occupational therapy. Consultation and supervision with designated faculty members and/or clinical practitioners. May be repeated for a maximum of 6 units. Prerequisite: consent of department.

OETH 319 PHYSICAL DYSFUNCTION LEVEL I FIELDWORK (3) Classroom and fieldwork experiences in evaluation and intervention in physical disabilities. Prerequisites: OETH 211 or OETH 600, OETH 218 or OETH 600, OETH 213 or OETH 601, OETH 221, BIOL 214, BIOL 427; to be taken concurrently with OETH 313 and OETH 317 or consent of department.

OETH 320 PSYCHOSOCIAL LEVEL I FIELDWORK (3) Classroom and fieldwork experiences in evaluation and intervention in psychosocial occupational therapy. Prerequisites: OETH 211 or OETH 600, OETH 218 or OETH 600, OETH 213 or OETH 601, PSYC 361; to be taken concurrently with OETH 314. Prerequisite or corequisite: BIOL 427.

OETH 323 GERONTOLOGICAL OCCUPATIONAL THERAPY (3) Interventions addressing the aging process and pathology in older adults. Prerequisites: OETH 211, OETH 216, OETH 218.

OETH 325 OCCUPATIONAL THERAPY PRACTICE WITH CHILDREN AND YOUTH (4) Examination of functional implications of pediatric conditions. Fundamentals of occupational theory and practice applied to children, adolescents and their families. Prerequisites: OETH 211 or OETH 600, OETH 218 or OETH 600, OETH 213 or OETH 601, OETH 221, BIOL 427; to be taken concurrently with OETH 326.

OETH 326 CHILDREN AND YOUTH LEVEL I FIELDWORK (3) Classroom and fieldwork practice in occupational therapy evaluation and intervention with children and youth. Corequisite: OETH 325.

OETH 428 OCCUPATIONAL THERAPY ORGANIZATIONS IN MODERN SOCIETY (3) Administration of programs within service delivery systems, considering technological, societal and economic trends. Prerequisites: OETH 319 or OETH 320 or OETH 326.

OETH 430 RESEARCH METHODS IN OCCUPATIONAL THERAPY (3) Guided independent research in topics related to occupational therapy theory and practice. Presentation of introductory materials on research methods. Prerequisites: OETH 313, OETH 319, OETH 320, MATH 237 or MATH 231 or PSYC 212.

OETH 435 PHYSICAL REHABILITATION LEVEL II FIELDWORK (9) Supervised Level II Fieldwork (480 hours) in occupational therapy practice. Focus on professionalism and entry-level competency. Prerequisite: OETH 313, 314, 317, 319, 320, 323, 325, 326 and consent of department. S/U grading.

OETH 436 PSYCHOSOCIAL LEVEL II FIELDWORK (9) Supervised Level II Fieldwork (480 hours) in occupational therapy practice. Prerequisites: OETH 313, 314, 317, 319, 320, 323, 325, 326 and consent of department. S/U grading.

OETH 437 SPECIALTY INTERNSHIP (4-6) Fieldwork experience to meet the student's special interests. Graded S/U. May be repeated for a maximum of 6 units. Prerequisites: OETH 436 and consent of department. Permit required.

OETH 470-479 [570-579] SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3) Designed to explore topics of special interest in the theory and practice of occupational therapy. May be repeated for a maximum of 3 units provided a different topic is covered. Prerequisite: consent of department.

Graduate Division

See TU *Graduate Catalog* for course descriptions.

PHILOSOPHY (PHIL)

Lower Division

PHIL 101 INTRODUCTION TO PHILOSOPHY (3) Fundamental problems of philosophy and various proposals for the solution of these problems.

PHIL 102 USING INFORMATION EFFECTIVELY IN PHILOSOPHY (3) Information gathering, evaluation and communication. Develops critical thinking and problem-solving techniques, communication and team-building skills.

PHIL 103 INTRODUCTION TO ETHICS (3) Introduction to the history and theory of ethics.

PHIL 111 INTRODUCTION TO LOGIC (3) Study of and practice in inductive and deductive reasoning, the composition of argument and demonstration, and the detection of formal and informal fallacies as developed in the Western tradition.

PHIL 112 HONORS LOGIC (3) Study of and practice in inductive and deductive reasoning, the composition of argument and demonstration, and the detection of formal and informal fallacies as developed in the Western tradition. Honors College course.

PHIL 201 SOCIAL AND POLITICAL PHILOSOPHY (3) A consideration of social and political doctrines from both Western and non-Western philosophical perspectives. The approach will be both historical and thematic. Themes will include the individual and the state, the male-female dialectic and attitudes toward property.

PHIL 204 RACE, CLASS AND GENDER (3) Social and political philosophy; contemporary American ideas of race, class and gender, with a focus on their interrelatedness.

PHIL 212 HONORS SPECIAL STUDIES IN PHILOSOPHY (3) Small group discussions and philosophical analysis of selected works not generally available in other electives. May be repeated for credit provided a different topic is covered. Honors College course.

PHIL 219 INTRODUCTION TO ASIAN PHILOSOPHY (3) Examination of the nature of Asian thought through a study of English translations of traditional sources of Indian, Tibetan, Chinese and Japanese philosophy.

PHIL 221 ANCIENT GREEK PHILOSOPHY (3) The origins of Western philosophical thought will be studied in the works of the Presocratics, Socrates, Plato and Aristotle.

PHIL 230 PHILOSOPHY OF LITERATURE (3) Philosophical analysis of literature. A consideration of philosophical orientations in these works will be undertaken.

PHIL 251 AFRICAN AMERICAN PHILOSOPHY (3) A philosophical examination of the current issues in African American thought in such fields as religion, politics, education, economics and aesthetics. An effort will be made to determine the place and the role of the contemporary African American in history.

PHIL 253 CONTEMPORARY ETHICAL PROBLEMS (3) The meaning of moral experience and the moral problems which arise in connection with human sexual integrity, ownership of property, welfare, violence, civil disobedience, punishment, war and truth telling in social relations and government.

PHIL 255 ENVIRONMENTAL ETHICS (3) Philosophical views on rights of non-human animals, intervaluation of environment and economics, "deep" vs. "shallow" ecological ethics, duties to future generations and other issues.

PHIL 270-279 PHILOSOPHICAL PERSPECTIVES (3) Considers contemporary issues from the uniquely philosophical perspective to stimulate independent reflection. May be repeated for credit provided a different topic is covered.

Upper Division

PHIL 301 [501] PHILOSOPHIES OF INDIA (3) Examination of major ideas in the Vedic, Epic, Classical darsana and modern periods. Prerequisite: one lower-level course in philosophy or consent of instructor.

PHIL 302 [502] PHILOSOPHIES OF CHINA AND JAPAN (3) Examination of some major philosophical systems through selected writings in translation. Prerequisite: one lower-level course in philosophy or consent of instructor.

PHIL 311 SYMBOLIC LOGIC (3) An introduction to the concepts and methods of symbolic logic. Translation of arguments from English into symbolic notation; methods of establishing the validity of arguments by means of symbolic logic. Discussion of logical notions, such as consistency and inconsistency, logical truth and the philosophy of logic. Prerequisite: PHIL 111 or consent of instructor.

PHIL 319 SCIENCE, TECHNOLOGY AND VALUES (3) Impact of modern science on various philosophical issues: science and religion, mind and computers, time travel, Einstein's relativity, human freedom, the ethical limits of technology. Prerequisites: one course in philosophy and two courses in science, or consent of instructor.

PHIL 320 PHILOSOPHY OF SCIENCE (3) Concepts, method and nature of science including induction and theory confirmation, probability, explanation, natural laws, space and time, and the objectivity of science. Prerequisite: one course in either philosophy or science.

PHIL 321 PHILOSOPHY OF LAW (3) An examination of the nature and theories of law, the relationship between law and morality, the nature of legal obligation and the notion of justice. Prerequisite: one lower-level course in philosophy or consent of the instructor.

PHIL 322 [522] HELLENISTIC AND MEDIEVAL PHILOSOPHY (3) The philosophical schools of the Hellenistic and Roman periods, viz. Stoicism, Epicureanism, Scepticism and Neo-Platonism, and the two main Christian philosophies of the Middle Ages, viz., Augustinianism and Thomism. Prerequisite: one lower-level course in philosophy.

PHIL 324 [524] MODERN PHILOSOPHY (3) The history of philosophy beginning with Descartes through the 19th century. Prerequisite: one lower-level course in philosophy.

PHIL 325 [525] SCHOOLS OF CONTEMPORARY PHILOSOPHY (3) A survey with varying emphasis on a number of such contemporary philosophical positions as pragmatism, phenomenology, logical positivism, the analysts, neo-Aristotelianism, the philosophers of science and the existentialists. Prerequisite: one lower-level course in philosophy.

PHIL 326 [526] AMERICAN PHILOSOPHY (3) The history of the main currents of American philosophical thought as exemplified in such writers as Edwards, Emerson, Pierce, James, Royce, Dewey and Whitehead. Prerequisite: one lower-level course in philosophy.

PHIL 327 AFRICAN PHILOSOPHY (3) Examination of major ideas and issues in African systems of thought. Prerequisite: one lower-level philosophy course or consent of instructor.

PHIL 331 [531] CONCEPTS OF WOMAN: AN HISTORICAL APPROACH (3) Various concepts which philosophers have used to define woman. An historical survey approach, with readings from Plato, Aquinas and others, and ending with Beauvoir. Prerequisite: one lower-level course in philosophy.

PHIL 332 FEMINIST PHILOSOPHY (3) Contemporary methods and problems, including redefinition of traditional areas of philosophy and creation of new issues for investigation. Prerequisite: one lower-level philosophy course or consent of instructor.

PHIL 339 [539] THEORIES OF KNOWLEDGE (3) An historical and systematic approach to the truth value and elements of the forms of human knowledge. The theories of major philosophers will be studied. Prerequisite: one lower-level course in philosophy.

PHIL 341 [511] ETHICS (3) Analysis of readings from the principle classical and contemporary ethical sources, study of the basic moral concepts as found in these sources;

applications to contemporary moral concerns. Prerequisite: one lower-level course in philosophy.

PHIL 343 [509] AESTHETICS (3) An analytical and historical examination of concepts of the nature of art, beauty, aesthetic value, aesthetic perception and of the modes of existence of artifacts. Prerequisite: one lower-level course in philosophy.

PHIL 353 [551] PHILOSOPHY OF RELIGION (3) Exposition of various approaches to the philosophy of religion with an analysis of the major issues on which they differ and agree. Not open to those who have successfully completed PHIL 451. Prerequisites: two courses in philosophy or religion.

PHIL 361 [561] BIOMEDICAL ETHICS (3) A search for guidelines in such moral problems as abortion, the care of the dying, organ transplants, informed consent in therapy and experimentation, adequate health care and its just distribution, control of human behavior by drugs, surgery, etc., test-tube reproduction, population control, genetic engineering and counseling. Prerequisite: one lower-level course in philosophy or consent of instructor.

PHIL 371 [563] BUSINESS ETHICS (3) Economics is one of the "moral sciences" insofar as it deals with an important sphere of human activity which intends a good. This course will institute a philosophical reflection on economic ideas as they appear in the three main categories of opinion, viz., conservative, liberal and radical. Attention will be drawn to the epistemological, ethical and metaphysical presuppositions of these traditions. Prerequisite: one lower-level course in philosophy or consent of instructor.

PHIL 380-389 [580-589] PHILOSOPHICAL TOPICS (3) Courses offered under this title will be of variable content. Topics of traditional philosophical interest or of philosophical problems in other areas of knowledge or of contemporary interest will be offered. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: one lower-level course in philosophy.

PHIL 413 [513] PHENOMENOLOGY (3) An examination of phenomenology as both a philosophical method and philosophical position. Themes to be considered include consciousness, the body, time and the experience of others. Primary course readings in the works of Husserl, Heidegger, Sartre, Merleau-Ponty. Prerequisite: two courses in philosophy.

PHIL 417 [517] EXISTENTIALISM (3) Some of the major existentialist philosophers will be studied, e.g., Kierkegaard, Nietzsche, Heidegger, Sartre, Beauvoir. The philosophical themes of transcendence, the absurd, estrangement and anxiety will be considered. Prerequisites: two courses in philosophy.

PHIL 427 KANT (3) Study of Kant's most important writings. Prerequisites: two courses in philosophy.

PHIL 440-449 [540-549] PHILOSOPHICAL SYSTEMS (3) The study of a major philosophical system or position, classical or modern, and of its important proponents. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: two courses in philosophy.

PHIL 460-469 WRITING SEMINAR IN PHILOSOPHICAL STUDIES (3) The course concentrates on a specific issue or thinker within the philosophical tradition and on developing the skills necessary to do quality written work in the discipline. Possible topics include Plato, Aristotle, Hegel, concepts of space and time, dimensions of freedom. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: ENGL 102 and two courses in philosophy.

PHIL 470-479 [570-579] PHILOSOPHICAL PROBLEMS (3) A consideration of one of the perennial interests of philosophy. May be repeated for credit provided a different topic is covered. Prerequisite: two courses in philosophy.

PHIL 495 RESEARCH TUTORIAL IN PHILOSOPHY (3) Directed readings and research leading to a thesis paper under one or more members of the department. Prerequisites: senior majors in philosophy or senior non-major, submission in advance of an outline of proposed research; permission of proposed director and department chair. Repeatable for a maximum of 6 units provided a different topic

is covered, but only one attempt will count towards the major requirements.

PHIL 497 PHILOSOPHY INTERNSHIP (3-6) Supervised experience in work settings using the analytic, organizational, comprehension, and communication skills and content knowledge available through the study of philosophy. Positions may be in government agencies, public or private foundations, industry, journalism, law firms, among others. May be repeated for a maximum of 6 units. No credit toward the Philosophy major. Prerequisite: approval of the philosophy internship coordinator. Graded S/U.

PHYSICAL SCIENCE (PHSC)

Lower Division

PHSC 101 PHYSICAL SCIENCE I (4) Fundamental principles of selected topics from physics and chemistry, emphasizing construction of concepts from experimental evidence. May not be used for the Natural Science major. \$25 lab/class fee.

PHSC 103 PHYSICAL SCIENCE II (4) Fundamental concepts of atoms, molecules, energy, states of matter and processes involved in phase transitions integrating chemistry, earth science and physics through application to interdisciplinary, environmentally oriented topics. One hour lecture, four hours lecture-lab. Prerequisite: PHSC 101 or permission of instructor.

PHSC 151 ENERGY AND POLLUTION (3) Basic forms of energy: thermal, electrical, nuclear, solar. The relationship between energy and pollution. The problems of energy and pollution. Two hours of lecture and two hours of laboratory per week. High school algebra is suggested.

PHSC 195 COURSE RESEARCH IN 100-LEVEL COURSES (1) Individual projects in any branch of physical science. Students can choose either to work on projects or in areas suggested by physical science faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for credit at different levels. Prerequisite: permission of the instructor who will direct the proposed work.

PHSC 234 STILL PHOTOGRAPHY (3) Emphasis will be on the production of photographs, rather than the mastery of many techniques. Camera operation, developing, printing and other topics according to student interest.

PHSC 295 COURSE RESEARCH IN 200-LEVEL COURSES (1) Individual projects in any branch of physical science. Students can choose either to work on projects or in areas suggested by physical science faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for credit at different levels. Prerequisite: permission of the instructor who will direct the proposed work.

Upper Division

PHSC 303 [503] EARTH-SPACE SCIENCE (3) Physical science principles applied in the study of earth and space. Emphasis on experimental and discovery approaches. Prerequisite: PHSC 101. \$25 lab/class fee.

PHSC 360 INTERNSHIP IN PHYSICAL SCIENCE (2-3) Practical experience in Physical Science in industry or public or private agencies through the university's Internship/Cooperative Education Program. Special permit and fee required. May be repeated for a maximum of 6 units. Prerequisites: major in Natural Science, junior or senior standing; 2.70 GPA; consent of major adviser.

PHSC 401 [501] ADVANCED LABORATORY IN PHYSICAL SCIENCE (2) Exacting laboratory work of an advanced nature under the guidance of the Physical Sciences staff. Students will present and defend their work at seminar. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor.

PHSC 405 [505] FUNDAMENTAL CONCEPTS IN THE EARTH SCIENCES (3) Principles of astronomy, geology and related earth sciences. Methods of investigation employed by earth scientists. Observations in the planetarium and field studies in the Baltimore area. Two lecture hours and one two-hour

laboratory period. No credit if student has taken ASTR 161 and/or GEOL 121. Prerequisite: PHSC 101 or equivalent.

PHSC 411 [511] PHYSICAL SCIENCE FOR TEACHERS (3) An in-service course for teachers in the elementary and/or junior high school designed to develop physical science concepts. Emphasis will be placed on developing these concepts through laboratory work. Prerequisite: teaching experience.

PHSC 470-479 [570-579] SPECIAL TOPICS IN PHYSICAL SCIENCE (1-4) The study of special topics in the areas of physical science. Special topics will be determined by their need for study and relevance to existing courses. May be repeated for credit provided a different topic is covered.

PHSC 490 INDEPENDENT STUDY IN PHYSICAL SCIENCE (1-4) Individual and supervised research in selected areas of the physical sciences. Topics may be either theoretically or experimentally oriented. May be repeated for a maximum of 6 units. Prerequisites: junior status and one course in PHSC.

PHSC 491 DIRECTED READINGS (1-4) Independent reading in an area selected by the student in consultation with the instructor. May be repeated for a maximum of 6 units. Prerequisites: junior status and one course in PHSC.

PHSC 494 TRAVEL STUDY (1-3) Investigation of field problems and phenomena. May be repeated for a maximum of 3 units.

PHSC 495 [595] COURSE RESEARCH IN 400-LEVEL COURSES (1) Individual projects in any branch of physical science. Students can choose either to work on projects or in areas suggested by physical science faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for credit at different levels. Prerequisite: permission of the instructor who will direct the proposed work.

PHYSICS (PHYS)

Lower Division

PHYS 100 UNDERSTANDING PHYSICS (3) Designed for non-science majors. An inquiry into intuitive, philosophical, historical and scientific understanding of principal concepts of classical and modern physics. Elementary algebra is used in this course, but emphasis is placed on physical understanding. Demonstrations and short illustrative experiments will be a part of the course. Three lecture hours.

PHYS 102 INTRODUCTION TO PHYSICS (3) Designed for students unprepared to take General Physics for Majors (PHYS 241), concentrating on mathematical expression of physical concepts as developed logically and through experimentation. This course begins meeting approximately one month into the term and is scheduled to coincide with the lecture time for PHYS 241.

PHYS 103 HOW THINGS WORK (3) For non-science majors: a practical introduction to physics and science in everyday life. Examines the workings of everyday things from toys to next-generation computers. Introduces fundamental science concepts underpinning ordinary to high-tech objects, their principles of operation, the histories of their development. Emphasizes critical thinking and communication skills.

PHYS 131 LIGHT AND COLOR (4) Some aspects of light and color and of vision will be examined on a factual and descriptive basis. Predominantly qualitative explorations will be made of the origin of light, of its wave and particular behavior, of the polarization of light, of lasers and holography, of the origin and physical basis of color, and of the physics of vision. This course in liberal arts physics is offered for curious inquirers who have had minimal contact with physics. Three lecture hours and two laboratory hours per week. \$25 lab/class fee.

PHYS 135 INTRODUCTION TO HOLOGRAPHY (4) Creative use of the holographic medium along with study of appropriate scientific principles and aesthetic values. Behavior of waves, including water, sound and electromagnetic. Optics of lenses and mirrors. Lasers, holography and experimental techniques of making holograms. Three lecture hours, two laboratory hours.

PHYS 143 PHYSICS OF SOUND AND MUSIC (4) Study of sound and its production by various instruments, including the human voice. Physical interpretations of concepts, such as noise, pitch, mechanical and acoustic waves, and oscillations, loudness, harmonics and timbre, scales and temperament, etc. Three lecture hours, two laboratory hours. Not open to students who have successfully completed PHYS 141. \$25 lab/class fee.

PHYS 185 INTRODUCTORY SEMINAR IN PHYSICS (1) This seminar is intended for freshmen and sophomores who have demonstrated exceptional ability in the sciences, and it will involve them directly with current ideas and research in physics. Classical physics, quantum physics, relativity and the new astronomy will be covered. Prerequisite: permission of the department.

PHYS 202 GENERAL PHYSICS FOR THE HEALTH SCIENCES (5) Special emphasis on motion, including kinetics and dynamics of linear and angular motion. Not intended for pre-medical, pre-dental or pre-physical therapy programs. Prerequisite: three years of high school mathematics. \$25 lab/class fee.

PHYS 203 TOPICS IN PHYSICS FOR BIOLOGY MAJORS (5) Topics may include mechanical and thermal properties of matter; forms of energy and conversion; optics; waves; electromagnetics. Students who wish to seek advanced degrees in biology, dentistry, medicine or related fields should enroll in PHYS 211-212 or 241, 242, 243. Prerequisite: MATH 115.

PHYS 211 GENERAL PHYSICS I (4) For arts and sciences, biology and geosciences majors: mechanics, heat, light, electricity, magnetism and a brief introduction to modern physics. Three lecture hours and one three-hour laboratory period. Prerequisite: MATH 115 or good standing in high school algebra and trigonometry. \$25 lab/class fee.

PHYS 212 GENERAL PHYSICS II (4) For arts and sciences, biology and geosciences majors; continuation of PHYS 211. Mechanics, heat, light, electricity, magnetism and a brief introduction to modern physics. Three lecture hours and one three-hour laboratory period. Prerequisite: PHYS 211. \$25 lab/class fee.

PHYS 241 GENERAL PHYSICS I CALCULUS-BASED (4) Calculus-based physics for science and engineering majors. Mechanics and the conservation laws, gravitation, simple harmonic motion. Prerequisite: MATH 273 (may be taken concurrently). \$25 lab/class fee.

PHYS 242 GENERAL PHYSICS II CALCULUS-BASED (4) Continuation of PHYS 241. Electricity, magnetism, DC and AC currents, geometric optics. Prerequisites: PHYS 241, MATH 274 (may be taken concurrently). \$25 lab/class fee.

PHYS 243 GENERAL PHYSICS III (4) Fluid kinematics and dynamics, waves, thermodynamics, physical optics, introduction to modern physics. Prerequisite: PHYS 242.

PHYS 244 MICROCOMPUTER APPLICATIONS IN THE PHYSICAL SCIENCES (3) Assembling your own personal computer and using it for data acquisition and analysis, numerical solutions, simulations and special projects. Prerequisites: PHYS 211 or PHYS 241; COSC 165, or consent of instructor.

PHYS 251 HONORS GENERAL PHYSICS I CALCULUS-BASED (4) Calculus-based study of motion, including kinematics and dynamics of linear and rotational motion, conservation laws, gravitation, and simple harmonic motion. Prerequisite: MATH 273 (may be taken concurrently). Open to Honors College students or by permission of the Honors College dean and professor of the course.

PHYS 252 HONORS GENERAL PHYSICS II CALCULUS-BASED (4) Continuation of PHYS 251. Electricity, magnetism, DC and AC circuits, geometric optics. Prerequisites: PHYS 252, MATH 274 (may be taken concurrently). Honors College course.

PHYS 270 COMPUTERS IN PHYSICS (4) A required course for the Applied and General tracks of the Physics major. Introduction to hardware and software applications of computers in physics, including computer interfacing to experiments, computer-aided design, LabView program-

ming, data analysis, simulation and modeling techniques. Prerequisite: PHYS 241.

PHYS 295-296 RESEARCH PROBLEMS IN PHYSICS (1-3) Individual project in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for credit at different levels. Prerequisite: permission of the instructor who will direct the proposed work.

Upper Division

PHYS 307 [507] INTRODUCTORY MATHEMATICAL PHYSICS (3) Mathematical expressions for selected topics, such as forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Prerequisites: PHYS 212 or PHYS 242; MATH 274.

PHYS 311 [511] MODERN PHYSICS I (3) A description of special relativity, the quantum theory, atomic structure and spectra. Prerequisites: MATH 274, PHYS 242 or PHYS 252; or PHYS 212 with consent of instructor.

PHYS 312 [512] MODERN PHYSICS II (3) A required course for the Applied and General tracks of the Physics major. Applications of special relativity and quantum theory to the various disciplines in physics, including solid state, nuclear, elementary particles and cosmology. Prerequisite: PHYS 311.

PHYS 335 [535] BASIC ELECTRONICS (4) Circuit components, characteristics of semi-conductors, electrical measurements, method of circuit analysis, electronic devices. Three lecture hours and one three-hour laboratory period. Prerequisite: PHYS 212 or PHYS 242 or consent of instructor.

PHYS 337 [537] DIGITAL ELECTRONICS (4) Subjects covered will be basic concepts of digital electronics such as gates, logic modules, truth tables, digital codes, sequential systems, semi-conductor memories, decade counters. The laboratory program is designed to give students first-hand experience on the material covered in lecture using integrated circuits and LED display systems. Two hours lecture, three hours laboratory. Prerequisite: MATH 115 or equivalent.

PHYS 341-342 [541-542] INTERMEDIATE PHYSICS LABORATORY I,II (3,3) First term: The measurement of several fundamental physical constants. Exploration of classical and modern research methods: lasers, holography, optical and nuclear spectroscopy. Second term: Several advanced experiments and a research project. Familiarization with machine shop procedure, vacuum and other experimental techniques. Five laboratory hours. Prerequisite: PHYS 270; and PHYS 311 or PHYS 311 concurrently. (Lab II: Prerequisite: PHYS 341)

PHYS 351 [551] MECHANICS I (4) Systems of coordinates, kinematics and transformations; Newtonian dynamics of particles and systems of particles; linear systems, oscillations and series techniques; calculus of variations and the Lagrangian and Hamiltonian formulations; application of Lagrangians to gravitation/central force motion. Optional: non-linear oscillations. Prerequisites: PHYS 242; PHYS 307 or consent of instructor.

PHYS 352 [552] THERMODYNAMICS AND KINETIC THEORY (3) Principles and laws of classical thermodynamics applied to simple irreversible processes, including chemical, elastic, electric and magnetic phenomena; thermodynamic functions and Maxwell's relations; the conservation equations in elementary kinetic theory; fluctuations; and irreversible transfer effects. May be taken concurrently with PHYS 243 or by permission. Three lecture hours. Prerequisites: PHYS 212 or PHYS 243, MATH 274.

PHYS 354 [554] ELECTRICITY AND MAGNETISM I (4) Electrostatics, magnetostatics and electromagnetic radiation, including Divergence Theorem and Stokes' Theorem, electrostatics in free space and dielectric materials, the Biot-Savart Law, the magnetic vector potential, inductance and electromotance, magnetic materials, Maxwell's Equations in free space and in materials, boundary value problems

(Snell's and Fresnel's Laws). Prerequisites: PHYS 243; PHYS 307 or consent of instructor.

PHYS 361 OPTICS FUNDAMENTALS (4) Geometric, wave and quantum optics: lenses and mirrors, lens aberrations and design, optical instruments, interference diffraction, polarization, absorption and scattering, lasers, holography and the dual nature of light. Three lecture hours and one three-hour laboratory each week. Prerequisites: PHYS 243, and PHYS 341 or consent of the instructor.

PHYS 385 [585] PHYSICS SEMINAR (1) Students participate in colloquia on topics of current interest in physics research under guidance of instructor. One lecture hour. Prerequisite: at least junior standing.

PHYS 391 INTERNSHIP IN PHYSICS (2-3) Practical experience in industry, public and private agencies. Not for major or minor credit. Special permit and fee required. May be repeated for a maximum of 6 units. Prerequisites: 2.70 GPA, junior or senior standing, major in Physics, consent of department. Graded S/U.

PHYS 395-396 [595-596] RESEARCH PROBLEMS IN PHYSICS (1-3) Individual project in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for a maximum of 6 units. Prerequisite: permission of the faculty member who will direct the proposed work.

PHYS 411 GRAVITATION, RELATIVITY AND COSMOLOGY (3) Development of Einstein's general theory of relativity and its relevance to astrophysics: theory of gravity, relativistic effects of massive stars, black holes, gravity waves, cosmology. Offered in alternate years.

PHYS 435 [535] ELECTRONICS (3) Principles of transistors with emphasis on their design and construction and an introduction to logic circuits. Two lecture hours and one two-hour laboratory. Prerequisite: PHYS 335.

PHYS 437 [537] INTRODUCTION TO MICROPROCESSOR-BASED DIGITAL SYSTEMS (3) An introductory course on basic microcomputer concepts. Topics covered include basic structure and organization of microcomputers, digital logic design, assembly language programming, memory elements and applications. Hardware-oriented experiments will be conducted providing practical experience in interfacing the microcomputer to a variety of instruments and input-output devices. Two hours lecture and two hours laboratory. Prerequisite: PHYS 307.

PHYS 445 [545] LASERS AND HOLOGRAPHY (3) The wave front reconstructions, laser, theory, the properties and making of holograms, and the applications of lasers and holography will be covered. Special projects will be assigned to students depending upon their individual theoretical and experimental background. Prerequisite: PHYS 243 or consent of instructor.

PHYS 451 [551] MECHANICS II (3) Continuation of PHYS 351. Rotation transformations; perturbation and Green's function techniques in solution of oscillating systems; collision; rotating frames of reference and dynamics of rigid bodies (including Euler's angles, precession, nutation); theory of coupled small oscillations. Optional: special relativity; continuum mechanics. Prerequisite: PHYS 351.

PHYS 453 [553] PHYSICAL OPTICS (3) Electromagnetic theory of light, wave solutions, interference, diffraction, scattering, radiation from coherent and incoherent sources, elementary theory of masers and lasers. Three lecture hours. Prerequisite: PHYS 354 or consent of instructor.

PHYS 454 ELECTRICITY AND MAGNETISM II (3) Continuation of PHYS 354. Wave guides, retarded potentials, dipole radiation, relativistic electrodynamics. Prerequisite: PHYS 354.

PHYS 455 [555] INTRODUCTORY QUANTUM MECHANICS (3) Schrödinger equation, states of one particle in one dimension, potential barrier problems in one dimension, the harmonic oscillator, system of particles in one dimension, motion in three dimensions, angular momentum, spin, application to atomic physics. Prerequisites: PHYS 311, PHYS 351 (may be taken concurrently).

PHYS 456 [556] INTRODUCTION TO STATISTICAL MECHANICS (3) Distribution functions, microcanonical, canonical and grand canonical ensembles, the partition function and thermodynamics relations. Fermi-Dirac and Bose-Einstein statistics, some simple models and applications, the Maxwell-Boltzmann transport equation and the hydrodynamic equation, transport coefficients. Three lecture hours. Prerequisite: PHYS 455.

PHYS 457 SOLID STATE PHYSICS (3) Crystal structure, wave propagation in periodic structures, the Fermi gas, energy bands, magnetism are presented as a central theoretical core for the study of the solid state. Some of the basic models, concepts and manifest properties of solids are also included. Prerequisites: PHYS 311, PHYS 351 and PHYS 354.

PHYS 459 [559] NUCLEAR AND PARTICLE PHYSICS (3) A lecture and problem course dealing with experimental and theoretical methods for the study of nuclear and particle physics. Topics include properties of nuclei, nuclear transitions, nuclear models, nuclear reactions, relativistic interactions, symmetry, fundamental interactions and contemporary models. Prerequisites: PHYS 311; PHYS 307 or consent of instructor.

PHYS 461 ELECTRO-OPTICS (4) Optical sources and detectors, electronics, controls and modulators. Radiant energy and power measurements, laser instrumentation, fiber optics, photo-active devices. Three lecture hours and one three-hour laboratory each week. Prerequisites: PHYS 361, PHYS 335 and PHYS 341-342, or consent of instructor.

PHYS 470-479 SPECIAL TOPICS IN PHYSICS (3) Special topics in the area of physics. Special topics will be determined by current interests of the faculty and the needs of the curriculum. Special permit of the department is required.

PHYS 486 [586] PHYSICS SEMINAR II (1) Students participate in colloquia on topics of current interest in physics research under guidance of instructor. One lecture hour. Prerequisite: senior standing or consent of instructor.

PHYS 490 [590] INDEPENDENT STUDY IN PHYSICS (1-4) May be repeated for a maximum of 6 units. Prerequisite: at least junior status and one course in the Department of Physics.

PHYS 491 [591] DIRECTED READINGS (1-4) May be repeated for a maximum of 6 units. Prerequisites: At least junior status and one course in the department.

PHYS 495 [595] CAPSTONE PROJECT IN PHYSICS (4) Individual project in applied or theoretical physics research. Prerequisite: consent of instructor who will mentor the research project.

PHYS 496 RESEARCH PROBLEMS IN PHYSICS (1-3) Individual projects in any branch of physics. Students can choose either to work on projects or in areas suggested by physics faculty. At the completion of a project, students must write a formal research paper on the work done. Repeatable for credit at different levels. Prerequisite: permission of the instructor who will direct the proposed work.

PHYS 499 HONORS THESIS IN PHYSICS (1-4) Writing of an honors thesis based on independent research done under the direction of a staff member. May be repeated for a maximum of 6 units. Prerequisites: consent of instructor and open only to advanced honors candidates.

POLITICAL SCIENCE (POSC)

Lower Division

POSC 100 USING INFORMATION EFFECTIVELY: UNDERSTANDING POLITICAL SYSTEMS (3) The nature of political systems and the skills necessary for systems thinking; methods and technologies for gathering, evaluating and presenting information. Not open to those who successfully completed IDLA 103.

POSC 101 INTRODUCTION TO POLITICAL SCIENCE (3) The origins of modern governments. The nature of constitutions and constitutionalism. A definition and interpretation of politics.

POSC 102 HONORS INTRODUCTION TO POLITICAL SCIENCE (3) The origins of modern government. The nature of constitutions and constitutionalism. A definition and

interpretation of politics. Prerequisite: admission to Honors College.

POSC 103 AMERICAN NATIONAL GOVERNMENT (3) Structure and functions of the government of the United States and the problems involved in the extension of the scope of democratic government in our contemporary life.

POSC 105 GOVERNMENTS OF THE WORLD (3) Comparative survey of governments and political systems in a number of major countries in the world today. Attention given to political behavior, structures, processes and policies. Not open to those who successfully completed POSC 137.

POSC 107 INTRODUCTION TO INTERNATIONAL RELATIONS (3) An introductory examination of principles of legal, political and social relations among nations; coordination and conflict in the international system; global issues, such as trade, security, war and peace, power and formation of foreign policy.

POSC 108 HONORS INTERNATIONAL RELATIONS (3) An introductory examination of principles of legal, political and social relations among nations; coordination and conflict in the international system; global issues, such as trade, security, war and peace, power and formation of foreign policy. Honors College course.

POSC 207 STATE GOVERNMENT (3) Historical background, state constitutions and the legislative, executive and judicial branches of government. Problems of state administration and federal-state relations.

POSC 209 INTRODUCTION TO LAW (3) The legal process in the United States for the liberal arts student.

POSC 212 HONORS IN POLITICAL SCIENCE (3) Supreme Court as a political institution, including personal policy preferences of justices in regard to civil rights and liberties. Honors College course.

Upper Division

POSC 301 POLITICAL RESEARCH I (3) Multi-method introduction to political research. Discusses how to frame and answer questions about politics. Covers quantitative and qualitative methods. Prerequisite: one POSC course.

POSC 303 [503] THEORY OF INTERNATIONAL POLITICS (3) The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restraints upon the struggle for power. Prerequisite: HIST 103 or POSC 107 or consent of instructor.

POSC 304 [504] POLITICS OF METROPOLITAN GROWTH AND CHANGE Examination of the political economy of metropolitan growth; role of federal, state, and local actors and policies in shaping development. Prerequisite: one lower-level political science course or consent of the instructor.

POSC 305 [505] URBAN GOVERNMENT AND POLITICS (3) The political history of American cities from the 18th century through the recent reform movement. City charters, home rule, types of executives, political machines, the metropolitan area. Prerequisite: POSC 103.

POSC 307 [507] CONTEMPORARY INTERNATIONAL POLITICS (3) Computer simulation (conducted jointly with colleges and universities throughout the world) used to study the formulation and implementation of contemporary international politics. Prerequisite: POSC 107 or POSC 303 or consent of instructor.

POSC 329/529 THE POLITICS OF ETHNICITY AND NATIONALISM Pervasiveness of ethnicity in domestic and international politics, and the instruments for managing ethnic conflict. Prerequisite: POSC 105 or 107, or 6 hours of POSC credit, or consent of instructor.

POSC 334/534 GOVERNMENTS AND POLITICS OF EAST ASIA Government and politics of East Asia, emphasis on China and Japan. Historical development of political institutions and current events within these states. Prerequisite: any 100-level POSC course or consent of instructor.

POSC 337 [508] COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3) An examination of the problems of modernization and stable constitutional rule in England, France, Italy and Germany. Prerequisite: POSC 101 or POSC 105 or consent of instructor.

POSC 339 [509] COMPARATIVE POLITICAL SYSTEMS (3) Attempt to bring together the analytical concepts and methodological techniques that may be applied to the study of political systems in a comparative sense. Prerequisite: POSC 103 or POSC 105 or consent of instructor.

POSC 340 COMPARATIVE PUBLIC POLICY (3) Comparative study of the policy problems and processes of the United States, Canada and western European countries, focusing on the growing convergence of public policy making in the states of the developed world. Prerequisites: POSC 101, POSC 103, POSC 105 or consent of instructor.

POSC 343/543 AFRICAN AMERICAN POLITICS Examination of African American strategies in struggle for full citizenship rights; political behavior in post-Civil Rights era; contemporary trends in electoral politics at local, state and national levels. Prerequisite: one lower-level political science course or consent of instructor.

POSC 345 GOVERNMENTS AND POLITICS OF EAST ASIA: FOCUS ON CHINA AND JAPAN (3) Examination of the governments and politics of East Asia with a particular emphasis on China and Japan. Emphasizes current political events and structures. Prerequisite: POSC 105 or consent of the instructor.

POSC 351 [551] THE GOVERNMENT AND POLITICS OF LATIN AMERICA (3) An examination of the informal and formal rules of the political "game" in Latin America with an emphasis on four types of political systems found in contemporary Latin America: democratic reformist, revolutionary, populist and military authoritarian. Prerequisite: POSC 101 or POSC 105 or consent of instructor.

POSC 355 [512] THE LATIN AMERICAN POLICY OF THE UNITED STATES (3) An analysis of the Latin American policy of the United States from the Monroe Doctrine to the present. Emphasis will be on historical, political, economic and security factors in the ebb and flow of inter-American relations. Prerequisite: POSC 101 or POSC 105 or consent of instructor.

POSC 375 [514] PUBLIC ADMINISTRATION (3) Administration as a central element of contemporary society, with special reference to the problems of government organization, control, personnel, finance and public relations. Prerequisite: POSC 103.

POSC 381 [515] THE PRESIDENCY (3) A discussion of the origin of the office, the selection of the president and policymaking in the executive branch. Prerequisite: POSC 103.

POSC 383 [516] CONGRESS (3) An investigation of the relations of Congress with the other branches of government and with the political parties and interest groups. Also examines the relationships between members of Congress and their constituency as well as the internal dynamics of Congress. Prerequisite: POSC 103.

POSC 384 [564] THE JUDICIAL SYSTEM (3) Roles, functions and operations of the American judicial system. Examining ideology of law and justice and consequences of legal decisions. Prerequisite: POSC 103 or consent of instructor.

POSC 401 POLITICAL RESEARCH II (3) Statistical methods to explore political phenomena. Polling, comparative research, legislative voting analysis and multivariate statistics. Prerequisite: POSC 301 and one other upper-division POSC course, or consent of instructor.

POSC 417 [517] AMERICAN POLITICAL PARTIES (3) Origin and development of the American two-party system. The activities of pressure groups and organizations, and their effects upon the party system. Prerequisite: POSC 103 or consent of instructor.

POSC 418/518 CONSTITUTIONAL LAW AND POLITICS (3) The nature and origins of the Constitution: judicial review, separation of powers, federalism and the Commerce Clause. Prerequisite: POSC 101 or POSC 103.

POSC 419 CIVIL RIGHTS AND CIVIL LIBERTIES: THE FIRST AND FOURTEENTH AMENDMENTS (3) The constitutional guarantees of freedom of speech, religious liberty, free assembly and equal protection. Prerequisite: POSC 101 or POSC 103.

POSC 420 CONSTITUTION PROTECTIONS: PERSONAL LIBERTY AND RIGHTS OF THE ACCUSED (3) Personal liberty in the

home, and the person in regard to individual decision-making and criminal justice. Prerequisite: POSC 101 or POSC 103.

POSC 421 [521] POLITICS AND ENVIRONMENTAL POLICY (3) Analysis and investigation of U.S. environmental problems from a political perspective. Prerequisite: POSC 103 or consent of instructor.

POSC 422 [580] THE SUPREME COURT (3) Roles, behavior, structure and operations of the U.S. Supreme Court. History, politics, decision making and impact of cases. Prerequisite: POSC 103 or consent of instructor.

POSC 424 LAW ONLINE (3) Using information technologies for communication and research purposes, students work collaboratively with students from at least one other major university. Prerequisite: POSC 103 or consent of instructor.

POSC 425 LEGAL THEORY (3) Focuses on the salient arguments for and against the major legal issues of our time. Readings, drawn from time-honored writers of the past, are designed to evoke continuous discussion and debate on contemporary problems in the law. Prerequisites: junior standing and 9 units of political science or consent of instructor.

POSC 427 [527] POLITICAL THEORY I (3) Political thought in the West from the Greeks to the end of the 16th century. Prerequisite: POSC 101 or consent of instructor.

POSC 428 [528] POLITICAL THEORY II (3) Political philosophers and their writings since the 16th century. Attention given to the conflict of ideologies in the 20th century. Prerequisite: POSC 101 or consent of instructor.

POSC 430 AMERICAN POLITICAL THOUGHT (3) Examines American political thinking, key concepts and theorists. Addresses major and minor figures, and mainstream and alternative perspectives within the American political tradition. Prerequisite: POSC 101 or consent of the instructor.

POSC 432 [532] UNITED STATES-RUSSIAN RELATIONS (3) Relations between the United States and Russia. Emphasis on Soviet and post-Soviet periods, nationalities, democratization and creation of market economies. Prerequisite: any 100-level political science course or consent of instructor.

POSC 434 COMPARATIVE FOREIGN POLICIES (3) The foreign policy and foreign decision-making in countries around the world using a thematic approach. Comprehensive study of the ideas behind foreign policy-making. Prerequisites: POSC 107 or POSC 303, or consent of instructor.

POSC 436 U.S. FOREIGN POLICY (3) The main events, ideas and structure behind U.S. foreign policy. Ideas about the formation, conduct and institutions involved in U.S. foreign policy and the issues facing U.S. presidents and policymakers throughout the 20th century. Prerequisite: POSC 107.

POSC 437 [537] CASTRO AND THE CUBAN REVOLUTION (3) A discussion of the factors that led up to the Castro Revolution in 1959 and the subsequent impact of the creation of the first socialist state on the Western Hemisphere. Prerequisite: POSC 355 or POSC 351 or consent of instructor.

POSC 441 [541] CONTEMPORARY UNITED STATES-WESTERN EUROPEAN RELATIONS (3) Emphasis will be on NATO, the European Economic Community and the Anglo-American efforts to create an Atlantic partnership between Europe and the United States. Prerequisite: POSC 103 or POSC 105 or consent of instructor.

POSC 447 [547] INTERNATIONAL LAW AND ORGANIZATION The nature, structure and sources of international law and domestic U.S. law, and the role of international organizations. Prerequisite: POSC 107 or consent of instructor.

POSC 449 [549] U.S. HOMELAND SECURITY POLICY Concept of U.S. homeland security in the context of recent history, nature of threats and major vulnerabilities that are in the focus of homeland security efforts, and the range of activities that constitute the U.S. homeland security enterprise. Prerequisite: POSC 107 or consent of instructor.

POSC 450 [550] INTEREST GROUPS AND PUBLIC POLICY (3) The structure, organization, objectives and activities of interest groups and their impact on public policy and campaign financing. Prerequisite: POSC 103 or consent of instructor.

POSC 453 [553] Intelligence and National Security Principal roles of intelligence in national policy formulation, in the provision of strategic and tactical warning, in providing support for military operations and in covert action. Problems inherent in conducting intelligence in a democracy. Prerequisite: POSC 107 or consent of instructor.

POSC 459 [506] SIMULATION AND GAMES IN POLITICAL SCIENCE (3) Political decisions using rational choice and game theory. Discussing voting methods, public goods and paradoxes of collective choice using computer simulation. Prerequisite: one upper-level (300/400) political science course or consent of instructor.

POSC 465 EDITORIAL WORK — TOWSON JOURNAL OF INTERNATIONAL AFFAIRS (1) One to three per term — three term limit. Members of the Editorial Board of The Towson Journal of International Affairs prepare the issues of that journal under the supervision of faculty advisers. Admission by consent of the instructor. Graded S/U.

POSC 467 [567] POLITICS AND THE BUDGETARY PROCESS (3) Analysis of the budgetary process. Not open to students who successfully completed this course as a special topic (POSC 470-479) course. Prerequisite: POSC 375 or consent of instructor.

POSC 470-479 [570-579] SPECIAL TOPICS IN POLITICAL SCIENCE (3) An examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. May be repeated for a maximum of 9 units provided a different topic is covered. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 481 [581] SEMINAR IN AMERICAN GOVERNMENT AND PUBLIC ADMINISTRATION (3) In-depth investigation into the structures and institutions of the American national government and the process of policy formation, implementation and evaluation. Specific topic of the seminar will vary from term to term. May be repeated for a maximum of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 375 or POSC 381 or POSC 383 or POSC 384 or consent of the instructor.

POSC 482 [582] SEMINAR IN COMPARATIVE POLITICS (3) In-depth investigation into the structures, institutions and policy performance of governments in the contemporary world. Specific topic of the seminar will vary from term to term. May be repeated for a maximum of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 337 or POSC 339 or POSC 340 or consent of the instructor.

POSC 483 [583] SEMINAR IN INTERNATIONAL RELATIONS (3) In-depth investigation into the structures, institutions, theories and practices of international relations. Specific topic of the seminar will vary from term to term. May be repeated for a maximum of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 303 or POSC 307 or POSC 434 or POSC 436 or consent of the instructor.

POSC 484 [584] SEMINAR IN LAW AND THE JUDICIAL SYSTEM (3) In-depth investigation into the structures, institutions, theories and practices of American constitutional law and the judicial system. Specific topic of the seminar will vary from term to term. May be repeated for a maximum of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 418 or POSC 419 or POSC 420 or POSC 422 or consent of the instructor.

POSC 485 [585] SEMINAR IN POLITICAL THEORY (3) In-depth investigation into the history, theories and applications of political theory. Specific topic of the seminar will vary from term to term. May be repeated for a maximum of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 427 or POSC 428 or consent of the instructor.

POSC 486 [586] SEMINAR IN STATE AND LOCAL GOVERNMENT (3) In-depth examination of the theories and practices of state and local government and politics. Specific topic of the seminar will vary from term to term. May be repeated for a total of 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 305 or POSC 375 or consent of the instructor.

POSC 490 [590] INDEPENDENT STUDY (1-3) Individual and supervised study in selected areas of political science. May be repeated for a maximum of 6 units. Admission by consent of instructor.

POSC 491 [591] SEMINAR: CONTEMPORARY U.S. FOREIGN POLICY (3) An examination of the contemporary nature, basis and instruments of American foreign policy. Formulation and implementation of American foreign policy will also be examined. Prerequisites: 15 units in POSC including POSC 107 or POSC 303, or consent of instructor.

POSC 493 [593] INTERNSHIP (3-9) Familiarizes students with the practical working of government institutions. The flexibility in time and unit arrangements will allow a variety of political experiences in which students combine theory and practice. No more than 3 units may be earned in any one term. Prerequisites: junior/senior standing and consent of instructor.

POSC 494 INTERNSHIP (1-6) Familiarizes the student with the practical working of government institutions in which students theorize and practice. U/G graded under S/U procedure. Prerequisites: junior/senior standing and consent of instructor.

POSC 498 HONORS DIRECTED READINGS IN POLITICAL SCIENCE (1-3) Readings and research in preparation for the writing of a thesis or other research paper in political science under the supervision of one member of the political science faculty. Must be taken in advance of the Honors Thesis course. Prerequisites: 15 units in political science, minimum average of 3.50 in POSC, and an overall GPA of 3.25. Consent of instructor.

POSC 499 HONORS THESIS IN POLITICAL SCIENCE (3) Research and writing of thesis directed by a faculty member in a chosen area of specialization. Prerequisites: 18 units in political science, directed readings in political science, 3.50 average in political science and an overall GPA of 3.25, and consent of instructor.

PORTUGUESE (PORT)

PORT 101 PORTUGUESE ELEMENTS I (3) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation.

PORT 102 PORTUGUESE ELEMENTS II (3) A thorough foundation in grammar; drills in pronunciation; elementary conversation; composition and translation. Prerequisite: PORT 101.

PORT 201 PORTUGUESE INTERMEDIATE I (3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisite: PORT 102.

PORT 202 PORTUGUESE INTERMEDIATE II (3) Review of grammar; conversation and prose composition; translation of cultural texts; outside readings. Prerequisite: PORT 201.

PSYCHOLOGY (PSYC)

Lower Division

PSYC 100 USING INFORMATION EFFECTIVELY IN THE BEHAVIORAL AND SOCIAL SCIENCES (3) Obtaining, evaluating and presenting social science information; critical thinking, problems of inference, search and analysis skills using computerized databases, Internet, statistical software and communication skills. Recommended for those who major in the social or behavioral sciences. Not open to those who successfully completed IDLA 101.

PSYC 101 INTRODUCTION TO PSYCHOLOGY (3) Psychological theories, principles and methods, with focus on measurement and experimentation, biopsychology, sensation and perception, learning and memory, motivation and emotion, personality and adjustment, abnormality and psychotherapy, development and individual differences.

PSYC 102 HONORS INTRODUCTION TO PSYCHOLOGY (3) An in-depth study of psychological theories, principles and methods, with focus on measurement and experimentation, biopsychology, sensation and perception, learning and memory, motivation and emotion, personality and adjustment, abnormality and psychotherapy, development and individual differences. Honors College course.

PSYC 201 EDUCATIONAL PSYCHOLOGY (3) The learning process and related concepts; human development; indi-

vidual differences; measurement and evaluation; personality and adjustment. Prerequisite: PSYC 101 or PSYC 102.

PSYC 203 HUMAN DEVELOPMENT (3) Study of research and theories related to the overall development of the human throughout the life span with an emphasis on physical, cognitive, social and emotional dimensions. Prerequisite: PSYC 101 or PSYC 102.

PSYC 204 HONORS HUMAN DEVELOPMENT (3) An in-depth study of research and theories related to the overall development of the human throughout the life span, with an emphasis on physical, cognitive, social and emotional dimensions. Prerequisite: PSYC 101 or PSYC 102. Honors College course.

PSYC 205 INTRODUCTION TO THE HELPING RELATIONSHIP (3) Current concepts of the helping relationship and an exploration of the conditions that facilitate its effectiveness. Prerequisites: PSYC 101 or PSYC 102 and Psychology major or minor planning to enter one of the helping professions, or consent of the instructor.

PSYC 212 BEHAVIORAL STATISTICS (4) Distributions and graphs, notation, levels of measurement, percentiles, measures of central tendency and variability, principles of probability, the normal curve, standard scores, sampling theory, hypothesis testing, significance of differences, correlation and prediction, computation on computer terminals, Chi square, non-parametrics, one-way analysis of variance. Prerequisite: MATH 109 or higher with a grade of "C" or better except MATH 204.

PSYC 213 RESEARCH DESIGN AND STATISTICAL ANALYSIS IN PSYCHOLOGY I (4) Methodologies for gathering observational and self-report data, analysis of data using descriptive statistics and correlation/regression procedures. Discuss ethics and feasibility of different research designs. Successful completion of the course is required for matriculation in Research Design and Statistical Analysis in Psychology II (PSYC 313). To receive Psychology major credit, PSYC 313 must also be successfully completed. This course is not open to students who have successfully completed PSYC 212 or PSYC 314. Prerequisites: PSYC 101 or 102, ENGL 102 or ENGL 190, MATH 109 or higher with grade of "C" or better except MATH 204.

Upper Division

PSYC 301 SCIENCE, PSEUDOSCIENCE AND SUPERSTITION (3) Differentiating between scientific and pseudo-scientific claims, focusing on psychological factors that influence human judgment and decision-making. Possible topics include: astrology, alternative medicine, New Ageism, alien abductions, parapsychology. Prerequisite: PSYC 101.

PSYC 305 PSYCHOLOGY OF LEARNING (3) Analysis of selected problems in both human and animal learning including reinforcement, punishment, verbal learning and verbal behavior. Prerequisite: 9 units of PSYC or consent of instructor.

PSYC 309 [512] PSYCHOPHARMACOLOGY (3) Mechanisms of drugs, their effects on behavior and related topics. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 115.

PSYC 311 [513] BEHAVIOR MODIFICATION (3) Examination and application of the basic principles of the experimental analysis of behavior, with an emphasis on the applied aspects of this modern discipline to schools, jobs, interpersonal relations and self-control. Prerequisite: 9 units of PSYC or consent of instructor.

PSYC 313 RESEARCH DESIGN AND STATISTICAL ANALYSIS IN PSYCHOLOGY II (4) Analysis of research studies, using descriptive and inferential statistics. Gathering and evaluating data using mathematical procedures and statistical software programs (SPSS), and presenting results in oral and written formats according to professional guidelines. To receive major credit, PSYC 213 must be completed. This course is not open to students who have successfully completed PSYC 212 or PSYC 314. Prerequisite: PSYC 213, PSYC 101 or 102, ENGL 102 or ENGL 190.

PSYC 314 RESEARCH METHODS IN PSYCHOLOGY (4) The experimental method and its application to recent problems in psychological research; introduction to experimental

design and inference. Three hours lecture, two hours of laboratory per week. Prerequisites: PSYC 101 or PSYC 102, ENGL 102 or ENGL 190, PSYC 212.

PSYC 315 [515] MOTIVATION (3) Interaction between physiological, neurological and pharmacological aspects of motivation with environmental influences, such as culture, learning and social dynamics. Issues in human motivation and emotion which will be emphasized are aggression, sex, achievement (competence) and cognitive-social influences. Prerequisite: 6 units of PSYC.

PSYC 317 [517] SENSATION AND PERCEPTION (3) A systematic investigation on the basic senses such as vision, audition, taste, smell and touch will be undertaken. The organization of sensory input will also be emphasized. Both human and non-human data will be presented. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 115.

PSYC 325 [524] SOCIAL PSYCHOLOGY (3) An introduction to the theory and research of how people think about, influence and relate to each other. Topics include social cognition, attitudes, aggression and helping. Prerequisite: 6 units of PSYC.

PSYC 327 INDUSTRIAL PSYCHOLOGY (3) Theories, psychological concepts and research applied to industrial and organizational settings. Prerequisite: PSYC 101 or PSYC 102.

PSYC 341 [540] ENVIRONMENTAL PSYCHOLOGY (3) The relationship between the physical and social environment and behavior, i.e., places, spaces and people. How man/woman construes, interprets, comprehends, feels about the environment, and how the environment functions as a reflection of human needs and values. Topics include environmental design, crowding, privacy, human territoriality, personal space. Prerequisite: PSYC 101 or PSYC 102.

PSYC 350 PERSONALITY (3) Introduction to the theoretical perspectives and research aimed at understanding personality processes and individual differences in thought, emotion and behavior. Perspectives may include psychoanalytic, dispositional, biological, learning and humanistic. Prerequisite: 6 units of PSYC.

PSYC 361 ABNORMAL PSYCHOLOGY (3) Disordered personal reactions to life. Organic and functional phenomena plus therapeutic techniques. Prerequisites: PSYC 101 or 102 and 6 units of PSYC or consent of instructor.

PSYC 381 [581] READINGS IN PSYCHOLOGY (1-2) A survey of relevant research literature under the guidance of a staff member who will direct the students' research. May be repeated for a maximum of 4 units. Graded S/U. Prerequisite: 9 units of PSYC and consent of instructor.

PSYC 383 PROCTORING IN PSYCHOLOGY (3-6) Students serve as teaching apprentices or proctors in a course which they have already completed (such as Introduction to Psychology), and which they must relearn to 100 percent mastery. Students will manage the learning and evaluate individual progress of the members of the class assigned to them. The experience includes guidance, support and motivation of the assigned students, all in a supervised situation. Only 3 units may be earned in one term. May be repeated for a maximum of 6 units. For 6 units, students must serve as a proctor for two separate courses. Graded S/U. Prerequisites: successful completion of five or more psychology courses or: introductory, educational and child, or adolescent psychology, and principles of education and be a junior or a senior plus permission of instructor. NOTE: Psychology majors and minors will not receive psychology elective credit for this course.

PSYC 391 DIRECTED RESEARCH EXPERIENCE IN PSYCHOLOGY (1-3) An opportunity for qualified students to gain research experience by assisting faculty members with research projects. PSYC 391 and PSYC 491 in combination may be repeated for a maximum of 12 total units but only 6 can apply to the major; the other 6 units will be used as general electives. Graded S/U. Prerequisites: 6 units of PSYC and consent of instructor.

PSYC 403 [503] INFANT AND CHILD DEVELOPMENT (3) An advanced course reviewing historical and current changes in the areas of infancy and childhood. Physical, cognitive and social emotional development will be covered in depth. Emphasis is placed on critical analysis of research

theory construction and methods. Not open to those who successfully completed ECED 413. Prerequisite: PSYC 203 or PSYC 204.

PSYC 404 [504] ADOLESCENT PSYCHOLOGY (3) Physical, emotional, intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: PSYC 203 or PSYC 204.

PSYC 405 THE PSYCHOLOGY OF AGING (3) The changes in learning, emotions, personality and social behavior, and the impact of culture and attitude on the aging process. Prerequisite: PSYC 203 or PSYC 204.

PSYC 411 [511] TESTS AND MEASUREMENTS (3) Psychological and educational testing and evaluation. The construction, administration, interpretation and use of the various evaluative devices of aptitude and achievement. Prerequisites: PSYC 101 or PSYC 102, and PSYC 212.

PSYC 419 DIVERSE PERSPECTIVES IN PSYCHOLOGY (3) Diverse theories and topics explored by both traditional and modern psychology, drawn from a range of philosophical and cultural perspectives: psychodynamic and behaviorist approaches, and existential, positive, transpersonal and mind-body psychology. Prerequisites: 6 units of psychology.

PSYC 429 MULTICULTURAL COUNSELING (3) This course will provide a conceptual, theoretical and practical overview of multicultural counseling. It will integrate the knowledge of the various techniques and methods of helping to work with clients from diverse cultural backgrounds in a counseling setting. Prerequisites: PSYC 101 or PSYC 102 and PSYC 205.

PSYC 430 SYSTEMS AND TECHNIQUES OF PSYCHOTHERAPY (3) Review and application of current theoretical approaches to the helping relationship. Prerequisites: PSYC 205 and PSYC 361.

PSYC 431 GROUP DYNAMICS (3) Intensive study of group interactions with emphasis upon reciprocal group influence of behavior. Prerequisites: 6 units of PSYC.

PSYC 432 [532] CROSS-CULTURAL PSYCHOLOGY (3) Comparison of psychological behavior and theory in Western and non-Western cultures. Prerequisites: 6 units of PSYC.

PSYC 433 GROUP PSYCHOTHERAPY INTERNSHIP (3) Supervised experience in use of group intervention techniques. Students will counsel groups of troubled adolescents. Supervision will focus on both group and individual dynamics. Prerequisites: PSYC 431, admission to Clinical Psychology Area of Focus.

PSYC 435 INTERNSHIP IN PSYCHOLOGY (3-6) Placement in a community service agency to familiarize students with its current practices. Supervised client contact will be provided. May be repeated for a maximum of 12 units, but only 6 units can apply to the major; the other 6 units will be used as general electives. Prerequisites: 23 units of psychology, minimum PSYC GPA 3.00 and consent of instructor.

PSYC 439 THE INITIAL INTERVIEW (3) Clinical observation and practicum experience. Focus on interviewer and interviewee dimensions and relationship with patients. Use of tapes, seminars and individual supervision. Prerequisites: PSYC 205, and admission to Clinical Psychology Area of Focus.

PSYC 447 [547] SEX DIFFERENCES: PSYCHOLOGICAL PERSPECTIVES (3) Sex role/personality development is examined from various perspectives: social, cultural, evolutionary and biological. Changing conceptions with regard to women, their roles and self-concepts, are emphasized within the overall context of sex differences and similarities in behavior. Prerequisite: PSYC 203 or PSYC 204.

PSYC 449 [549] PSYCHOLOGY OF LESBIAN CULTURE (3) Impact of culture on development of a lesbian identity within a psychological framework. Prerequisites: 6 units in PSYC or WMST or consent of instructor.

PSYC 451 [551] INTRODUCTION TO THE EXCEPTIONAL CHILD (3) Children with atypical physical, mental, social and emotional development, including physically handicapped, mentally retarded, gifted and emotionally disturbed children. Prerequisite: PSYC 203 or PSYC 204.

PSYC 453 [553] ISSUES IN MENTAL HEALTH INTERVENTION (1-2) Readings, lectures and seminars relating to psychological emergencies and the modes of intervention during psychological crises. May be repeated for a maximum of 4 units. Graded S/U. Prerequisites: PSYC 205, PSYC 454 concurrent, admission to Clinical Psychology Area of Focus.

PSYC 454 INTERNSHIP IN PSYCHOTHERAPY (4) Techniques of psychotherapeutic intervention. Students will see patients in psychotherapy under intensive supervision. Seminars and individualized readings. May be repeated for a maximum of 12 units. Prerequisites: PSYC 453 concurrent and admission to Clinical Psychology Area of Focus.

PSYC 457 GENDER IDENTITY IN TRANSITION (3) Psychological consequences of changing definitions of femininity, masculinity and personhood will be examined using recent theories of gender identity formation. Concepts such as androgyny, sex-role transcendence and future shock will be related to psychological adaptation to social change. Prerequisite: PSYC 447 or consent of instructor.

PSYC 460 [560] ETHOLOGY AND COMPARATIVE PSYCHOLOGY (3) A survey of the major behavioral adaptations in non-human and human species within the framework of evolutionary theory, ethology and experimental psychology. Three units of lecture a week. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 115.

PSYC 461 COGNITIVE PSYCHOLOGY (3) The nature of the cognitive processes, an analysis of the organization of cognitive abilities, and problems in cognition. Theoretical viewpoints will be explored, including those of Piaget, J.P. Guilford, Ausubel, Lewin, Skinner. A comparison among theories will be made as they relate to the thinking processes. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 115.

PSYC 465 [565] PHYSIOLOGICAL PSYCHOLOGY (3) An introduction to the physiological bases of behavior. The topics to be considered are basic neuroanatomy and neuropsychology, sensory and motor systems, motivational systems, and "higher order" behavioral systems. Three hours of lecture per week. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 115.

PSYC 467 [567] MIDLIFE DEVELOPMENT (3) A study of adult behavior between the ages of 18 and 60. The developmental stages of young adulthood, adulthood and middle age will be discussed along with topics pertinent to each of the levels such as leaving and becoming emancipated from the family; the transition and adjustment to marriage and work; and bridging the gap between ideals and actual fulfillment. Prerequisite: PSYC 203 or PSYC 204.

PSYC 470-479 [570-579] SPECIAL TOPICS (1-3) Survey and critical evaluation of modern literature pertaining to selected problems in psychology. May be repeated for a maximum of 12 units provided a different topic is covered. Prerequisite: consent of instructor.

PSYC 486 [587] ADVANCED EXPERIMENTAL DESIGN (3) Analysis of variance, multiple comparisons, nonparametrics, general problems related to sampling, experimenter effects, SPSS analysis, reading of the experimental literature. Honors approval or consent of instructor. Prerequisites: PSYC 212 and PSYC 314.

PSYC 491 [591] INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3) An opportunity for especially qualified students to undertake research problems according to their interest and training under the direction of a staff member. May be repeated for a maximum of 12 units, but only 6 units can apply to the major; the other 6 units will be used as general electives. Graded S/U. Prerequisites: PSYC 313 or PSYC 314, PSYC 391, and consent of instructor.

PSYC 494 [594] TRAVEL AND STUDY ABROAD IN PSYCHOLOGY (1-3) Selected topics, issues, programs, projects and/or facilities related to the field of psychology. Locations and topics to be selected by department and instructor sponsoring the program. Prerequisite: consent of instructor. There is no foreign language skill requirement.

PSYC 497 HONORS SEMINAR IN PSYCHOLOGY (3) Issues of current and historical interest in psychology, examined from clinical, developmental, experimental and

other relevant points of view. Seminar format, including discussions, based on readings from primary sources and group projects. Prerequisites: completion of the first year of Departmental Honors in Psychology (Junior Year) and special permit.

PSYC 498 HONORS CAPSTONE IN PSYCHOLOGY (1) Advanced course work in psychology focused on preparation and presentation of Psychology Honors Thesis to thesis committee and peers. Prerequisites: Admission to the Honors Thesis in Psychology Program and successful completion of PSYC 486 and 497 with a grade of "B" or better.

PSYC 499 HONORS THESIS IN PSYCHOLOGY (4) Independent research on special problems in psychology or closely related fields. Prerequisites: PSYC 314, PSYC 486, Honors approval.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

READING EDUCATION (REED)

Lower Division

REED 102 ACADEMIC LITERACY (3) Develops an understanding of the reading process and the multiple factors that influence reading proficiency. Explores different reading theories, strategies, vocabulary and applications, college-level literacy in the natural sciences, mathematics, the humanities, the social sciences, business and the fine arts. This reading course can be taken for credit by students who qualify.

Upper Division

REED 365 READING AND WRITING IN THE CONTENT AREAS K-12 (3) Strategies for teaching reading and writing in K-12 certification programs within the content disciplines. Prerequisite: ELED 324.

REED 370-389 SPECIAL TOPICS IN READING EDUCATION (3) Studies of selected topics in literacy education. Specific requirements and prerequisites will vary and will be designated by the department each time a topic is scheduled. May be repeated with a different topic for a maximum of 6 units. Prerequisite: consent of the director of the REED program.

RELIGIOUS STUDIES (RLST)

Lower Division

RLST 103 EXPLORING BIBLICAL ARCHAEOLOGY (3) The nature of archaeological evidence, its context, recovery, reconstruction and interpretation. Includes application of archaeological evidence in problem solving and the archaeology of Israel.

RLST 105 INTRODUCTION TO THE STUDY OF RELIGION (3) Survey of world religious traditions informed by comparative, historical and phenomenological methodologies. Not open to students who have successfully completed PHIL 105.

RLST 205 WOMEN IN WORLD RELIGIONS (3) Role of women, both human and divine, in the major Asian and Western religions. Not open to students who have successfully completed PHIL 205.

RLST 206 JUDAISM, CHRISTIANITY AND ISLAM (3) History, scriptures, doctrines, practices and interactions of three monotheistic religions. Not open to students who have successfully completed PHIL 206.

RLST 207 INTRODUCTION TO BUDDHISM (3) Survey of dominant forms of Buddhism in Asia during its classical period and subsequent spread to the West and encounter with modernity.

RLST 208 INTRODUCTION TO HINDUISM (3) Dominant forms of Hinduism during its "classical" South Asian period, and its continuation into the contemporary era as a modern world religion.

RLST 210 INTRODUCTION TO JUDAISM (3) Overview of Jewish identity, history, intellectual traditions, community, philosophy, mysticism, holidays, life-cycle events, rituals and prayer.

RLST 211 INTRODUCTION TO JEWISH THOUGHT (3) Religious and historical developments of Jewish thought; prominent Jewish philosophers and mystics who shaped its eclectic character.

RLST 270 TOPICS IN RELIGIOUS STUDIES (3) Introduction to diverse topics in the study of religion. May be repeated provided a different topic is covered.

Upper Division

RLST 305 [505] FAITH PERSPECTIVES IN MEDICAL ETHICS (3) Hindu, Buddhist, Islamic, Christian and Jewish perspectives on issues in medical ethics including the role of the doctor, abortion, cloning, pre-gender selection, mental health and euthanasia. Prerequisite: One course in a natural science, religious studies, philosophy or consent of the instructor.

RLST 311 [511] JEWISH MYSTICISM AND KABBALAH (3) Classical Kabbalah of Provence and Gerona, the Zohar, and the Kabbalah of Zafed with attention given to major trends in Jewish mysticism. Prerequisite: One course in RLST or one course in PHIL or consent of the instructor.

RLST 312 [512] JEWISH ETHICS AND SPIRITUALITY IN HASIDISM (3) The Tanya, the major work of Hasidism, is used to explore mystical and ethical aspects of Hasidism such as human attachment to divine reality, repentance and forgiveness, spiritual happiness. Prerequisite: One course in RLST or PHIL or consent of instructor.

RLST 331 [531] EXPLORING GENESIS (3) Theological, textual and sociological analysis of Genesis aimed to develop new perspectives on the text and on Israelite civilization. Prerequisite: One course in RLST or consent of the instructor.

RLST 355 [555] INTRODUCTION TO THE NEW TESTAMENT (3) Study of the literature, history, sociology and theology of the early Christian movement focusing on canonical and noncanonical materials. Not open to students who have successfully completed PHIL 355. Prerequisite: one lower-level course in philosophy or religious studies.

RLST 357 [557] TOPICS IN COMPARATIVE RELIGION (3) Exploration of culturally diverse religious traditions in terms of a specified theme, topic or problem. May be repeated with a different topic. Prerequisite: one lower-level course in philosophy, religious studies or history.

RLST 370 [570] ADVANCED TOPICS IN RELIGIOUS STUDIES (3) An examination of diverse topics in the study of religion. May be repeated for a maximum of 6 units provided a different topic is covered.

RLST 413 [513] THE KABBALAH OF THE ZOHAR (3) Studies of the Book of Splendor (Zohar), the most influential composition of the Kabbalah; themes include parts of the soul, mystical experience, good and evil, the Zoharic concepts of life and death, and time and eternity. Prerequisites: At least two courses in RLST or PHIL or the consent of instructor.

RUSSIAN (RUSS)

Lower Division

RUSS 101-102 RUSSIAN ELEMENTS I,II (3,3) A thorough foundation in grammar; drills in pronunciation, elementary conversation; composition and translation. RUSS 101 is a prerequisite to RUSS 102. Not open to native or heritage speakers without consent of instructor.

RUSS 201-202 RUSSIAN INTERMEDIATE I,II (3,3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings. Prerequisites: RUSS 102 is a prerequisite to RUSS 201 and RUSS 201 is a prerequisite to RUSS 202.

SECONDARY EDUCATION (SCED)

Lower Division

SCED 200 FOUNDATIONS OF EDUCATION (3) Sociological, philosophical, psychological and historical foundations of Western education. Perspectives in these areas as they relate to current educational issues and practices.

Upper Division

SCED 301 FIELD EXPERIENCES IN SECONDARY EDUCATION

(3) Experiences in observing and studying school activities directly related to classroom instruction and pupil learning; observing and analyzing teacher roles, student roles and instructional environment. Emphasis is placed on direct experience in a variety of school settings. Prerequisite: PSYC 201.

SCED 305 ADOLESCENT LEARNING, DEVELOPMENT AND DIVERSITY (3) Classic and contemporary theories of learning with explicit connections to the ways learning theories affect students and teachers. Current research into brain development and function will be investigated, with an emphasis on classroom applications. The course will also address the complexity introduced by the extraordinary diversity of today's adolescent population. Prerequisite: PSYC 101.

SCED 319 SURVEY OF EDUCATIONAL PROGRAMS (3) Combines theoretical aspects of ELED 311, The Child in the Elementary School Curriculum, and SCED 341, Principles of Secondary Education. A field experience to schools is required. Open only to those students in art, dance, music, physical education, health or media specialists whose majors lead directly to certification in elementary and secondary education. Prerequisites: PSYC 201 or concurrently, and written permission of chair, Department of Secondary Education.

SCED 341 PRINCIPLES OF SECONDARY EDUCATION (4) Philosophy and purposes of secondary education; nature of secondary education programs; principles of teaching and learning; basic techniques in instruction. A field experience to schools is required and will necessitate travel time before and after class. To be taken the term prior to the methods course. Prerequisites: junior standing, PSYC 201 (or taken concurrently), taken concurrently with SCED 460, and written permission of the chair of secondary education.

Methods Courses

Methods courses in each subject are not necessarily offered every term. It is the responsibility of students to meet with their secondary education adviser to determine when they will take the teaching methods course.

SCED 342 PRINCIPLES OF MIDDLE LEVEL EDUCATION (4) To provide experiences that introduce the candidate to the emerging professional knowledge in the field of middle level education and enhance his/her ability to become a competent professional decision maker in the middle school setting. The course will provide information and experiences that will allow the candidate to reflect on the types of decision-making situations that middle school teachers encounter.

SCED 353 TEACHING MODERN FOREIGN LANGUAGE IN THE SECONDARY SCHOOL (3) Aims and purposes of foreign language instruction; current curricular trends, including the importance of modern language teaching practices. Open only to seniors who plan to teach foreign language, with consent of instructor. Prerequisites: 2.50 GPA in major field, SCED 341, SCED 460, and written permission from chair, secondary education.

SCED 355 TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL (3) Objectives, curriculum, materials and instructional procedures in the teaching of social studies. Open only to seniors immediately prior to student teaching and to others with equivalent backgrounds and objectives. Prerequisites: 2.50 GPA in major field; SCED 341, SCED 460, and written permission from chair, secondary education.

SCED 357 TEACHING ENGLISH IN THE SECONDARY SCHOOL (3) Language arts as taught in secondary schools. Open only to seniors immediately prior to student teaching and to others with equivalent backgrounds and objectives with consent of instructor. Prerequisites: 2.50 GPA in major field; SCED 341, SCED 460, and written permission from chair, secondary education.

SCED 365 TEACHING SOCIAL STUDIES IN THE MIDDLE SCHOOL (3) Knowledge, skills and dispositions to make decisions about curriculum, instruction and assessment in a middle school social studies classroom. Open only to seniors immediately prior to student teaching and to

others with equivalent backgrounds and objectives with consent of instructor. Prerequisites: 2.50 GPA in major field; SCED 3xx, SCED 460, and written permission from chair, secondary education. Concurrent with SCED 499.

SCED 367 TEACHING ENGLISH IN THE MIDDLE SCHOOL (3) English-language arts as taught in middle schools. Open only to seniors immediately prior to student teaching and to others with equivalent backgrounds and objectives with consent of instructor. Prerequisites: 2.50 GPA in major field; SCED 342, SCED 460 and written permission from chair, secondary education. Concurrent with SCED 499.

Full-Time Internship

The following full-time internship courses provide practical experiences in observation, participation and student teaching in public school classrooms under the guidance of master teachers and a university supervisor. Prerequisites: SCED 499, appropriate methods course, satisfactory completion of the Praxis I tests, completion of the Speech and Hearing screening, completion of GPA requirements, written permission from students' major department and the Center for Professional Practice. All middle school education students will complete their full-time internships at two middle schools. All secondary education students will complete their full-time internships at both the middle school and high school levels in the same term. SCED 401 and 462 are to be taken concurrently with full-time internships. All student teaching experiences in secondary education are graded S/U.

Upper Division

SCED 383 STUDENT TEACHING IN SECONDARY EDUCATION — ENGLISH (12)

SCED 384 STUDENT TEACHING IN SECONDARY EDUCATION — FRENCH (12)

SCED 385 STUDENT TEACHING IN SECONDARY EDUCATION — GEOGRAPHY (12)

SCED 386 STUDENT TEACHING IN SECONDARY EDUCATION — GERMAN (12)

SCED 389 STUDENT TEACHING IN SECONDARY EDUCATION — HISTORY (12)

SCED 394 STUDENT TEACHING IN SECONDARY EDUCATION — SPANISH (12)

SCED 396 STUDENT TEACHING IN SECONDARY EDUCATION — SOCIAL SCIENCE (12)

SCED 399 DIFFERENTIATED STUDENT TEACHING — SECONDARY (1-8) Student teaching experiences in addition to those listed above or student teaching in special subject areas, according to needs and interests of the student. Prerequisites: consent of chair, secondary education; written permission from Center for Professional Practice.

SCED 401 ANALYZING STUDENT TEACHING (1-3) Analysis of and development of solutions for problems in pupil behavior, curriculum, evaluation and instructional procedures. Secondary teaching philosophies and strategies based upon identified needs determined as a result of the student teaching experience will be explored in depth. Open to students concurrent with or following student teaching.

SCED 419 [518] YOUNG ADULT LITERATURE (3) Examination of literature as an expression of basic needs and ideas of youth through wide independent reading; studying criteria and aids for selection of books and other media; evaluating in terms of forces affecting society and the adolescent.

SCED 460 [560] USING READING AND WRITING IN THE SECONDARY SCHOOLS (4) Developmental reading and writing assessment; vocabulary building, comprehension; special needs adaptations; clinical practice. Prerequisites: SCED 341 or concurrently.

SCED 461 [561] TEACHING READING IN THE SECONDARY CONTENT AREAS (3) Application and assessment of reading strategies and instructional frameworks in secondary content classrooms. Prerequisite: SCED 460.

SCED 462 SEMINAR IN TEACHING READING IN THE SECONDARY CONTENT AREAS (1) Application and assessment of reading strategies and instructional frameworks in secondary content classrooms.

SCED 470-489 [570-589] SPECIAL TOPICS IN SECONDARY EDUCATION: (Topic to be named) (1-3) In-depth study of a selected topic in secondary or adult education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. May be repeated for credit provided a different topic is covered.

SCED 494 [594] TRAVEL AND STUDY IN SECONDARY EDUCATION (1-6) Study abroad of educational facilities, programs or practices, or selected projects in education topics. By special arrangement with program chair and sponsoring instructors.

SCED 495 [595] INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4) An opportunity for especially qualified students to undertake research problems or study projects relevant to their interest and training under the direction of a staff member. Prerequisite: consent of chair of secondary education.

SCED 496 [596] DIRECTED READINGS IN SECONDARY EDUCATION (1-4) Independent reading in selected areas of Secondary Education in order to provide for the individual a comprehensive coverage or to meet special needs. By invitation of the department to qualified students. Prerequisite: consent of chair of secondary education.

SCED 499 INTERNSHIP IN SECONDARY EDUCATION (1-6) Clinical experience in a professional development school the term immediately prior to full-time internship; focus on classroom management and discipline, technology utilization and reflective practices. Prerequisites: SCED 341, SCED 460; written permission of chair of secondary education. Graded S/U.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

SCIENCE EDUCATION (SCIE)

Upper Division

SCIE 371 [551] TEACHING SCIENCE IN EARLY CHILDHOOD EDUCATION (2) Familiarizes students with appropriate methods and materials in science for the young child. Emphasis will be on interdisciplinary approach. Prerequisite: ECEC 341 or concurrently.

SCIE 376 [576] TEACHING SCIENCE IN THE ELEMENTARY SCHOOL (3) Application, analysis and integration of science teaching skills in the elementary classroom. Field experience in local schools. Taken concurrently with BIOL 303 and PHSC 303.

SCIE 380 [580] TEACHING SCIENCE IN THE SECONDARY SCHOOL (3) Selection of appropriate content, methods and evaluation techniques, analysis of textbooks and resource materials for teaching science in the middle and high schools. Must be taken the term prior to student teaching.

SCIE 393 STUDENT TEACHING IN SECONDARY EDUCATION—SCIENCE (12) Practical experience in observation, participation and student teaching in public school classrooms under the guidance of master teachers and a university supervisor. Graded S/U.

SCIE 421 APPLIED SEMINAR IN SECONDARY SCIENCE EDUCATION (2) Analysis, evaluation and application of current issues in secondary science education. Co-requisite: SCED 499.

SCIE 460-465 [560-565] SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY SCHOOL TEACHER I-VI (1,2,3) Three different modules of science instruction will be offered each term for teachers of primary and intermediate grades. Emphasizes instructional strategies in both the processes

and content of the science. Students may elect to take 1, 2 or all 3 modules for 1, 2 or 3 units, respectively. All students must attend the first class meeting for course orientation. Thereafter, each module will meet once a week for four weeks. Each meeting will consist of approximately four hours laboratory work. Prerequisite: teaching experience in the elementary schools.

SOCIAL SCIENCE (SOSC)

Upper Division

SOSC 401 [501] TOPICS IN SOCIAL SCIENCE (3) Issues and problems to be selected by the instructor and studied from the multiple approaches of various social sciences. Prerequisites: 15 units in the social sciences.

SOCIOLOGY (SOCI)

Lower Division

SOCI 100 USING INFORMATION EFFECTIVELY IN THE SOCIAL SCIENCES (3) Obtaining, evaluating and presenting social science data with emphasis on critical thinking, search and analysis skills using computerized databases, and statistical software, and communication skills. Recommended for students majoring in social or behavioral sciences. Not open to those who successfully completed IDLA 101.

SOCI 101 INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior.

SOCI 102 HONORS INTRODUCTION TO SOCIOLOGY (3) Sociological concepts, theories, methods; a study of society and culture; the influence of the social environment on individual behavior. Honors College course.

SOCI 210 SOCIOLOGY OF SPORT (3) Critical examination of the role of sport in society. Course material will transcend prevalent stereotypes and myths of sport and analyze significant realities of the culture, social and corporate organization, major social processes, and relations of class, race and gender in contemporary society.

SOCI 241 BLACKS IN AMERICA: MYTHS AND REALITY (3) Prevailing myths regarding black society, development of such myths, and the reality which contradicts them.

SOCI 243 SOCIOLOGY OF RACE, CLASS AND GENDER (3) Traditional and contemporary sociological approaches to the nature and interrelationship of race, class and gender inequalities.

SOCI 249 SOCIAL PROBLEMS (3) Theoretical and empirical understanding of the sociological approach to contemporary social problems, such as alcoholism, drug abuse, rape, homophobia, sexism, racism, poverty, family disorganization, violence. Prerequisite: SOCI 101.

SOCI 265 STATUS, FRIENDSHIP, INTIMACY (3) Effects of role position and expectations on behavior in friendship groups, work teams, couples and families. Emphasis on systems of role positions and their enactment in interaction.

Upper Division

SOCI 300 SOCIOLOGICAL ANALYSIS (3) Sociological perspectives, data and techniques needed to identify and interpret social and cultural patterns. Develops computer and writing skills. Prerequisites: SOCI 101, ENGL 102 or ENGL 190, or consent of instructor.

SOCI 301 THE FAMILY (3) The family as the basic group in human societies; its development; its relation to other social institutions; the family in modern industrial societies. Prerequisite: SOCI 101.

SOCI 311 [511] INDIVIDUAL AND SOCIETY (3) A social psychological approach to the inter-relationships of the individual and his/her social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 101.

SOCI 312 SOCIOLOGY OF GENDER (3) Sociological analysis of gender primarily in American society, including as it relates to socialization, social interaction, inequality in the

workplace, stereotypes in everyday life, and social institutions such as education, the family and organizations. Prerequisite: SOCI 101.

SOCI 313 INTRODUCTION TO SOCIAL PSYCHOLOGY (3) A general introduction to the inter-relationships between social organization and individual human behavior. Examination of social factors in the emergence of consciousness, self, personality and interpersonal relations. Prerequisite: SOCI 101.

SOCI 323 [523] SOCIAL MOVEMENTS (3) Exploration of the emergence, strategies, challenges and outcomes of collective efforts to resist or promote social change. Emphasis on relationship between social movement organizations and major social institutions. Prerequisite: SOCI 101.

SOCI 326 [526] RELIGION AND SOCIETY (3) Connections between religious expression and practice and social contexts; classic and contemporary sociological theories of religion; role of religion in global society. Prerequisite: SOCI 101.

SOCI 327 [527] URBAN SOCIOLOGY (3) Survey of the theoretical and sociological conceptualizations of modern Western industrial cities. Prerequisite: SOCI 101.

SOCI 329 [529] DEMOGRAPHY (3) Social, economic and political problems related to changes, distribution and movement of population; analysis of contemporary population trends in the United States and the world. Prerequisite: SOCI 101.

SOCI 331 DEVIANCE AND ORGANIZATIONS (3) Major social patterns associated with contemporary large-scale organizations, with special emphasis on deviance by and within corporations, governments and crime syndicates. Prerequisite: SOCI 101.

SOCI 333 [533] POLITICAL SOCIOLOGY (3) Contemporary relevance of the fundamental ideas regarding the relationship of the social and political systems; the significance of social and political democratization; class struggles and revolution; the influence of government bureaucracy. Prerequisite: SOCI 101.

SOCI 335 [535] MEDICAL SOCIOLOGY (3) A study of social and cultural perspectives on illness; demographic trends; the health professions; institutions for the delivery of health care services. Prerequisite: SOCI 101.

SOCI 336 SOCIOLOGY OF MENTAL ILLNESS (3) Social structure of mental illness and mental health services; mental illness as social construction; life within total institutions; mental illness as social stigma; and social policy of mental illness. Prerequisites: SOCI 101 and PSYC 101.

SOCI 341 [541] CLASS, STATUS AND POWER (3) An examination of major theories and significant research on socially structured inequality in modern and traditional societies. Prerequisite: SOCI 101.

SOCI 343 [543] SOCIOLOGY OF RACE AND ETHNICITY (3) Race and ethnicity as social constructions; individual and collective racial and ethnic identities; racial and ethnic inequality; and resistance to oppression. Prerequisite: SOCI 101.

SOCI 351 [551] DEVIANT BEHAVIOR (3) Deviance as a process in society. Understanding conformity and deviance; identification and labeling of deviants; society's response to deviant behavior. Prerequisite: SOCI 101.

SOCI 353 [553] THEORIES OF CRIME (3) Evolution of criminological theory; crime rates and trends; social profile of criminal offenders and victims; societal responses. Prerequisite: SOCI 101.

SOCI 355 [555] DELINQUENCY AND JUVENILE JUSTICE (3) Nature, distribution and causes of youth crime; youth gangs; the juvenile justice system. Prerequisite: SOCI 101.

SOCI 357 [557] SOCIAL WELFARE (3) Sociological analysis of social welfare institutions and the functions they perform within modern societies. Prerequisite: SOCI 101.

SOCI 359 [559] SOCIAL GERONTOLOGY (3) Examination of social factors in aging in later life and responses to aging;

evaluation of research in social gerontology. Prerequisite: SOCI 101.

SOCI 362 WORK AND OCCUPATIONS (3) Sociological theories and research on work and occupations; conceptions of work, occupation and profession; historical and contemporary issues in work and occupations; trends in blue- and white-collar industries; the relationship between work and the self; implications of the modern distinction between work and family. Prerequisite: SOCI 101.

SOCI 365 ORGANIZATIONS AND SOCIETY (3) Major social patterns associated with contemporary organizations; diversity and common elements among organizations; formal and informal aspects of bureaucracies; the growth of rationalization and McDonaldization; the impact and place of organizations in modern life. Prerequisite: SOCI 101.

SOCI 370 [560] TOPICS IN SOCIOLOGY (3) Current topics in sociology designed for non-majors as well as majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: SOCI 101.

SOCI 381 [581] SOCIOLOGICAL THEORY (3) Major systems of sociological theory; the works, assumptions and implications of major European and American schools. Prerequisites: junior standing; SOCI 101; 9 additional units of sociology.

SOCI 383 SOCIOLOGY OF LAW (3) Legal norms and institutions in relation to society; role of law in social processes, such as conflict and cooperation. Prerequisite: SOCI 101.

SOCI 391 [582] RESEARCH METHODS (3) A consideration of methodology of sociological research; the various steps in conducting research projects, from statement of the problem to final analysis of data. Prerequisites: SOCI 101; 9 additional units of SOCI; either PSYC 212 or MATH 231.

SOCI 440 [540] SOCIOLOGY OF IMMIGRATION (3) Examination of sociological theories and research regarding immigration; emphasis on the contemporary context in the United States and globally. Prerequisites: SOCI 101; one 300-level SOCI course.

SOCI 470 [570] SPECIAL TOPICS IN SOCIOLOGY (1-3) An examination of current topics in sociology designed for junior and senior majors. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisites: SOCI 101 and 6 additional units of sociology.

SOCI 485 [585] SEMINAR IN SOCIOLOGY (3) Capstone application of ideas, methods and facts learned in previous sociology courses. Prerequisites: SOCI 101, three upper-level SOCI courses, and senior standing or permission of instructor.

SOCI 491-492 [591-592] INTERNSHIP IN SOCIOLOGY I,II (3,3) Supervised experience in work setting which facilitates understanding of roles and relationships relevant to sociological inquiry and application of sociological knowledge. Students may elect to take one term for 3 units (491) or two terms for 3 units each (491-492), in one agency both terms or in a different agency each term. No more than 3 units may be earned in a term without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisites: SOCI concentration; junior standing; and consent of internship coordinator.

SOCI 495 [595] INDEPENDENT RESEARCH (3) Supervised research and sociological investigation involving library and/or field experiences, and culminating in a written report. May be repeated for a maximum of 6 units. Prerequisites: SOCI 381 and SOCI 391 and consent of instructor.

SOCI 497 SEMINAR IN SOCIOLOGY (HONORS) (3) Exploring and analyzing major areas of sociology. Prerequisite: consent of the departmental Honors coordinator.

SOCI 498 READINGS IN SOCIOLOGY (HONORS) (4) A survey of the relevant scholarly literature under the guidance of a faculty member who will direct the student's research. Prerequisite: consent of the departmental Honors coordinator.

SOCI 499 HONORS THESIS IN SOCIOLOGY (4) Supervised research and sociological investigation involving library and/or field experience and culminating in a written report. Prerequisite: consent of the departmental Honors coordinator.

SPANISH (SPAN)

Lower Division

SPAN 101 SPANISH ELEMENTS I (3) Principles of Spanish grammar; drills in pronunciation; elementary conversation; composition; readings. Not open to native or heritage speakers without consent of instructor.

SPAN 102 SPANISH ELEMENTS II (3) Review and further study of grammar principles; pronunciation; conversation; composition; readings. Prerequisite: SPAN 101. Not open to native or heritage speakers without consent of instructor.

SPAN 201 SPANISH INTERMEDIATE I (3) Review of grammar and pronunciation; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in Spanish. Prerequisite: SPAN 102 or equivalent. Not open to native or heritage speakers without consent of instructor.

SPAN 202 SPANISH INTERMEDIATE II (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab. Conducted in Spanish. Not open to native or heritage speakers without consent of instructor. Prerequisite: SPAN 201 or equivalent.

SPAN 203 HONORS SPANISH INTERMEDIATE I (3) Review of grammar; conversation and prose composition; translation of texts of cultural value; outside readings commensurate with the ability of the individual student. Conducted in Spanish. Not open to native or heritage speakers without consent of instructor. Prerequisite: SPAN 102 or equivalent. Honors College course.

SPAN 204 HONORS SPANISH INTERMEDIATE II (3) Continuing study of grammar structures; conversation and prose composition; reading, translation and discussion of texts of cultural value; outside readings commensurate with the ability of the individual student. Not open to native or heritage speakers without consent of instructor. Prerequisites: SPAN 201, SPAN 203 or equivalent. Honors College course.

SPAN 211 SPANISH FOR THE HEALTH PROFESSIONS (3) Advanced grammar structures; conversation; composition; reading of cultural texts; oral and written exercises in language lab related to the health professions. Conducted in Spanish. Prerequisite: SPAN 102 or equivalent. Not open to students who have taken SPAN 201.

Upper Division

SPAN 301 COMPOSITION AND CONVERSATION I (3) Reading, conversation and composition on topics of cultural and literary interest; grammar and syntax. Conducted in Spanish. Prerequisite: SPAN 202 or equivalent.

SPAN 302 COMPOSITION AND CONVERSATION II (3) Reading, conversation and composition on topics of cultural and literary interest; review of grammar and syntax as needed. Prerequisite: SPAN 301 or equivalent.

SPAN 305 READINGS IN SPANISH (3) Improves reading and comprehension skills in Spanish, while exposing students to introductory Spanish literature. Prerequisite: SPAN 202 or equivalent or consent of instructor.

SPAN 306 SPANISH PHONETICS (3) Analysis and laboratory drills of standard Latin-American pronunciation with some attention to Castilian. Conducted in Spanish. Not open to native speakers of Spanish. Prerequisites: SPAN 301-302 or equivalent.

SPAN 311 CULTURE AND CIVILIZATION OF SPAIN (3) Value-system and way of life as embodied in the language, history, arts and customs of Spain. Conducted in Spanish. Prerequisites: SPAN 301-302 or equivalent.

SPAN 312 CULTURE AND CIVILIZATION OF LATIN AMERICA (3) Value-system and way of life as embodied in the language, history, arts and customs of Ibero-America. Prerequisites: SPAN 301-302 or equivalent.

SPAN 321 SURVEY OF SPANISH LITERATURE (3) Survey of major literary works produced in Spain throughout the centuries. Conducted in Spanish. Prerequisites: SPAN 301 and SPAN 302 or equivalent.

SPAN 322 SURVEY OF SPANISH-AMERICAN LITERATURE (3) Survey of major literary works produced in Spanish America throughout the centuries. Conducted in Spanish. Prerequisites: SPAN 301 and SPAN 302 or equivalent.

SPAN 331 SPANISH FOR BUSINESS (3) The fundamentals of commercial correspondence in Spanish. Focuses on the form and style of Spanish currently used in a business environment. Intensive practice in speaking, writing and translating. Prerequisites: SPAN 301-302 or equivalent or consent of instructor.

SPAN 370 SPECIAL TOPICS IN SPANISH (3-6) Specialized topics in language and culture. Content varies. May be repeated once for a maximum of 6 units provided a different topic is covered. Prerequisite: SPAN 202 or equivalent.

SPAN 391 ADVANCED SPANISH GRAMMAR (3) Spanish syntax, idiomatic construction, word formation, original composition. Conversation and oral drill. Conducted in Spanish. Prerequisites: SPAN 301-302.

SPAN 402 ASPECTS OF SPANISH LINGUISTICS (3) Linguistic and structural features of the Spanish language are examined. Conducted in Spanish. Prerequisites: SPAN 301 and SPAN 302 or equivalent.

SPAN 407 ADVANCED SPANISH COMPOSITION (3) Development of composition skills through writing. Conducted in Spanish. Prerequisites: SPAN 301 and SPAN 302 or equivalent.

SPAN 408 ADVANCED SPANISH CONVERSATION (3) Development of advanced skills to participate in both formal and informal conversation, social and abstract topics. Conducted in Spanish. Prerequisites: SPAN 301-302 or equivalent.

SPAN 409 TRANSLATION (3) Translation theory and practice English to Spanish and Spanish to English. Prerequisite: SPAN 301 or SPAN 302.

SPAN 412 CONTEMPORARY SPANISH NOVEL (3) Emphasis on such writers as Cela, Sender, Delibes and Goytisolo. Conducted in Spanish. Prerequisite: SPAN 321 or SPAN 322 or equivalent.

SPAN 417 THE GOLDEN AGE IN SPANISH LITERATURE I (3) Principal attention to Cervantes, Tirso de Molina, Lope de Vega and Ruiz de Alarcón. Conducted in Spanish. Prerequisite: SPAN 321 or SPAN 322 or equivalent.

SPAN 431 19TH-CENTURY SPANISH LITERATURE (3) The main literary movement of the century: neoclassicism, romanticism, realism, naturalism and special emphasis on "costumbrismo." Conducted in Spanish. Prerequisite: SPAN 321 or SPAN 322 or equivalent.

SPAN 455 HISPANIC POPULAR CULTURES (3) Analysis of a topic concerned with Hispanic folklore and popular cultures. May be repeated for a maximum of 6 units. Prerequisites: SPAN 301 and SPAN 302 or consent of department.

SPAN 465 FILM AND LITERATURE IN SPANISH (3) Comparative examination of the complex relationships between films and literature in Spanish. Course conducted in Spanish. Course may be repeated for a maximum of 6 units when identified by a different subtitle. Prerequisite: SPAN 321 or SPAN 322.

SPAN 470 SPECIAL TOPICS IN SPANISH (3) Discussion of a central topic with changing emphasis from year to year. May be repeated for credit provided a different topic is covered. Prerequisite: SPAN 321 or SPAN 322 or equivalent.

SPAN 481 THE SHORT STORY IN SPANISH (3) Literary analysis of short stories from Spain and/or Latin America. Conducted in Spanish. Prerequisite: SPAN 321 or SPAN 322 or equivalent.

SPAN 491 DIRECTED READINGS IN SPANISH LITERATURE (1-3) Reserved for superior students under the guidance of a departmental adviser. For junior or senior majors only. Conducted in Spanish. Prerequisites: at least 3 units of literature study at the 400 level, consent of department chair.

SPAN 492 DIRECTED READINGS IN SPANISH (1-3) Similar to Spanish 491 with concentration on a different subject matter. Conducted in Spanish. Junior or senior majors only. Prerequisites: at least 3 units of literature study at the 400 level, consent of department chair.

SPAN 494 TRAVEL STUDY ABROAD (3-16) A study of the main features of Hispanic culture and civilization. Cities and topics to be selected. For complete information contact the chair of the department. Prerequisite: consent of instructor.

SPAN 497 INTERNSHIP IN SPANISH (3) Gives training and experience using Spanish in working with government, business and industry in Maryland or Washington, D.C., under professional supervision. Prerequisites: junior or senior standing Spanish majors (professional track) only, and completion of at least 27 units above 300-level courses. Written consent of coordinator of program.

SPECIAL EDUCATION (SPED)

Upper Division

SPED 301 INTRODUCTION TO SPECIAL EDUCATION: K-12 (3) Historical, philosophical, legal foundations of special education as related to current issues and practices in educational settings.

SPED 401 CURRICULUM/METHODS OF INCLUSION (3) Designing and implementing inclusive programs. Prerequisite: SPED 301.

SPED 413 ASSISTIVE TECHNOLOGY FOR STUDENTS WITH DISABILITIES K-12 (3) Designing instruction for students with disabilities using assistive and instructional technology. Prerequisites: SPED 301 and ISTC 201 or equivalent.

SPED 415 ASSESSMENT OF INFANT/PRIMARY STUDENTS WITH DISABILITIES (3) Comprehensive assessment of young children, linking evaluative information to inclusive programming.

SPED 417 COLLABORATIVE PLANNING FOR INFANT/PRIMARY PROGRAMS (3) Methods and models of interdisciplinary collaborative planning for young children with disabilities. Prerequisite: SPED 301.

SPED 425 FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (K-12) (3) Assessment techniques; philosophical rationale; current research; intervention strategies. Prerequisites: 6 units PSYC; 9 units SPED or consent of instructor.

SPED 427 CURRICULUM/METHODS OF SOCIAL EMOTIONAL AND MOTOR DEVELOPMENT FOR STUDENTS WITH DISABILITIES K-12 (3) Curriculum theory: research, instructional techniques for students with disabilities. Prerequisites: 6 units SPED or consent of instructor.

SPED 428 WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES (3) Communication skills, human relations; parent counseling and conferencing. Prerequisites: SPED 301 and consent of SPED instructor.

SPED 429 CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES (3) Theoretical foundations; development of practical interventions. Prerequisites: SPED 301 and consent of SPED instructor.

SPED 430 INFORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (K-12) (3) Assessment, diagnosis, prescriptive techniques; procedures, administration, interpretation, programming. Prerequisites: SPED 301 and consent of SPED instructor.

SPED 431 CURRICULUM AND METHODS OF READING FOR PRIMARY STUDENTS WITH DISABILITIES (3) Reading practices, context, procedures, materials and assessment for primary students with disabilities. Prerequisite: SPED 301.

SPED 441 CURRICULUM/METHODS OF INSTRUCTION FOR STUDENTS WITH DISABILITIES (K-12) (3) Characteristics affecting learning, designing educational programs. (Observations in appropriate settings and guest lecturers in specialty area.) Prerequisites: 6 units in PSYC and 6 units in education.

SPED 451 PSYCHOEDUCATIONAL ASSESSMENT OF STUDENTS WITH DISABILITIES (ELEMENTARY/MIDDLE SCHOOL) (3) Assessment and interventions for cognitive, educational, emotional and social behaviors of students with disabilities. Special permit required. Prerequisites: SPED 301, SPED 425, SPED 430.

SPED 453 CURRICULUM AND METHODS OF SECONDARY SPECIAL EDUCATION (3) Issues and trends, including transitional-related instruction, postsecondary programs and adaptability in secondary classrooms. Prerequisite: SPED 301 or consent of the instructor.

SPED 455 ASSESSMENT OF MIDDLE AND HIGH SCHOOL STUDENTS WITH DISABILITIES (3) Diagnosis and prescriptive techniques used by secondary-level special education professionals. Prerequisite: SPED 301.

SPED 469 COLLABORATIVE TEACHING IN THE ELEMENTARY SCHOOL (3) Provides general education and special education teacher candidates with the knowledge and dispositions necessary for successful collaborative teaching. Prerequisite: 9 units in SPED.

SPED 470 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3) In-depth study of a selected topic in special education. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. May be repeated for a maximum of 6 units.

SPED 491 INTERNSHIP: STUDENTS WITH DISABILITIES IN ELEMENTARY/MIDDLE GRADES (3) Supervised clinical field experience with elementary/middle school students with disabilities. Prerequisites: 12 units SPED and consent of the program director.

SPED 493 SEMINAR IN STUDENT TEACHING (3) This seminar is taken during the student teaching term. Topics include: special education; critical issues and topics; making special education professional. (Taken with SPED 498.)

SPED 496 INTERNSHIP: STUDENTS WITH DISABILITIES (SECONDARY/ADULT PROGRAMS) (3) Supervised clinical field experience with students with disabilities at the middle and high school levels prior to student teaching. Prerequisites: 12 units of SPED and consent of coordinator of secondary special education.

SPED 497 INTERNSHIP: STUDENTS WITH DISABILITIES IN INFANT/PRIMARY PROGRAMS (3) Supervised clinical field experience with young children with disabilities. Prerequisites: 12 units SPED and consent of the program director.

SPED 498 STUDENT TEACHING: SPECIAL EDUCATION (3-12) Placement in special education classroom either public or private at the age/grade appropriate for students' programs. Prerequisites: 18 units SPED and consent of the program director.

AUDIOLOGY AND SPEECH-LANGUAGE PATHOLOGY (SPPA)

See under "A"

Graduate Division

See *TU Graduate Catalog* for course descriptions.

THEATRE ARTS (THEA)

Lower Division

THEA 101 ACTING I (3) Development of imagination through improvisation, exercises and simple scenes.

THEA 102 HONORS ACTING I (3) Development of imagination through improvisation, exercises and simple scenes. Honors College course.

THEA 103 INTRODUCTION TO AMERICAN THEATRE (3) Theatrical experience through study of the various types, styles and production processes of the theatre. Theatre as a public art and its relationship to our culture.

THEA 105 MOVEMENT FOR THE ACTOR (3) Tension, release, alignment and physical characterization utilizing movement theories. Prerequisite: THEA 110 or consent of instructor.

THEA 109 ACTING I FOR DESIGN/PRODUCTION AND THEATRE STUDIES (3) Introduction to acting skills. Basic performance vocabulary and fundamentals. Includes text work, improvisation and performance exercises. This course will also incorporate the elements of acting through the lens of the total theatre maker. Prerequisite: Theatre Major in Design/Production or Theatre Studies Track or permission of instructor.

THEA 110 ACTING I FOR ACTING TRACK (3) Introduction to acting skills. Basic performance vocabulary and fundamentals grounded in the language of Stanislavsky. Includes text work, improvisation and performance exercises. Prerequisite: Audition/placement into Acting track.

THEA 111 VOICE FOR THE ACTOR I (3) Theory and practice in vocal production, application to the freeing, development and strengthening of the voice. Prerequisite: THEA 110 or consent of instructor.

THEA 125 SCRIPT ANALYSIS (3) Interpretation and analysis of playscripts as the basis for public performance, from the viewpoints of audience members and practitioners. Introduction to research methods for contemporary performance. Some sections reserved for majors only.

THEA 126 HONORS SCRIPT ANALYSIS (3) Interpretation and analysis of playscripts as the basis for public performance, from the viewpoint of audience members and practitioners. Introduction to research methods for contemporary performance. Honors College course.

THEA 142 INTRODUCTION TO THEATRE DESIGN (3) Creative aspects of theatrical design from concept to realization. Some sections reserved for majors only. \$25 lab/class fee.

THEA 201 SCENIC DESIGN I (3) Influence of acting, directing, audience and aesthetics on the development of scenic design.

THEA 202 ACTING II (3) Technique and practice of scene study: analyzing a script, rehearsing a scene and playing an action. May be repeated for a maximum of 6 units. Prerequisites: THEA 110, THEA 105 and THEA 111 and consent of instructor.

THEA 205 THEATRE GAMES (3) Exercises in "game structures" to develop creativity, encourage work on personal acting techniques, and free the actor from mechanical stage behavior. Prerequisite: THEA 101.

THEA 209 SOUND DESIGN (3) Electronic and acoustic information and their relationship to theatre spaces and artistic applications.

THEA 210 AUDITION TECHNIQUE (3) Selection, preparation and presentation of audition pieces for stage, television, film and other media. Prerequisites: THEA 110, THEA 111, THEA 105 and/or consent of instructor.

THEA 211 HISTORY OF THEATRE AND DRAMA I (3) Relationship of theatre and drama to other fine arts and humanistic studies from their origins to 1600. Prerequisite: THEA 125.

THEA 212 HISTORY OF THEATRE AND DRAMA II (3) Relationship of theatre and drama to other fine arts and humanistic studies from 1600 to 1850. Prerequisite: THEA 125.

THEA 213 HISTORY OF THEATRE AND DRAMA III (3) Relationship of theatre and drama to other fine arts and humanistic studies from 1850 to present. Prerequisite: THEA 125.

THEA 231 MIME AND PHYSICAL THEATRE TECHNIQUES (3) Ensemble exercises and performance projects utilizing gestures, illusions and walks.

THEA 241 COSTUME, DRESS AND SOCIETY: EGYPTIAN TO ELIZABETHAN (3) Study of clothing, costume design and construction.



THEA 242 COSTUME, DRESS AND SOCIETY: ELIZABETHAN TO 1950 (3) Study of clothing, costume design and construction.

THEA 245 MAKEUP DESIGN I (3) Theories and techniques of designing stage makeup for a variety of characters and roles. \$50 lab/class fee.

THEA 246 MAKEUP DESIGN II (3) Special effects in character makeup using advanced techniques. Prerequisite: THEA 245. \$50 lab/class fee.

THEA 251 STAGECRAFT I (3) Production techniques, construction procedures, painting, props and lighting. Lab required.

THEA 255 LIGHTING DESIGN I (3) Developing awareness of light and its application as a form of aesthetic expression. Lab required.

THEA 257 STAGE MANAGEMENT (3) Theatrical production focusing on the duties and responsibilities of stage managers. Lab required.

THEA 261 ACTING FOR MUSICAL THEATRE I (3) An introduction to the acting problems inherent in musical theatre performance. Theory and practice. Prerequisite: consent of instructor.

THEA 262 ACTING FOR MUSICAL THEATRE II (3) Theory and practice of acting in a musical theatre situation. Work in scene and role analysis, character development and personal performing technique.

THEA 271 SPECIAL TOPICS (1-3) In-depth study of a selected area dependent upon faculty and student interest. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: department approval.

THEA 280 EXPERIMENTAL LABORATORY THEATRE ENSEMBLE (3) Experimental techniques, style and performance.

Upper Division

THEA 301 TECHNIQUES OF COMEDY (3) An introduction to the theories and uses of comedy. Varied practice in comic performance with an emphasis on material emanating from students' experiences. Prerequisites: THEA 110, one other acting course or consent of instructor.

THEA 302 INTERMEDIATE SCENE STUDY (3) A continuation of the work of THEA 202, focusing on scene study, script analysis and character development. Modern realism through contemporary non-realism. Prerequisites: THEA 202, THEA 322, THEA 335 and permission of instructor.

THEA 303 CULTURAL DIVERSITY IN CONTEMPORARY THEATRE (3) An examination of both the construction of cultural identity and issues of cultural conflict as they are expressed in contemporary theatre.

THEA 304 HONORS CULTURAL DIVERSITY IN CONTEMPORARY THEATRE (3) An examination of both the construction of cultural identity and issues of cultural conflict as they are expressed in contemporary theatre. Honors College course.

THEA 306 THEATRE ORGANIZATION AND ADMINISTRATION (3) An examination of theatre organizations, their missions within the community and business models used for producing theatre. Areas such as management, marketing, development and finance will be explored through lecture, discussion and creative projects. Prerequisite: Junior or Senior standing in major; or consent of instructor.

THEA 307 THEORIES OF THEATRE (3) Theories in acting, directing, design and dramaturgy from the classical through the modern period. Prerequisites: ENGL 102; THEA 211, THEA 212, THEA 213, or consent of instructor.

THEA 308 VOICE AND MOVEMENT INTEGRATION (3) Flexibility, responsiveness and integration of vocal and physical expression. Prerequisites: THEA 322, THEA 335 and consent of instructor.

THEA 309 ACTING III (6) Character development, approaching a script, structuring a scene, relating to environment, ensemble work and audition techniques. Prerequisite: consent of instructor.

THEA 310 THEATRE FOR SOCIAL CHANGE (3) Examination of the theory and practice of theatre as a catalyst for social

change. Development of original performances to address significant issues in contemporary American experience. Prerequisite: THEA 110 or THEA 102 or consent of instructor.

THEA 312 SHAKESPEARE (3) Shakespeare reading facility, text analysis, contemporary vocabulary in scenes and monologues. Prerequisite: consent of instructor.

THEA 314 PLAYWRITING (3) Examination of the principles and processes playwrights use to create texts for the stage. Fundamental elements of playwriting, such as the relationship between language and structure, will be explored through the analysis of existing plays and the development of students' original scripts in a workshop setting. Prerequisites: ENGL 102 and one of THEA 211, 212 or 213; or consent of instructor.

THEA 315 ADVANCED SCENE STUDY (1-6) Understanding scenes with specific motivational, analytical, character or other acting problems. May be repeated for a maximum of 6 units. Prerequisite: consent of instructor.

THEA 316 THEATRE OF CROSSING CULTURES (3) Students will apply the actor's process of creating a role through character research, text analysis and ensemble building to the practice of crossing cultural boundaries. This process will help students understand how race, class and gender shape individual identity and community experience. Prerequisites: Completion of GedEd I.B. and ENGL 102 or ENGL 190.

THEA 317 ENSEMBLE LABORATORY THEATRE (3) An exploration of the ensemble process used to create original theatre. Prerequisite: THEA 110 or THEA 109; THEA 142; and one of THEA 211, THEA 212 or THEA 213.

THEA 318 TOPICS IN STAGE COMBAT (3) Creating the illusion of violence for live theatrical performance. The specific weapons or techniques covered will be determined by the course instructor. May be repeated for a maximum of 9 units with different weapons or techniques.

THEA 322 VOICE FOR THE ACTOR II (3) Theory and practice of vocal production applied to period, contemporary and original texts. May be repeated for a maximum of 6 units. Prerequisite: THEA 202 and consent of instructor.

THEA 327 ACTING FOR THE CAMERA (3) Development of camera acting skills and taped/directed scene study. Prerequisites: THEA 202 or consent of instructor.

THEA 331 DIRECTING I (3) Fundamentals of play directing through exercises, directorial play analysis and projects in directing short scenes. Prerequisites: THEA 110, THEA 125 and one of either: THEA 211 or THEA 212 or THEA 213, or consent of instructor.

THEA 332 MIME AND PHYSICAL THEATRE STYLES (3) Advanced mime technique, ensemble exercises and performances in the Italian, Oriental, French and American styles, including community service performances. Prerequisite: THEA 231 or consent of instructor.

THEA 335 IMPULSE IMPROVISATION (3) Listening and responding to impulses within oneself and the ensemble. Prerequisites: THEA 202 and consent of instructor.

THEA 345 SPEECH AND DIALECT FOR THE THEATRE (3) This course will introduce the analysis of spoken English and the application of that analysis to speech for the stage, including techniques to learn English language dialects and foreign language accents. Prerequisites: THEA 110 or THEA 109, THEA 125 or consent of instructor.

THEA 351 STAGECRAFT II (3) Application of new technological approaches to stage construction, rigging and organization. Prerequisite: THEA 251 or consent of instructor.

THEA 353 COSTUME DESIGN I (3) Research techniques and relationship of color, texture and historical period to the script and production style.

THEA 355 LIGHTING DESIGN II (3) Color, organization and approaches to lighting design. Lab required. Prerequisite: THEA 255 or consent of instructor.

THEA 357 HAND DRAFTING FOR THE THEATRE (3) A practical introduction to hand drafting for the theatre. Prerequisite: THEA 142.

THEA 358 PROPERTY DESIGN AND CONSTRUCTION (3) Materials, tools and techniques for executing property design. Prerequisite: consent of instructor. \$50 lab/class fee.

THEA 361 SCENIC DESIGN II (3) Relationship of concept, script, aesthetics and research to a production's design and style. Prerequisite: THEA 201 or consent of instructor.

THEA 365 THEATRE STUDY ABROAD (9) One term exchange program in acting, design or theatre studies at universities abroad. Prerequisites: junior/senior standing and consent of department.

THEA 380 TOPICS IN DIVERSITY (3) Racial, ethnic, class, gender or sexual identity through the theatre as created by and about members of that group. Prerequisite: completion of GenEd I.B. and ENGL 102 or 190.

THEA 401 COMMUNITY OUTREACH IN THEATRE (3) An experiential study of the value of arts in the local community. In a program that uses storytelling and other theatre activities, university students will work in a Baltimore City school with third-grade students to encourage and enhance the experience of reading. Prerequisite: THEA 110 or THEA 109.

THEA 410 CATALYST THEATRE II (3) Examination of social issues occurring on college and high school campuses and the creation, development and performance of original scripts. Prerequisites: THEA 202 or THEA 310 and consent of instructor.

THEA 421 DIRECTING II: THE CONTEMPORARY PLAY (3) Preparation techniques and directorial approaches to contemporary drama. Individual directing projects of scenes from representative contemporary dramas. Prerequisite: THEA 331 or consent of instructor.

THEA 423 ADVANCED STUDY IN MOVEMENT THEATRE (3) Develop, prepare and perform a solo or ensemble piece. May be repeated for a maximum of 9 units. Prerequisites: THEA 332 and THEA 335.

THEA 425 ADVANCED STUDY IN ACTING STYLE (1-9) Advanced work in the problems of acting plays from poetic and historic theatre. May be repeated for a maximum of 9 units, with no more than 3 units to be taken in any term. Prerequisite: consent of instructor.

THEA 427 ADVANCED STUDY IN DIRECTING (1-9) Independent study in preparation, rehearsal and production of special directing projects. May be repeated for a maximum of 9 units. Prerequisites: THEA 331 and consent of instructor.

THEA 429 ADVANCED STUDY IN THEATRE PRODUCTION (1-9) Independent study in theatre production. May be repeated for a maximum of 9 units. Prerequisite: consent of instructor.

THEA 433 ADVANCED STUDY IN STAGE MANAGEMENT (1-9) Independent study in stage management. May be repeated for a maximum of 9 units. Prerequisites: THEA 257, THEA 331 or consent of instructor.

THEA 443 STRUCTURAL DESIGN AND SAFETY (3) Stress analysis, safety practices and construction techniques. Prerequisites: MATH 115, THEA 251 or consent of instructor.

THEA 445 SCENE PAINTING (3) Techniques for painting scenery. Lab required. Prerequisites: THEA 201, ART 201 or consent of instructor.

THEA 453 COSTUME DESIGN II (3) Fabric selection, budget preparation, pattern choices, resums and portfolios. Prerequisite: THEA 353.

THEA 463 PERIOD STYLE FOR DESIGN (3) Historical periods and styles and their relationship to the visual arts, literature and society. Prerequisite: consent of instructor.

THEA 480 [580] ADVANCED STUDY IN THEATRE DESIGN (1-9) Independent study in costume, scenery or lighting design. May be repeated for a maximum of 9 units. Prerequisite: consent of instructor.

THEA 487 PROFESSIONAL THEATRE SEMINAR (1-12) A term-long internship in a resident theatre company. For majors only. Prerequisite: consent of department.

THEA 488 THEATRE VISITATION AND ANALYSIS ABROAD (3) Analysis and critique of theatre productions. Prerequisites: junior/senior standing and consent of department.

THEA 489 SENIOR ACTING SEMINAR (3) Auditioning techniques, unions, agents, resumés, the transition from student to professional and the realities of professional theatre. Prerequisite: consent of instructor.

THEA 490 PERFORMANCE PRACTICUM (1–3) Performance in a theatre production sponsored by the Towson University Department of Theatre Arts. Eligible productions determined by the department. Repeatable for a maximum of 9 units. Prerequisites: audition and approval of instructor.

THEA 491 PRODUCTION DRAMATURGY (1–3) Practical experience in production dramaturgy, which will include a combination of research, text analysis and education outreach. This is a project course related to specific theatrical productions and therefore assignments will be determined by the instructor, student and director. May be repeated for a maximum of 9 units. Prerequisites: THEA 125 and at least one of either THEA 211, THEA 212 or THEA 213; permission of instructor.

THEA 492 THEATRE PRODUCTION: ACTING (1) Experience involving the process of applying acting skills to scene works for directing class projects. May be repeated for a maximum of 3 units. Prerequisite: THEA 109 or THEA 110 or consent of instructor.

THEA 493 [593] ADVANCED STUDY IN THEATRE (1–9) Independent study of an academic or creative nature. May be repeated for a maximum of 9 units. Prerequisite: approval of plan of study by instructor and department chair.

THEA 494 THEATRE PRODUCTION: SCENIC ELEMENTS (1) Experience involving major responsibility in props, scenic construction and painting on a departmental production. May be repeated for up to 3 units.

THEA 495 THEATRE PRODUCTION: LIGHTING AND SOUND (1) Experience involving major responsibility in lighting or sound on a departmental production. May be repeated for up to 3 units.

THEA 496 THEATRE PRODUCTION: CONCENTRATION IN COSTUME (1) Experience involving major responsibility in costuming for a departmental production. May be repeated for up to 3 units.

THEA 497 THEATRE PRODUCTION: RUNNING CREW (1) Experience involving major responsibility in running a show. May be repeated for up to 3 units.

THEA 498 THEATRE PRODUCTION: ADMINISTRATION (1) Experience involving administrative responsibilities for departmental resources or productions. May be repeated for a maximum of 3 units. Prerequisites: THEA 125, THEA 142, and THEA 109 or THEA 110, or consent of instructor.

THEA 499 SPECIAL PROJECT IN THEATRE RESEARCH (3) Seminar to demonstrate students' proficiency in an area agreed upon by students and their adviser. Prerequisite: Theatre major with senior standing or consent of instructor.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

WOMEN'S STUDIES (WMST)

Lower Division

WMST 231 WOMEN IN PERSPECTIVE (3) An examination of the status of women and women's attempts to achieve economic, legal and social equality and physical integrity in the past and today with an emphasis on U.S. women. The focus is on both the commonalities and the diversity of women's experience. Topics covered include marriage, motherhood, education, jobs and sexuality, with attention to race and class.

WMST 232 HONORS WOMEN IN PERSPECTIVE (3) An examination of the status of women and women's attempts to achieve economic, legal and social equality and physical integrity, in the past and today with an emphasis on U.S. women. The focus is on both the commonalities and the diversity of women's experience. Topics covered include

marriage, motherhood, education, jobs and sexuality, with attention to race and class. Emphasis on student research into and analysis of women's political, autobiographical and fictional writings. Honors College course.

WMST 233 INTERNATIONAL PERSPECTIVES OF WOMEN (3) Interdisciplinary examination of women's status and activism worldwide, including regional and local comparisons. Roles of governments and international organizations in shaping women's experiences.

WMST 234 HONORS INTERNATIONAL PERSPECTIVES ON WOMEN (3) Interdisciplinary examination of women's status and activism worldwide, including regional and local comparisons. Roles of governments and international organizations in shaping women's experiences. Women's rights and movements to implement them, including grassroots activism. Emphasis on student research into and analysis of analytic essays, news, reportage, fiction and testimonial writings. Honors College course.

WMST 235 AMERICAN WOMEN AND POPULAR CULTURE (3) Interdisciplinary examination of representations of women, femininity and masculinity in contemporary American popular culture, using gender to apply critical analysis to film, literature, television and music, including the diverse responses of feminist artists and alternative media.

WMST 240 THEMES AND ISSUES IN WOMEN'S STUDIES (3) Study of a theme or current issue from the perspective of women's studies. May be repeated for a maximum of 9 units provided that a different topic is covered each time.

Upper Division

WMST 332 [532] WOMEN'S CULTURE AND CREATIVITY (3) Study of the historical conditions influencing women's creativity, the nature of women's aesthetic achievements, and the emergence of new female cultural and artistic traditions. Prerequisite: WMST 231 or WMST 232 or consent of instructor.

WMST 333 WOMEN'S WORDS, WOMEN'S LIVES (3) Practice in and study of expository writing about women. Readings include fiction, biographies, autobiographies, letters and journals; student writing will focus on such topics as women's roles, relationships and actions. Prerequisites: ENGL 102; one course in women's studies or one additional English course.

WMST 335 [535] WOMEN, WORK AND FAMILY (3) Women's work examined historically and cross-culturally from an interdisciplinary perspective. Women's work in traditional societies, effects of industrialization on women's work, and women's paid and unpaid work in contemporary societies. Prerequisite: 3 lower-division units in women's studies or consent of instructor.

WMST 336 [536] WOMEN AND MEDICINE (3) How gender has influenced the structure, content and practice of medicine in the 19th and 20th centuries, with emphasis on disease theory and treatment, physicians' involvement in social policy and women's challenges to medical authority. Special focus on the history of nursing, women's entry into medical practice and women's health movements past and present. Prerequisite: 3 units in women's studies or social sciences.

WMST 337 [537] FEMINIST THEORY (3) An examination of the variety of perspectives, theories, debates and controversies within feminist thought and practice including global activist movements. Prerequisites: 3 units in women's studies or consent of instructor.

WMST 338 [538] WOMEN AND SEXUALITY (3) Examination of the politics of sexuality: the interaction between cultural definitions and evaluations of women's sexualities and women's social and legal states; and women's attempts to achieve sexual autonomy. Emphasis on how the meaning of sexuality changes over time and how women respond to these changes, and their effect on women. Prerequisites: 3 units in women's studies or social sciences.

WMST 339 REPRODUCTIVE TECHNOLOGIES AND THE FUTURE OF MOTHERHOOD (3) Reproductive science and contraceptive technologies affecting contemporary

society, focusing on ethical and legal issues, and changing definitions of motherhood. Prerequisites: two science courses or one math and one science course.

WMST 345 WOMEN, ENVIRONMENT AND HEALTH (3) Relationships between economic development, health and the environment from a global perspective with a focus on women's roles in environmental management; how women's activism affects social and public policy agendas.

WMST 370 [570] TOPICS IN WOMEN'S STUDIES (3) An interdisciplinary examination of selected issues, themes or topics in women's studies. Variation in content in different terms. May be repeated for credit provided a different topic is covered. Prerequisite: one women's studies course or consent of instructor.

WMST 481 THE EROTIC IMAGINATION IN CHRISTIANITY AND HINDUISM (3) Explores the use of sexual imagery to understand the human-divine relationship. Critical exploration of the ways that erotic religious traditions both re-inscribe and destabilize cultural norms of gender and sexuality.

WMST 481 DIRECTED READINGS FOR HONORS IN WOMEN'S STUDIES (3–4) Reading and research in preparation for the writing of an Honors thesis. Prerequisite: consent of the Departmental Honors coordinator. Special permit only.

WMST 485 SEMINAR IN WOMEN'S STUDIES (3) Advanced study in a specialized area of women's studies. May be repeated for a maximum of 6 units. Prerequisites: WMST 231 or WMST 232 and WMST 337 or equivalent. Special permit only.

WMST 491 [591] DIRECTED READING IN WOMEN'S STUDIES (1–4) Independent reading in women's studies with emphasis on interdisciplinary relationships. Topics selected by student in consultation with the instructor. May be repeated for a maximum of 6 units. Prerequisites: 15 units in interdisciplinary or departmental women's studies courses; minimum 3.00 GPA in women's studies. Special permit only.

WMST 496 INTERNSHIP IN WOMEN'S STUDIES (3–6) Field placement for students in agencies or organizations working on projects that serve women. May be repeated for a maximum of 9 units. Prerequisites: 3.20 GPA in women's studies courses; 3.00 overall GPA; WMST 231, 232, 233 or 234, and 21 upper-level units; no "I" grades on transcript; consent of the women's studies internship coordinator or department chair in advance of term in which student intends to do the internship. Special permit only. Graded S/U.

WMST 499 HONORS THESIS IN WOMEN'S STUDIES (3) Thesis preparation in a chosen area of specialization. Prerequisite: consent of the departmental Honors coordinator. Special permit only.

Graduate Division

See *TU Graduate Catalog* for course descriptions.

WRITING (WRIT)

Upper Division

WRIT 312 HISTORY OF SCIENCE (3) A general overview of the development of scientific knowledge from ancient to modern times. How our modern scientific worldview has been shaped by major periods of scientific development, particularly in the 16th and 17th centuries, involving primarily astronomy and physics, and in the 19th and 20th, including geology, biology and psychology. Attention will be given to the relations between science and culture, religion, technology and public policy. Prerequisite: ENGL 102 or ENGL 190; successful completion of GenEd categories I.B., I.C. and I.IA.

WRIT 375 PUBLIC ADMINISTRATION (3) The theory and practice of managing the public's business with special emphasis on organizational change, personnel and budget. Writing for public administration and the use of computer-based data sources. Prerequisite: POSC 103 and ENGL 102 or ENGL 190.

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**From I-95 (northbound and southbound):**

Take the Baltimore Beltway I-695 west (toward Towson). Take exit 25, Charles Street, south. Proceed approximately 1.7 miles. Turn left on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.

From I-83 (northbound and southbound):

Take the Baltimore Beltway I-695 east (toward Towson). Take exit 25, Charles Street, south. Proceed approximately 1.7 miles. Turn left on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.

From I-70 (eastbound):

Take the Baltimore Beltway I-695 north (toward Towson). Take exit 25, Charles Street, south. Proceed approximately 1.7 miles. Turn left on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.

From Baltimore (Penn Station):

Proceed north on Charles Street for five miles. Turn right on Towsontown Boulevard, and proceed to the first stoplight. Turn right on Osler Drive and make the first right to the Enrollment Services Center parking lot.



V Parking Information Kiosk

P Pay & Display Visitor Parking

L Loading/Unloading
(Free Meter)

♿ Restricted Parking

🚧 Construction areas
Please refer to www.towson.edu
for the most up-to-date information

Academic and Administrative Buildings

The Admissions Office is located in the Enrollment Services (ES) building.

AD Administration Building - E6
AH Auburn House - E2
BU Burdick Hall - B5
CA Center for the Arts - C4
CC Child Care Center - E2
CK Cook Library - D7
DH Dowell Health Center - C7
ES Enrollment Services Ctr - A4
FH Field House - C2
GE Glen Esk - C7
GS General Services - A5
HH Hawkins Hall - C6
LH Lecture Hall - C6
LA College of Liberal Arts - C6
LI Linthicum Hall - C7
LS Landscape Services - D1
MC Media Center - D7
PP Power Plant - C7
PY Psychology Building - C6
SA Stephens Annex - D7

SB Softball Field - D1
SF Soccer Field - C1
SM Smith Hall - C6
SP Schuerholz Park - B5
ST Stephens Hall - D7
TC Towson Center - D2
TD Terrace Dale - E7
(leased space)
TM Towson University Marriott
Conference Hotel - C8
TN Tennis Courts - D1
US Johnny Unitas® Stadium - D2
UU University Union - C5
VB Van Bokkelen Hall - D6
WC West Village Commons
(under construction)
YR 7800 York Road - E6
Y2 7400 York Road - E4

Residence Buildings

AT Glen Complex (A Building) - C5
BA Barton House - A4
BT Glen Complex (B Building) - C5
CT Glen Complex (C Building) - D5
DO Douglass House - A3
DT Glen Complex (D Building) - D5
GD Glen Dining Hall - C5
MH Millennium Hall - B4
NE Newell Hall - D7
ND Newell Dining Hall - D7
PH Paca House - A4
PR Prettyman Hall - D8
RT Residence Tower - C7
RI Richmond Hall - D7
SC Scarborough Hall - D8
TH Tubman House - A3
TR Towson Run Apartments - A3
WA Ward Hall - C8
WE West Hall - C7

A

B

C

D

E

Fall 11

1

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4

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8

Where should I park?

Don't waste time searching for parking. Depending on when you arrive on campus, parking can generally be found in the lots in one of three zones.

