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GRADUATE CATALOG

This is the official site for the 2018-19 Graduate Catalog for Towson University. The catalog contains details on every graduate program, as well as all relevant policies and procedures. All information contained in this catalog is updated annually and published in the summer preceding the given academic year.
## Academic Calendar

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

### Fall Term 2018

<table>
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<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall classes and Change of Schedule period begin</td>
<td>August 27 (M)</td>
</tr>
<tr>
<td>Last day to drop or add first 7-week courses</td>
<td>August 30 (Th)</td>
</tr>
<tr>
<td>Labor Day Holiday (TU closed)</td>
<td>September 3 (M)</td>
</tr>
<tr>
<td>Change of Schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course</td>
<td>September 5 (W)</td>
</tr>
<tr>
<td>Last day to withdraw from first 7-week courses with a grade of “W”</td>
<td>September 24 (M)</td>
</tr>
<tr>
<td>Mid-term and end of first 7-week courses</td>
<td>October 16 (T)</td>
</tr>
<tr>
<td>Second 7-week courses begin</td>
<td>October 17 (W)</td>
</tr>
<tr>
<td>Last day to drop or add second 7-week courses</td>
<td>October 22 (M)</td>
</tr>
<tr>
<td>Last day to withdraw from full-term courses with a grade of “W.” Last day to change to Pass or Audit grading option</td>
<td>November 5 (M)</td>
</tr>
<tr>
<td>Last day to withdraw from second 7-week courses with a grade of “W.”</td>
<td>November 14 (W)</td>
</tr>
<tr>
<td>Thanksgiving Holiday</td>
<td>November 21-25 (W-Su)</td>
</tr>
<tr>
<td>Last Saturday classes meet</td>
<td>December 8 (Sa)</td>
</tr>
<tr>
<td>Last day of classes</td>
<td>December 10 (M)</td>
</tr>
<tr>
<td>Reading Day</td>
<td>December 11 (T)</td>
</tr>
<tr>
<td>Final examinations begin</td>
<td>December 12 (W)</td>
</tr>
<tr>
<td>Last day of examinations and end of term</td>
<td>December 18 (T)</td>
</tr>
<tr>
<td>• Saturday exams will be held at the regularly scheduled meeting time.</td>
<td></td>
</tr>
</tbody>
</table>

### Minimester 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>January 2 (W)</td>
</tr>
<tr>
<td>Change of Schedule period</td>
<td>January 2-3 (W &amp; Th)</td>
</tr>
<tr>
<td>Last day to withdraw</td>
<td>January 11 (F)</td>
</tr>
<tr>
<td>Martin Luther King Day (TU closed)</td>
<td>January 21 (M)</td>
</tr>
<tr>
<td>Classes end</td>
<td>January 22 (T)</td>
</tr>
</tbody>
</table>

### Spring Term 2019

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes begin</td>
<td>January 28 (M)</td>
</tr>
<tr>
<td>Last day to drop or add first 7-week courses</td>
<td>January 31 (Th)</td>
</tr>
<tr>
<td>Change of Schedule period ends. Last day to drop a course with no grade posted to academic record. Last day to add a course</td>
<td>February 5 (T)</td>
</tr>
<tr>
<td>Last day to withdraw from first 7-week courses with a grade of “W.”</td>
<td>February 25 (M)</td>
</tr>
<tr>
<td>Spring Break</td>
<td>March 17-24 (Su-Su)</td>
</tr>
</tbody>
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### Mid-term and end of first 7-week courses

- March 25 (M)

### Second 7-week courses begin

- March 26 (T)

### Last day to drop or add second 7-week courses

- March 29 (F)

### Last day to withdraw from full-term course with a grade of “W.” Last day to change to Pass or Audit grading option

- April 8 (M)

### Last day to withdraw from second 7-week courses with a grade of “W.”

- April 23 (T)

### Last Saturday classes meet

- May 11 (S)

### Last day of classes

- May 14 (T)

### Final examinations begin

- May 15 (W)

### Last day of examinations and end of term

- May 21 (T)

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.*

*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.*

*Towson University is a smoke-free campus*
ABOUT THE UNIVERSITY

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. The first graduate program (M.Ed. in Elementary Education) began in 1958. The institution expanded its offerings in the arts and sciences in 1963 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 reflected its evolution from a state-supported to a state-assisted institution. The first doctoral program (Au.D.) began in 2001. TU has now graduated over 125,000 students. Since 1960, Towson University has awarded more than 18,000 advanced degrees.

Towson University enrolls and graduates more undergraduate students from the region than any other institution. Enrollment for the 2017 fall term was 19,596 undergraduates and 3,109 graduate students.

The Campus
Towson University is situated on a beautifully landscaped, 329-acre campus in the suburban community of Towson, Md., just eight miles north of downtown Baltimore. Students have easy access to the many cultural advantages of the city of Baltimore, the Peabody Conservatory of Music and Library, Enoch Pratt Free Library, Walters Art Museum, Baltimore Museum of Art, Meyerhoff Symphony Hall, Lyric Theatre, Center Stage and many other cultural centers necessary for a well-rounded university experience.

Accreditation
Institutional Accreditation and Approval
Middle States Commission on Higher Education (MSCHE) (http://www.msche.org)

Towson University is accredited by the Middle States Commission on Higher Education (MSCHE) to award undergraduate, master’s and doctoral degrees. In addition, certificates are awarded at the post-baccalaureate and post-master’s levels. Towson University’s accreditation was reaffirmed by MSCHE on November 17, 2011, following an extensive self-study process and site visit. Towson University has been accredited by MSCHE since 1949.

Accreditation is the educational community’s means of self-regulation through quality assurance and improvement. The accrediting process is intended to strengthen and sustain the quality and integrity of higher education, making it worthy of public confidence. MSCHE is the regional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Middle States Commission on Higher Education
3624 Market Street
Philadelphia, PA 19104-2680
Phone: 267-284-5000
www.msche.org (http://www.msche.org)

View Towson University’s Statement of Accreditation Status their website (http://www.msche.org/institutions_view.asp?idinstitution=473).

Maryland Higher Education Commission (http://www.mhec.state.md.us)

The Maryland Higher Education Commission coordinates the growth and development of post-secondary education in Maryland. In keeping with the goals outlined in the State Plan for Higher Education, the commission establishes statewide policies for public and private colleges and universities, and for private career schools. The commission reviews and approves the start-up and continuation of new colleges and universities in Maryland, as well as requests for new academic programs at established schools. Towson University was chartered in the State Constitution as the State Normal School in 1865. Because it was in place prior to the creation of the Maryland Higher Education Commission, it is an “established school.” Towson University has sought and received approval for all programmatic offerings.

Program Accreditation and Approval
American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education (http://www.aota.org/educate/accred.aspx) accredits programs in occupational therapy. Towson University’s master’s program has been accredited since 1978. The program was reaccredited in 2012.

American Speech-Language-Hearing Association, Council on Academic Accreditation in Audiology and Speech-Language Pathology (http://www.asha.org/academic/accreditation/CAA_overview.htm) accredits professional programs. The doctoral program in audiology has been accredited since 2001 and was reaccredited 2012. The master’s program in speech-language pathology has been accredited since 1991 and was reaccredited in 2011.

Commission on Collegiate Nursing Education (http://www.aacn.nche.edu/ccne-accreditation/about/mission-values-history) accredits undergraduate and graduate nursing programs. The undergraduate nursing program has been accredited since 2001. The program was reaccredited in 2011. Graduate level programs have been accredited since 2004. The graduate programs were reaccredited in 2009.

Maryland Board of Nursing (http://mbon.maryland.gov/Pages/default.aspx) has approved the registered nursing program.

Maryland State Department of Education (http://www.marylandpublicschools.org/Pages/default.aspx) has approved programs leading to teacher licensure.

National Association of Schools of Dance, Commission on Accreditation (http://www.arts-accredit.org)* accredits academic units. The Department of Dance has been accredited since 1982 and was last reaccredited in 2003.

National Association of Schools of Music, Commission on Accreditation (http://www.arts-accredit.org)* accredits academic units. The Department of Music has been accredited since 1974 and was last reaccredited in 2004.

National Association of Schools of Theatre, Commission on Accreditation (http://nast.arts-accredit.org)* accredits academic units. The department has been accredited since 2003 and was last reaccredited in 2009.
Towson University

National Council for Accreditation of Teacher Education (http://www.ncate.org)* accredits undergraduate and graduate programs to prepare teachers and other school personnel. Towson University’s programs have been accredited since 1954 and were last reaccredited in 2012.

Towson’s teacher education programs have been recognized by the following organizations as a part of NCATE process:

- American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) / American Association for Health Education (AAHE)
- American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) / National Association for Sport and Physical Education (NASPE)
- American Council on the Teaching of Foreign Languages (ACTFL)
- American Library Association (ALA) / American Association of School Librarians (AASL)
- Association for Childhood Education International (ACEI)
- Association for Middle Level Education (AMLE) formerly National Middle School Association (NMSA)
- Council for Exceptional Children (CEC)
- Educational Leadership Constituent Council (ELCC)
- International Reading Association (IRA)
- National Association for the Education of Young Children (NAEYC)
- National Association of School Psychologists (NASP)
- National Council for the Social Studies (NCSS)
- National Council of Teachers of English (NCTE)
- National Council of Teachers of Mathematics (NCTM)
- National Science Teachers Association (NSTA)
- Association to Advance Collegiate Schools of Business (AACSBI http://www.aacsb.edu) accredits undergraduate and graduate programs in business and accounting. Towson University’s programs were initially accredited in 1992 and were last reaccredited in 2013.
- Joint Review Committee on Education Programs in Athletic Training (https://caete.net/about) accredits entry-level education programs. Towson University’s program has been accredited since 1999 and was last reaccredited in 2009.
- ABET (Computing Accreditation Commission) (http://www.abet.org), formerly known as Accrediting Board for Engineering and Technology, accredits undergraduate programs in computer science. Towson University’s computer science program has been accredited since 1994 and was reaccredited in 2012.
- Forensic Science Education Programs Accrediting Commission (FEPEC) (http://www.aafs.org) accredits undergraduate and graduate programs. Towson University’s programs have been accredited since 2011.
- Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA) (http://www.arc-pa.org) accredits entry-level physician assistant programs. Towson University’s program has been accredited since 1972 and was last reaccredited in 2010

State Authorization

Towson University is not authorized to conduct distance education programs in the following states: Alabama, Arkansas, Hawaii, Indiana, Iowa, Kansas, Minnesota, Missouri, Montana, the Philippines, Puerto Rico, Utah, the Virgin Islands, Wisconsin, and Wyoming. However, residents of these states may enroll in distance education courses if they are in residence in Maryland and enrolled concurrently in face-to-face courses on the Towson University campus.

(Approved by USM, pending Maryland Higher Education Commission final approval)

I. Summary Mission Statement

Towson University fosters intellectual inquiry and critical thinking preparing graduates who will serve as effective, ethical leaders and engaged citizens. Through a foundation in the liberal arts, an emphasis on rigorous academic standards, and the creation of small learning environments, we are committed to providing a collaborative, interdisciplinary and inter-professional atmosphere, excellence in teaching, leadership development, civic engagement, and applied and sponsored research opportunities at the undergraduate and graduate levels. Our graduates leave Towson University with the vision, creativity and adaptability to craft solutions that enrich the culture, society, economy, and environment of Maryland, the region, and beyond.

II. Institutional Identity

Towson University, founded in 1866 as the Maryland State Normal School, offers nationally recognized undergraduate and graduate programs in the liberal arts, sciences, arts, and applied professional fields. Towson University is more than Maryland’s largest comprehensive university. It is an institution that prepares a qualified workforce and produces innovative, evidence-based research. As a productive, research-oriented comprehensive university, it provides students with extraordinary opportunities to work alongside faculty in addressing significant issues, while also generating new knowledge to solve real world societal problems.

Towson University’s longstanding commitment to creating a multicultural campus is advanced by policies and practices that promote the recruitment and retention of diverse student, staff, and faculty bodies that reflect local, regional, national, and global diversity. Curricular and extracurricular programming supports TU’s commitment to diversity and inclusion.

As a large and complex learning community, TU offers rigorous undergraduate and graduate programs. The undergraduate curriculum promotes the intellectual skills essential for:

- communicating effectively,
- gathering and evaluating information,
- thinking critically and meaningfully,
- using technology effectively,
- appreciating diversity and commonalities, and
- making informed ethical choices.

These skills are grounded in TU’s long-standing commitment to a strong liberal education core that emphasizes an understanding of how the arts and sciences gather, evaluate, and apply information to reach valid conclusions. The core curriculum, combined with focused study
in a chosen discipline and a commitment to students’ co-curricular experience, serves to develop intellectual and social abilities that will guide students as contributing members of the workforce and of a democratic society.

The masters and applied doctoral programs build on the strengths of TU and are in areas that are fundamental to the development and vigor of the institution and the State of Maryland by conducting critical research that informs business, health care, and educational practices. The goal of these programs is to prepare ethically and globally minded professionals who are leaders in their fields.

The six colleges that define the fields of study at Towson University include:

The College of Business and Economics, accredited by AACSB International (The Association to Advance Collegiate Schools of Business) in both its accounting and business administration programs, offers a one-of-a-kind Business Excellence program designed to prepare students to enter their careers. AACSB accreditation places the college in the top one percent of business schools worldwide and the top 10 percent in the United States. Offering both undergraduate and graduate programs, the college provides a comprehensive business and entrepreneurial focused education.

Recognized as Maryland’s preeminent teacher education institution as well as a national model for professional preparation, Towson University has a distinguished history in the preparation of classroom teachers and education specialists. The College of Education offers a comprehensive slate of high quality, performance-based, professional education programs for the initial and advanced preparation of teachers and education specialists. The majority of graduates from the college enter schools as teachers and specialists.

The College of Fine Arts and Communication encourages students to develop their creative and analytical abilities, tailored to their aspirations, by encouraging dialogue, inspiration, passion and beauty. These attributes are fostered through a broad liberal arts education and specialized professional training. Recognized as a thriving visual arts center for Maryland, the college contributes to the cultural life of Towson and the Greater Baltimore region.

The College of Health Professions develops outstanding professionals at the undergraduate and graduate levels in a wide range of health care, human service, and sport-related fields that promote and enhance health, well-being, and human performance in a diverse world. Students are supported in a wide array of applied experiences that complement their academic coursework, including the Institute of Well-being, which provides a wide range of professional and inter-professional opportunities that develop and evaluate best practices, promote professional development, facilitate research, and enhance the lives of community members through outreach programs.

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.

The Jess and Mildred Fisher College of Science and Mathematics offers undergraduate and graduate programs in the physical, mathematical, computational and life sciences, with an emphasis on student success through improving student retention, persistence, and time-to-graduation.

The FCSM promotes a wide range of opportunities for authentic research experiences for all undergraduates. The college is the home of numerous STEM education and outreach programs including Towson UTeach — TU’s path to becoming a high school science or mathematics teacher.

III. Institutional Capabilities

By Carnegie Classification, Towson University is a Masters (Comprehensive) University I. It has achieved national prominence as a premier comprehensive university by offering a wide-range of excellent graduate and undergraduate degree programs. Towson University has increased 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 outreach to business, education, non-profit, and health care organizations.

Towson’s faculty members actively pursue scholarship and creative activities that complement and expand disciplinary knowledge while maintaining superior teaching. TU values and rewards equally the scholarships of discovery, teaching, integration, and application. Members of Towson University also engage in a wide range of research, entrepreneurship and service activities which support TU’s institutional outreach programs to government, health care, sport organizations, non-profit groups, education, business, and the fine arts. Towson University is designated by the Carnegie Foundation as a university recognized for curricular engagement, outreach, and partnership. Our intercollegiate athletics program is an integral part of building campus community and pride. Athletics also provides leadership development and other co-curricular opportunities for both student-athletes and the student body as a whole.

TU capitalizes on its location by providing varied and distinctive opportunities for students, staff and faculty learning, leadership development, teaching, and research. It recognizes its obligation to serve at the local, regional, state, and national levels through its academic programs, applied research, and professional services. Towson University is an integral partner with the state’s community college system. TU serves a robust and growing transfer student population, focusing on program offerings, integration and success in completing their baccalaureate degree and beyond. As part of its pursuit to meet societal needs in a comprehensive manner, Towson University will maintain a wide range of baccalaureate programs while further developing graduate education, and expanding its focus on research, particularly in the applied fields.

As Towson University has grown, we strive to maintain our commitment to student-centered experiences that include frequent engagement with faculty and librarians through diverse course formats and settings. This value is reflected in the master plan that calls for substantial modification to and growth of the academic precinct over the next 10 years. The plan includes a focus on designing new academic and academic support spaces which emphasize the values of interactive learning, informal teaching and learning communication, and individual student attention.

IV. Institutional Objectives and Outcomes

In keeping with the Towson University 2020 Focused Vision, the University System of Maryland Strategic Plan, and the Maryland State Plan for Higher Education, TU will pursue the following directions:

**We are committed to:**

- Rigorous undergraduate and graduate education,
- Expanded interdisciplinary and co-curricular experiences,
• Innovative community outreach to meet societal needs,
• TU Library as a center for intellectual inquiry, and
• Quality faculty and staff professional development.

Our undergraduate and graduate student learning outcomes include:
• Information literacy and technological competency.
• Effective communication.
• Critical analysis and reasoning.
• Specialized knowledge in defined fields.
• Working in multifaceted work environments.
• Local and global citizenship and leadership.

TU2020 is the evolution of Towson University's two previous strategic plans, TU2010 and TU2016 and focuses the action items into institutional priorities as presented.

**Academic Excellence and Student Success**: Towson University's top priority, academic excellence and student success, is dependent on the teaching and mentorship of faculty. Academic innovation through academic transformation and course redesign are central to enabling student success. We are committed to the continuous improvement process of examining programming, curricular and co-curricular offerings to ensure students have outstanding educational experiences and opportunities.

**Assess and strengthen academic programs to ensure students develop Towson’s Learning Outcomes.**

• Review and evaluate curriculum to ensure challenging content that addresses workforce and geographic demands.
• Include diverse perspectives across the curriculum.
• 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.
• Improve recruitment, marketing and outreach to make Towson a first choice institution for an increasing percentage of students.

We will continue to improve graduation completion and retention rates, close the achievement gap, ensure a seamless transfer process, and prepare globally conscious students for an expanding workforce.

**Optimize retention and time to graduation for all students.**

• Strengthen student advising.
• Implement an early warning system to assist students throughout their academic career.

**Provide support programs for student populations with non-traditional needs.**

• Identify and address needs of non-traditional students.
• Support transfer student transition through model programs focusing on orientation and advising.

A Model in Higher Education through Innovation in Teacher and Leader Preparation, STEM Workforce Development, and a National and International Reputation for Arts and Arts Education: Towson University will focus program enhancements in areas of existing strength. We will continue to lead the nation as an example of best practices in teacher preparation and school leadership. In addition to teacher preparation, we will reinforce and expand our contributions to workforce development in critical STEM disciplines such as cyber-security, forensic chemistry, and environmental science.

We will continue to expand our national and international reputation in arts and communication.

**Feature the arts, academics and community outreach as key components of the Towson University experience.**

• Celebrate the accomplishments of the university community and alumni within TU and beyond.

Continually assess our success in meeting marketplace demands and continuing education needs through feedback from alumni, donors, employers and business and government leaders.

• Right-size enrollment, faculty and staff to build capacity in high demand fields such as STEM, health professions and education.
• Continue to develop and implement regular market research from opinion leaders, alumni and employers.

**Innovation, Entrepreneurship and Applied Research**:

Towson University's focus on innovation and entrepreneurship facilitates collaborations and strategic partnerships with the community and state. We will continue to support our faculty, staff and student applied research endeavors and connect their work to teacher transformation, innovation and entrepreneurship.

**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 successful community outreach efforts and continue to enhance collaboration with our neighbors.

**Emphasize campus-wide applied research and scholarship efforts.**

• Support faculty efforts in grants and contract initiatives.
• Promote faculty research and engaged scholarship.

**Communicate the significance of 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.

We will continue to promote economic and workforce development to keep the majority of TU graduates working in Maryland.

**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.

Internships and Experiential Learning Opportunities: Towson University will expand its emphasis on internships and experiential learning, and significantly increase corporate, educational, government and health care partnerships to help provide these opportunities.

Increase corporate, educational, government, and health care partnerships to help provide internship and experiential learning opportunities.

• Build upon successful community outreach efforts and continue to enhance collaboration with our neighbors.
• Further implement service learning as a component of the academic experience tied to the curriculum with linkages to the region.

Increase philanthropic support to achieve TU’s goals.

• Maximize fundraising opportunities and collaboration throughout TU.
• Aggressively identify and cultivate friends and extramural funds for academic, arts, athletics, and community and student development endeavors.

Involve students in co-curricular educational experiences on- and off-campus that build civic engagement and 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.

A Model for Leadership Development: Towson University is rooted in our strong commitment to civic engagement, civility and ethics. TU supports personal and professional growth by recognizing and developing positive leadership philosophies and styles. Our primary goal is to instill in our students the qualities essential for outstanding, lifelong leadership in all aspects of their lives. We are committed to increasing credit and noncredit opportunities in leadership development for our faculty, staff and students.

Challenge, inspire and support members of the academic community to perform at the highest level.

• Provide credit and non-credit bearing programming for students, faculty, staff and the community to develop and understand leadership philosophies and styles.
• Inspire students, faculty and staff 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.
• Offer professional development programs on the use of online delivery and new technology to support faculty and students.

Emphasize the shared governance structure throughout TU to ensure responsive organizational leadership.

• Encourage and support TU community to engage in effective shared governance.
• Improve communication in the development of priorities and policies.

A Model for Campus Diversity: Towson will further strengthen its commitment to diversity and continue to provide a safe, inclusive, welcoming, and peaceful community respectful to all. Our institutional strategies will expand and continue to provide a forum for campus dialogue and action.

Enhance and celebrate a diverse and complex university.

• Promote appreciation for and advancement of equity, diversity and inclusion at TU.
• Enhance recruitment and retention of students from underserved and/or underrepresented populations.
• Close the achievement gap for first generation, low income and students from underrepresented groups.
• Enhance recruitment and retention of faculty and staff from underserved and/or underrepresented populations.
• Support respectful and mutually beneficial community collaboration.

A Model of Outstanding Stewardship – People and Natural Resources: Towson University is committed to serving as an effective steward of our natural resources. This includes ensuring that students, faculty, staff and the community have opportunities to realize their full potential. We are dedicated to continue to empower our campus and greater community to make choices for lifelong well-being and effective stewardship of our natural resources.

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.

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.

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.

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 TU.

Continue to improve internal and external communications.

• Seek innovative ways to promote the accolades of TU and alumni.
• Improve access to information for alumni, supporters and friends.
• Enhance and adopt technology that allows us to effectively reach more people.

Maximize resources and success through stronger internal partnerships and collaborations.

• Increase collaborations across TU.
Excellence in Athletics: Towson University is committed to a financially stable, gender-equitable, and competitive athletics program. TU will continue to support these goals by placing academics first. We will support opportunities for all Towson University students to participate in a range of sports activities and leadership opportunities that support physical well-being and personal excellence.

Feature athletics as a key component of the Towson University experience.

- Celebrate the accomplishments of the university community and alumni within TU and beyond.
- Encourage broader participation in activities by all members of TU and the greater community.
OFFICE OF GRADUATE STUDIES

Towson University's graduate programs prepare students to be ethically and globally minded professionals who are leaders within their fields. Enrollment is thriving with 3,100 students taking courses across more than 75 certificate, master's and doctoral level programs. Through cutting-edge courses and programs students develop the advanced knowledge, experiences and skills needed for their professional careers. Because many enrolled graduate students are working full time, graduate courses are offered at convenient times and at off-campus sites as well as at the main TU campus. Select courses are offered online and through blended formats.

Towson University has accepted the challenge set forth by the Maryland Higher Education Commission (MHEC) to provide rigorous, innovative graduate programs that respond to specific state, regional and national workforce and societal demands. Faculty members from across the university community work together to create meaningful learning opportunities for graduate students, tailored to their individualized goals. Many of the faculty members are renowned scholars who encourage graduate students to collaborate on faculty research projects and creative productions. Guided by a commitment to educational excellence, the university provides learning resources and support services that promote student success. More applied graduate programs will be developed as the needs of students, businesses and the community continue to evolve.

Graduate Studies Committee

The Graduate Studies Committee, a committee of the University Senate, determines graduate education policy and is responsible for graduate curriculum and standards. The voting membership comprises 10 members of the faculty (two each from the College of Education, the College of Health Professions, the College of Liberal Arts, and the Jess and Mildred Fisher College of Science and Mathematics; one each from the College of Business and Economics and the College of Fine Arts and Communication), and 2 graduate students. The dean of Graduate Studies, the director of Cook Library, and representatives from University Admissions and the Registrar's Office are ex-officio members. The Graduate Studies Committee also hears student appeals that are related to academic matters. The appeals process is described in Appendix F (p. 306).

Administration

The dean and staff of the Office of Graduate Studies administer and implement the policies established by the Graduate Studies Committee for graduate education. On all matters of curriculum and academic requirements for individual graduate programs, the faculty contacts are the graduate program directors.

Office of Graduate Studies

The office, located in the Psychology Building, Room 207, is open Monday through Friday, 8:30 a.m.-5 p.m. except for scheduled holidays.

For more information, contact:

Office of Graduate Studies
Towson University
Psychology Building, Room 207
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<td>School Psychology Concentration (p. 103)</td>
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**Degree Code Key**

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<th>Description</th>
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<tr>
<td>CAS</td>
<td>Certificate of Advanced Study</td>
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<td>EDD</td>
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<td>MA</td>
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<tr>
<td>MAT</td>
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<td>Master of Fine Arts</td>
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<td>MM</td>
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<tr>
<td>MS</td>
<td>Master of Science</td>
</tr>
<tr>
<td>OTD</td>
<td>Doctor of Occupational Therapy</td>
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</tbody>
</table>
The College of Business and Economics

Stephens Hall 218
Phone: 410-704-3342
Fax: 410-704-3664

Vision Statement
To be recognized as the business college of choice for students, faculty and organizations in our region.

Mission Statement
The College of Business and Economics develops high quality and innovative programs and resources, connects individuals to opportunities and theory to practice in curricular, extra-curricular and research activities, and transforms students who will have a positive impact within Maryland and beyond.

Core Values
We embrace a culture of excellence, ethical behavior, respect, civility, accountability, diversity and inclusion.

Shohreh Kaynama, Dean
Judy Harris, Associate Dean

Master’s Degree Programs
• Accounting and Business Advisory Services (p. 18)
• Marketing Intelligence (p. 21)
• Supply Chain Management (p. 22)

Post-Baccalaureate Certificate Programs
• Interactive Marketing (p. 20)
• Project, Program and Portfolio Management (p. 21)
• Supply Chain Management (p. 23)

Accounting and Business Advisory Services M.S.
Degree: Master of Science
https://www.towson.edu/cbe/departments/accounting/gradaccounting/

Program Director: Dr. Martin Freedman
Phone: 410-704-4143
Email: mfreedman@towson.edu

The Master of Science in Accounting and Business Advisory Services at Towson University is a joint program with the University of Baltimore. This program is designed to meet two important educational objectives.

First, when combined with a bachelor’s degree in accounting, the program allows students to earn the additional units necessary to meet the 150-hour requirement to sit for the Uniform Certified Public Accountant (CPA) exam in Maryland and many other states. The revised CPA exam (as of November 2003) includes a section called Business Environment and Concepts, composed of questions related to finance (22–28 percent) and information technology (17–23 percent), as well as other topics currently covered by an undergraduate accounting degree. Students planning to take the revised CPA exam will be best served by a program of study that emphasizes the same subject matter as the exam.

Second, by incorporating courses in the related disciplines of financial management and information technology, the program complements the technical skills acquired in an undergraduate accounting education.

Graduates of the M.S. in Accounting and Business Advisory Services program will have the flexibility needed to accelerate their public accounting careers or pursue careers in other areas such as management accounting, internal auditing, accounting for governmental or other nonprofit entities, and management consulting.

NOTE: Since this program is jointly operated with the University of Baltimore, the tuition, fees and grading system for students are the same as at the University of Baltimore. Contact the Bursar’s Office for more information.

Combined Bachelor’s-Master’s Program
Requirements to be a CPA in Maryland (and in all but two of the other states) include 150 hours of post-secondary education. To provide a seamless process for Towson students to achieve the 150 hours, a program that combines the Bachelor’s degree in Accounting and the Master’s degree in Accounting and Business Advisory Services (combined Bachelor’s-Masters Accounting Program) is offered.

Admitted accounting majors may apply for the combined Bachelor’s-Masters Accounting Program in the second term of their junior year and be admitted prior to their senior year. Students can apply to the graduate M.S. in Accounting and Business Services Program in their senior year, but are not officially admitted to the graduate program until the second term of their senior year. Student must complete a graduate application with the University admission office. In order to be admitted to the Bachelor’s-Master’s Accounting program, the student must be an admitted undergraduate accounting major with at least one term of residency in the university. The student also must take the GMAT and achieve a minimum score of 400, and have a GPA of at least 3.00.

Six units of 500- and 600-level courses can be counted toward both the undergraduate and graduate programs. A bachelor’s degree is awarded after all the bachelor’s degree requirements are met, normally in the fourth year. The undergraduate accounting elective is fulfilled by taking any one of the required or elective graduate accounting courses. The business ethics undergraduate requirement is met by taking PHIL 563.

Students graduating from the combined Bachelor’s-Master’s Accounting Program earn 114 undergraduate units and 30 graduate units from Towson. The Maryland CPA Board counts a 3-unit graduate course as equivalent to 4.5 credit hours. For the purposes of the Maryland CPA 150-hour requirement, the student earns 114 hours from undergraduate courses and 45 hours from graduate courses.
Admission Requirements

The minimum requirements for admission to the joint graduate program in Accounting and Business Advisory Services at Towson University and the University of Baltimore are a baccalaureate degree from an accredited college or university**, and a 3.00 minimum undergraduate GPA for full admission and a 2.75 for conditional admission. Admission to the program will be based on undergraduate academic performance and scores on the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE). ***

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html).

** See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html).

*** This GMAT or GRE requirement will be waived for students with a baccalaureate degree in business or accounting from an AACSB-accredited university who graduated with a GPA of 3.5 or greater.

Prerequisite Courses

The following list of undergraduate accounting and non-accounting classes are required to be completed before enrolling in graduate courses required as part of the M.S. in Accounting and Business Advisory Services program.

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<td>ACCT 300</td>
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<tr>
<td>ACCT 301</td>
<td>INTERMEDIATE ACCOUNTING I</td>
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<td>ACCT 302</td>
<td>INTERMEDIATE ACCOUNTING II</td>
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<td>ACCT 303</td>
<td>INTERM ACCT III</td>
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<td>ACCT 341</td>
<td>MANAGEMENT ACCOUNTING I</td>
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<td>AUDITING I</td>
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Non-Accounting Courses

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<td>or BUSX 301</td>
<td>BUSINESS COMMUNICATIONS</td>
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<td>ECON 201</td>
<td>MICROECONOMIC PRINCIPLES &amp; MACROECONOMIC PRINCIPLES</td>
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<td>ECON 205</td>
<td>STATISTICS FOR BUSINESS AND ECONOMICS I &amp; MATH 231</td>
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<td>or MATH 231</td>
<td>BASIC STATISTICS</td>
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<td>FIN 331</td>
<td>PRINCIPLES OF FINANCIAL MANAGEMENT</td>
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<td>BUSINESS LAW</td>
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<td>MKTG 341</td>
<td>PRINCIPLES OF MARKETING</td>
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<td>MNGT 361</td>
<td>LEADERSHIP AND MANAGEMENT</td>
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<tr>
<td>MNGT 482</td>
<td>BUSINESS ETHICS AND SUSTAINABILITY &amp; PHIL 371</td>
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<tr>
<td>or PHIL 371</td>
<td>BUSINESS ETHICS</td>
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Total Units 51-54

Degree Requirements

Completion of a minimum of 30 units beyond the undergraduate degree of which a minimum of 18 units should be in 600-level courses or above designed primarily for graduate students. (This is an AACSB requirement.) Students may take courses at either institution, but typically take a minimum of 12 units sponsored by each institution out of the total 30-unit program.

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<td>ADVANCED TOPICS IN ACCOUNTING SYSTEMS 1, 2</td>
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<td>FIN 625</td>
<td>CORPORATE FINANCE 1</td>
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Additional Accounting and Ethics Courses 3

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<td>ACCT 680</td>
<td>TAXATION OF ENTITIES</td>
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<td>ACCT 720</td>
<td>DESIGN OF MANAGERIAL COST AND CONTROL SYSTEMS</td>
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<td>PHIL 563</td>
<td>BUSINESS ETHICS 5</td>
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Other Electives 12

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Accounting 3, 5

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<td>ACCT 697</td>
<td>GRADUATE ACCOUNTING INTERNSHIP</td>
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<td>FINANCIAL STATEMENT ANALYTICS AND VALUATION</td>
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Electronic Business and Technology Management 4

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<td>EBTM 604</td>
<td>INTRODUCTION TO PROJECT MANAGEMENT</td>
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<td>EBTM 625</td>
<td>PROJECT LEADERSHIP AND COMMUNICATION</td>
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<td>EBTM 715</td>
<td>PROJECT COST ACCOUNTING AND FINANCE</td>
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<td>EBTM 720</td>
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<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
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<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
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<td>AIT 612</td>
<td>INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS</td>
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<td>AIT 614</td>
<td>NETWORK SECURITY</td>
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<td>DATABASE MANAGEMENT SYSTEMS</td>
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Professional Writing 4

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<td>BUSINESS WRITING</td>
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Finance 6

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<td>FIN 720</td>
<td>GLOBAL FINANCE</td>
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<td>FIN 725</td>
<td>RISK MANAGEMENT</td>
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<td>FIN 735</td>
<td>FINANCIAL MODELING</td>
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<td>FIN 750</td>
<td>REAL ESTATE INVESTMENT</td>
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Interactive Marketing Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cbe/departments/marketing/grad/interactivepbc/

Program Director: Dr. Philippe Duverger
Phone: 410-704-3538
Email: pduverger@towson.edu

Similar to the Master of Science in Marketing Intelligence (p. 21), the embedded Post-Baccalaureate Certificate in Interactive Marketing is designed to develop marketing professionals who can create, implement and evaluate data-driven marketing strategies.

The Certificate focuses on the digital marketing skills and strategies and offers an introduction to data base structure. Students then have the option to pursue the M.S. in Marketing Intelligence.

Admission Requirements
This program admits fall term only.

Admission to the Post-Baccalaureate Certificate in Interactive Marketing program is competitive. The eligibility requirements to be admitted into the program is:

- A baccalaureate degree from a regionally accredited college or university**.
- A cumulative GPA of 3.00 (on a scale of 4.00) or equivalent on the most recent 60 units of graduate or undergraduate work is required for full admission. Conditional admission may be granted with a minimum cumulative GPA of 2.75.
- Minimum TOEFL score of 550 (where applicable).

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- A resume
- A one to two-page statement describing their past relevant experience, their career goals, and how they expect this program to support those goals.
- Two reference letters attesting to the applicant's ability to withstand the rigors of a graduate education

Those students who have no background in statistics and/or programming may be required to complete additional course work in these areas prior to being admitted to the program.

** See Exceptions to Policy under Graduate Admissions. (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)
# Degree Requirements

The Post-Baccalaureate Certificate in Interactive Marketing is a 15-unit program. Students who complete the certificate program can continue on to the master’s degree program in Marketing Intelligence if they so choose.

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<td>MKTG 710</td>
<td>INTERACTIVE MARKETING</td>
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<td>AIT 632</td>
<td>DATABASE MANAGEMENT SYSTEMS</td>
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<tr>
<td>COSC 710</td>
<td>SOCIAL NETWORK ANALYSIS</td>
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</tbody>
</table>

**Required Courses**

**Applied Courses**

Select one of the following:

- MKTG 781 INTERACTIVE MARKETING PROJECT
- MKTG 791 INTERACTIVE MARKETING INTERNSHIP

Total Units: 15

---

# Marketing Intelligence M.S.

Degree: Master of Science

[https://www.towson.edu/cbe/departments/marketing/grad/intelligence/](https://www.towson.edu/cbe/departments/marketing/grad/intelligence/)

Program Director: Dr. Philippe Duverger
Phone: 410-704-3538
Email: pduverger@towson.edu

The Master of Science in Marketing Intelligence and the embedded Post-Baccalaureate Certificate in Interactive Marketing (p. 20) are designed to fill a growing need for graduates with the skills necessary to acquire, analyze and utilize marketing intelligence information in the digital age.

The program is designed with an applied, experiential learning focus based on industry needs.

With digital marketing options evolving rapidly, companies need individuals who can create, implement and evaluate data-driven marketing strategies.

As a graduate of Towson’s Marketing Intelligence master’s program students will be qualified for jobs such as:

- Marketing Intelligence Analyst
- Digital Marketing Manager
- Marketing Research Analyst
- Customer Insight Specialist

**Admission Requirements**

This program admits fall term only.

Admission to the Master of Science degree in Marketing Intelligence is competitive. The eligibility requirements to be admitted into the programs are:

- A baccalaureate degree from a regionally accredited college or university**
- A cumulative GPA of 3.00 (on a scale of 4.00) or equivalent on the most recent 60 units of graduate or undergraduate work is required for full admission. Conditional admission may be granted with a minimum cumulative GPA of 2.75;
- Proficiency in statistics and familiarity with programming;
- Students without proficiency in statistics will be conditionally admitted to the program and will be required to take MKTG 607 Marketing Research Methods in their first semester in the MKGI-MS program, at the discretion of the Program Director.
- A resume;
- A one- to two-page statement describing their past relevant experience, their career goals, and how they expect this program to support those goals;
- E-mail addresses of two professional and/or academic references.

**Non-immigrant international students**: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

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# Degree Requirements

<table>
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<tbody>
<tr>
<td>AIT 632</td>
<td>DATABASE MANAGEMENT SYSTEMS</td>
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<tr>
<td>COSC 710</td>
<td>SOCIAL NETWORK ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>COSC 757</td>
<td>DATA MINING</td>
<td>3</td>
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<tr>
<td>EBTM 604</td>
<td>INTRODUCTION TO PROJECT MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 605</td>
<td>MARKETING INTELLIGENCE STRATEGY</td>
<td>3</td>
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<tr>
<td>MKTG 710</td>
<td>INTERACTIVE MARKETING</td>
<td>3</td>
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<tr>
<td>MKTG 770</td>
<td>MARKETING ANALYTICS AND METRICS</td>
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<tr>
<td>MKTG 780</td>
<td>ADVANCED MARKETING ANALYTICS</td>
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</tbody>
</table>

**Required Courses**

**Applied Courses**

Select one of the following:

- MKTG 781 INTERACTIVE MARKETING PROJECT
- MKTG 791 INTERACTIVE MARKETING INTERNSHIP

Select one of the following:

- MKTG 881 MARKETING INTELLIGENCE PROJECT
- MKTG 891 MARKETING INTELLIGENCE INTERNSHIP

Total Units: 30

---

1 Students who successfully complete AIT 632, COSC 710, MKTG 605, MKTG 710, and MKTG 781 or MKTG 791 earn a Post-Baccalaureate Certificate in Interactive Marketing as part of their Master of Science Degree.

# Project, Program and Portfolio Management Certificate

Post-Baccalaureate Certificate
[https://www.towson.edu/cbe/departments/ebusiness/grad/projmgmt/](https://www.towson.edu/cbe/departments/ebusiness/grad/projmgmt/)

Program Director: Dr. Natalie Scala
Phone: 410-704-2773
Email: nscala@towson.edu

The purpose of the Post-Baccalaureate Certificate in Project, Program and Portfolio Management is to provide prospective students with the knowledge and competencies necessary to manage projects, programs and portfolios. The program will provide managers the wherewithal to
develop professionally and further their careers within a broad range of industries.

The program will be offered through a unique educational experience that is a blend of theory and practice. The primary objective is to provide students with both a conceptual and pragmatic understanding of general and specialized project, program and portfolio management areas that is applicable across industries and fields. This program has been designed by benchmarking the content and courses against industry credentialing offerings so that graduates of the program can proceed to professional certification based on the knowledge gained in the program. Students have the opportunity to complete courses in a combination of face-to-face, online and blended formats.

Graduates of the program will be employed in areas with job titles such as project manager, program manager, cost estimator, among others.

Admission Requirements

Applications for admission are accepted, and admission decisions are made, on a rolling basis.

Admission to the Post-Baccalaureate Certificate in Project, Program and Portfolio Management is competitive and the eligibility requirements to be admitted into the program are:

- A bachelor’s degree in a relevant field from a regionally accredited college or university** and/or three years post-bachelor’s experience working in project management-related area is recommended. Applicants must have a cumulative GPA of 3.00 (on a scale of 4.00) or equivalent on the most recent 60 units of graduate or undergraduate work. Conditional admission may be granted with a minimum GPA of 2.75.
- For international students, a minimum IELTS score of 6.5 or minimum TOEFL score of 80 for iBT (550 for paper-based testing) is required. See more details for international admissions at https://www.towson.edu/academics/graduate/admissions/apply/international.html.
- Applicants must submit a résumé and a one- to two-page statement describing their past relevant experience, their career goals and how they expect this program to support those goals.
- Two reference letters are required attesting to the applicant’s ability to withstand the rigors of a graduate education.

Those students who have no background in statistics or who received their B.S. degree more than five years ago are required to take a course in statistics—EBTM 501—prior to taking classes in the program.

Submit the online application. (http://www.towson.edu/academics/graduate/admissions/apply)

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

Students must complete a total of at least 15 units.

The required courses in the certificate program include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>EBTM 604</td>
<td>INTRODUCTION TO PROJECT MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 620</td>
<td>PROCUREMENT AND SOURCING</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 625</td>
<td>PROJECT LEADERSHIP AND COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 715</td>
<td>PROJECT COST ACCOUNTING AND FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 750</td>
<td>PROGRAM AND PORTFOLIO MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1. Demonstrate knowledge of key subject domains of project, program and portfolio management.
2. Demonstrate critical thinking and problem solving skills in a PPP setting.
3. Analyze methods to evaluate appropriate leadership skills and communication plans in a PPP setting.
4. Apply software tools to create a project plan and a portfolio.

Supply Chain Management M.S.

Degree: Master of Science

https://www.towson.edu/cbe/departments/ebusiness/grad/supplychain/

Program Director: Dr. Natalie Scala
Phone: 410-704-2773
Email: nscala@towson.edu (nscala@towson.edu)

The Master of Science degree in Supply Chain Management and the embedded Post-Baccalaureate Certificate in Supply Chain Management (p. 23) are designed to develop professionals who can manage, analyze and control activities across the entire supply chain: from upstream procurement to downstream distribution channels. The types of employers targeted by this program include companies, consulting firms and government agencies that need to achieve competitive advantage and cost efficiencies by improving their supply chain performance. This program has been designed by benchmarking the content and courses against industry credentialing offerings so that graduates of the program can proceed to professional certification based on the knowledge gained in the program.

Students have the opportunity to complete courses in a combination of face-to-face, online and blended formats.

Graduates with a supply chain management background can pursue careers as purchasing specialists, contract administrators, procurement officers and managers, supply chain management professionals, business analysts, demand managers and more. In fact, the majority of U.S. jobs fall somewhere in a supply chain, whether it is procurement, logistics and operations, marketing, or sales and service.

Admission Requirements

Applications for admission are accepted, and admission decisions are made, on a rolling basis.

Admission to the Master of Science degree in Supply Chain Management is competitive. The eligibility requirements to be admitted into the program are:

- A bachelor’s degree in a relevant field from a regionally accredited college or university**, and/or three years post-bachelor’s experience working in supply chain-related areas is recommended. Applicants must have a cumulative GPA of 3.00 (on a scale of 4.00) or equivalent
Students must complete a total of at least 30 units.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBTM 602</td>
<td>INTRODUCTION TO SUPPLY CHAIN MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 604</td>
<td>INTRODUCTION TO PROJECT MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 610</td>
<td>OPERATIONS MANAGEMENT</td>
<td>3</td>
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<tr>
<td>EBTM 620</td>
<td>PROCUREMENT AND SOURCING</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 710</td>
<td>LOGISTICS AND DISTRIBUTION</td>
<td>3</td>
</tr>
<tr>
<td>EBTM 720</td>
<td>SUPPLY CHAIN ANALYTICS</td>
<td>3</td>
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<tr>
<td>COSC 643</td>
<td>INTERNET SUPPLY CHAIN MNG</td>
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<tr>
<td>EBTM 730</td>
<td>BUSINESS PROCESS MANAGEMENT</td>
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<td>EBTM 735</td>
<td>SIX-SIGMA QUALITY</td>
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<tr>
<td>EBTM 740</td>
<td>CUSTOMER RELATIONSHIP MANAGEMENT</td>
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<tr>
<td>EBTM 790</td>
<td>SPECIAL TOPICS IN SUPPLY CHAIN MANAGEMENT</td>
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<tr>
<td>EBTM 795</td>
<td>INDEPENDENT STUDY</td>
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<tr>
<td>EBTM 797</td>
<td>INTERNSHIP IN SUPPLY CHAIN MANAGEMENT</td>
<td></td>
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</tbody>
</table>

The extended project offers a practical, real-world, problem-solving experience for the student. Ideally, students will take on a project from their workplace, an agency of federal, state or local government, or a private business. They will begin work on the project after taking 15 units of course work and may continue working on the project while completing other course work.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>EBTM 881</td>
<td>SUPPLY CHAIN MANAGEMENT CAPSTONE PROJECT</td>
<td>3</td>
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</tbody>
</table>

Total Units 30

1. Students who successfully complete EBTM 602, EBTM 610, EBTM 620, EBTM 710, and EBTM 720 earn a Post- Baccalaureate Certificate in Supply Chain Management as part of their Master of Science degree.

1. Demonstrate knowledge of methods to manage, analyze and control supply chain activities (ILTC)
2. Demonstrate critical thinking and problem solving skills in a supply chain setting
3. Apply software solutions to develop creative alternatives to supply chain problems (ILTC)
4. Synthesize and integrate concepts and methods to evaluate and recommend supply chain improvements

Supply Chain Management Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cbe/departments/ebusiness/grad/supplychainpc/

Program Director: Dr. Natalie Scala
Phone: 410-704-2773
Email: nscala@towson.edu

Similar to the Master of Science in Supply Chain Management, the Post-Baccalaureate Certificate is designed to develop supply chain professionals who can manage, analyze and control activities across the entire supply chain—from upstream procurement to downstream distribution channels. The types of employers targeted by this program include companies, consulting firms and government agencies that need to achieve competitive advantage and cost efficiencies by improving their supply chain performance. This program has been designed by benchmarking the content and courses against industry credentialing offerings so that graduates of the program can proceed to professional certification based on the knowledge gained in the program.

Students have the opportunity to complete courses in a combination of face-to-face, online and blended formats.

Graduates with a supply chain management background can pursue careers as purchasing specialists, contract administrators, procurement officers and managers, supply chain management professionals, business analysts, demand managers and more. In fact, the majority of U.S. jobs fall somewhere in a supply chain, whether it is procurement, logistics and operations, marketing, or sales and service.

Admission Requirements

Applications for admission are accepted, and admission decisions are made, on a rolling basis.
Admission requirements for the Post Baccalaureate Certificate are the same as the Master of Science degree in Supply Chain Management (p. 22). (p. 22)

**Degree Requirements**

The Post-Baccalaureate Certificate in Supply Chain Management is a 15-unit program and includes five of the six required courses in the Master of Science Degree in Supply Chain Management. Students who complete the certificate program can continue onto the master’s degree program if they so choose.

The required courses in the post-baccalaureate certificate program include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>EBTM 602</td>
<td>INTRODUCTION TO SUPPLY CHAIN MANAGEMENT</td>
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<tr>
<td>EBTM 610</td>
<td>OPERATIONS MANAGEMENT</td>
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<td>EBTM 620</td>
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<td>EBTM 710</td>
<td>LOGISTICS AND DISTRIBUTION</td>
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</tr>
<tr>
<td>EBTM 720</td>
<td>SUPPLY CHAIN ANALYTICS</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. Demonstrate knowledge of methods to manage, analyze and control supply chain activities
2. Demonstrate creative thinking and problem solving skills in a supply chain setting
3. Apply software solutions to develop creative alternatives to supply chain problems

**The College of Education**

Hawkins Hall 304  
Phone: 410-704-2570  
Fax: 410-704-2733  
Email: coe@towson.edu

As the first teacher-training institution in Maryland, Towson University has a distinguished history in the preparation of classroom teachers, educational specialists and school leaders. Programs of study in the College of Education include baccalaureate degrees with teacher certification in early childhood education, middle school education, elementary education and special education. The College of Education offers a program leading to teacher certificates of advanced study (post-master’s) in secondary education for those enrolled in baccalaureate degree programs in other colleges of the university.

Programs at the graduate level lead to master’s degrees with initial or advanced certification in teaching, special education, school administration, reading specialist and media specialist. Master’s degree programs in early childhood education, elementary education and secondary education are aligned with the certification standards of the National Board for Professional Teaching. Doctoral and master’s degrees are offered in the area of instructional technology. Programs of study within the College of Education are constantly assessed and organized to provide students at all levels with a professional education based on current research models of best practice and the needs of the larger professional community.

Faculty members in the College of Education actively participate in the academic community as teachers, scholars and advisers. They are dedicated to the mission of the college as it applies to all educators in all programs: to inspire, educate and prepare facilitators of active learning for diverse and inclusive communities of learners in environments that are technologically advanced.

Laurie Mullen, Dean  
Laila Richman, Associate Dean  
Gilda Martinez-Alba, Assistant Dean

**Doctoral Degree Program**

- Instructional Technology (p. 35)

**Certificates of Advanced Study (Post-Master’s)**

- Organizational Change (p. 133) (See Interdisciplinary Programs (p. 131) section)
- Reading Education (p. 42)

**Master’s Degree Programs**

- Early Childhood Education (p. 27)
- Elementary Education (p. 31)
- Human Resource Development: Educational Leadership (p. 33)
- Instructional Technology (p. 37)
- Reading Education (p. 39)
- Secondary Education (p. 43)
- Special Education (p. 44)
- Teaching (p. 48)

**Certification**

- Administration I Certification (p. 25)
- Library Media Specialist (https://catalog.towson.edu/graduate/degree-certificate-programs/education/instructional-technology-ms)  
- Reading Specialist (p. 42)

**Post-Baccalaureate Certificate**

- Action Research for School Improvement (p. 24)
- Autism Spectrum Disorder in the Classroom (p. 25)
- Community Engagement and Leading School Change (p. 26)
- Educational Technology (p. 30)
- Foundations of Special Education (p. 32)
- Instructional Design and Development (p. 37)
- Teaching English Learners (p. 47)

**Action Research for School Improvement Certificate**

Post-Baccalaureate Certificate  
https://www.towson.edu/coe/departments/leadership/grad/schoolimprovement/  
Program Director: Dr. Carla Finkelstein  
Phone: 410-704-2974  
Email: cfinkelstein@towson.edu
Admission Requirements

- A minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study
- Certification as a teacher or licensure as a school professional is required
- This program is offered only as a cohort-based program through the Towson Learning Network.

This 12-unit applied certificate program is designed to prepare experienced educators as change agents for schools and school systems by identifying and responding to issues that need to be addressed for student success. This focus is in keeping with Maryland preK-16 initiatives, Race to the Top (RTTT) and Common Core implementation, and other new directions in education that encourage focused professional development as an alternative to an advanced professional degree.

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<tr>
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<td>ILPD 675</td>
<td>LEADERSHIP AND ACTION RESEARCH</td>
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</tr>
<tr>
<td>ILPD 743</td>
<td>LEARNING COMMUNITIES AND ORGANIZATIONAL CHANGE</td>
<td>3</td>
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<th>Electives</th>
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<tr>
<td>Select two of the following:</td>
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<tr>
<td>ILPD 614</td>
<td>CLASSROOM ASSESSMENT FOR INSTRUCTIONAL LEADERS</td>
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<tr>
<td>ILPD 740</td>
<td>EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION</td>
</tr>
<tr>
<td>ILPD 742</td>
<td>TRANSFORMATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT</td>
</tr>
</tbody>
</table>

Total Units 12

1. Students will be able to obtain and utilize data to inform decisions for school improvement.
2. Students will be able to facilitate the development, articulation, implementation, and stewardship of a school vision that promotes student success.
3. Students will be able to identify best practices in teaching and learning and design professional plans for faculty and staff.
4. Students will be able to examine educational issues through school-based inquiry and professional practice.
5. Students will be able to develop and promote the integration of technology, research, and information resources into curriculum design and pedagogy.

Administrator I Certification

Towson University offers coursework that meets the Maryland Department of Education (MSDE) licensure requirements for Administrator I certification. This certification, in addition to a master’s degree, is a requirement for supervisors, assistant principals and principals. The Administrator I certification is not a degree conferred by Towson University. However, completion of the required courses for the certification will result in a stamp statement printed on the student’s transcript. Students must apply to MSDE for certification.

Please note: In order to receive the Administrator I stamp, you must be enrolled in a degree program.

There are two ways to get the Administrator I Certification:

1. Complete the master’s degree in Human Resource Development - Educational Leadership Track (p. 33) to receive the Administrator I certification stamp statement on your transcript.
2. Complete the 30-unit Organizational Change Certificate of Advanced Study (CAS) (p. 133) to receive the Administrator I certification stamp statement on your transcript.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>ILPD 603</td>
<td>LEGAL AND ETHICAL ISSUES IN EDUCATION</td>
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</tr>
<tr>
<td>ILPD 667</td>
<td>CURRICULUM &amp; ASSESSMENT FOR INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
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<tr>
<td>ILPD 716</td>
<td>LEADERSHIP OF THE SCHOOLS</td>
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<td>ILPD 740</td>
<td>EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION</td>
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<td>ILPD 781</td>
<td>SEMINAR IN SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 797</td>
<td>INTERNSHIP IN INSTRUCTIONAL LEADERS</td>
<td>3</td>
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</tbody>
</table>

Total Units 18

1 Courses that are approved for Administrator I Certification.
2 All incoming students must have a college transcript documenting successful completion of a special education course (undergraduate or graduate).

Online Options

The Organizational Change Certificate of Advanced Study (CAS) (p. 133) is available online.

Online courses for the Administrator I certification program are available only to residents of Maryland.

Off-Campus Cohort Programs

The Administrator I Certification is also available at off-campus locations through school system partnerships (https://www.towson.edu/tln) offered by the Towson Learning Network.

Faculty

Courses are taught by experienced faculty, many of whom have strong research agendas in education, professional development, assessment and leadership. Many still work in the field, sharing their leadership experiences with students. Our faculty members are superb advisers and mentors who help each student develop an individualized professional career plan.

Autism Spectrum Disorder in the Classroom Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/coe/departments/specialed/grad/autism-classroom-certificate/

Program Director: Dr. Katherine Holman
Phone: 410-704-3613
Email: kholman@towson.edu
The certificate in Autism Spectrum Disorder in the Classroom will provide students with:

- Acquisition of specialized knowledge, skills and dispositions to be leaders in schools and communities in serving students with ASD and their families.
- Completion of application assignments, or APPS, which are designed to allow for the implementation of learned skills in their classroom followed by guided reflection and revision from faculty and colleagues.
- Assessment of and guided reflection and development of leadership skills.
- Access to faculty and national leaders in the area of autism spectrum disorders.
- Opportunities to engage with local community partners who specialize in supporting individuals on the spectrum and their families.
- Reflective Roadmap to Leadership: A transparent and tangible development process of knowledge, skills and dispositions related to both leadership and ASD.

With the six-course sequence, the program will arm school professionals with the knowledge and capacities for effectively serving students with ASD within their schools and community.

This program will provide graduates with the knowledge, skills and dispositions to be leaders in empowering students, families and community members to become the drivers of positive change in the lives of individuals with ASD and their families.

This post-baccalaureate certificate (PBC) is designed specifically for general and special educators, as well as related service providers, which provides a comprehensive understanding of the unique challenges of students with ASD and their families. The program will highlight the most effective, evidence-based practices and strategies to support the learning and social success of these students in school and the community, as well as critical supports and resources for the families of these school-aged children.

Admissions Requirements

- A baccalaureate degree from an accredited college or university**
- An overall minimum GPA of 3.00 (GPA of 2.75 for conditional admission, based on the last 60 units of total undergraduate and post-baccalaureate study)
- Letter of recommendation
- Admission essay

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 620</td>
<td>EDUCATING STUDENTS WITH AUTISM SPECTRUM DISORDERS</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622</td>
<td>SOCIAL THINKING AND CONNECTEDNESS FOR STUDENTS ON THE AUTISM SPECTRUM</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623</td>
<td>BEHAVIOR MANAGEMENT FOR STUDENTS WITH ASD</td>
<td>3</td>
</tr>
<tr>
<td>SPED 625</td>
<td>CURRICULUM AND METHODS OF INSTRUCTION FOR STUDENTS WITH ASD I</td>
<td>3</td>
</tr>
<tr>
<td>SPED 644</td>
<td>UNIVERSAL DESIGN FOR LEARNING AND DIFFERENTIATED INSTRUCTION</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 18

The coursework from this program can be applied towards the existing Master’s in Special Education (https://catalog.towson.edu/graduate/degree-certificate-programs/education/special-education-med) with a concentration in Teacher as Leader: Autism Spectrum Disorder.

1. Students will gain experience interviewing a family member and a professional about their perceptions of the Individualized Education Program (IEP) team process and will utilize this information to develop both a personal and leadership action plan, which utilizes information gained to improve the IEP team process (CEC ASD Advanced Preparation Standard 7: Collaboration)
2. Students will gain an in depth understanding about the social needs of students with autism spectrum disorder and will demonstrate competence in selecting appropriate social goals, embedding them within instruction and reflecting on the success of the lesson and empowering others to better meet this important area of need (CEC ASD Advanced Preparation Standard 1: Assessment; Standard 3: Programs, Services and Outcomes)
3. Students will identify a current challenge in their school or classroom and will apply Universal Design for Learning (UDL) framework to provide possible solutions through the use of technology and expanding options. This plan will demonstrate student's competency in information literacy and use of technology to remove barriers and provide a comprehensive solution to the proposed problem (CEC ASD Advanced Preparation Standard 2: Curricular Content Knowledge)
4. Students will learn how to evaluate student’s behaviors to determine their function, design appropriate positive behavioral interventions to improve behavior and collect data on the effectiveness of the intervention (CEC ASD Advanced Preparation Standard 3: Programs, Services and Outcomes; Standard 6: Professional and Ethical Practice)

Community Engagement and Leading School Change Certificate

Post-Baccalaureate Certificate

Program Director: Dr. Carla Finkelstein
Phone: 410-704-2974
Email: cfinkelstein@towson.edu

The certificate in community engagement and leading for school change will provide students with:

- A sociological understanding of the race and class dynamics shaping the communities that they serve
- Tools for developing an asset-based understanding of the students and families with which they work, and
Program completers will be able to:

• Skills for making changes to improve the ways in which schools serve and are accountable to their students, families, and communities.

Through examining sociological theory, understanding the concept of professional learning communities, and implementing action research initiatives, students will increase their capacity for community engagement and school change.

With the four-course sequence, the program will arm school professionals with the knowledge and capacities for making school change in response to community needs. Through this process and seeing the school community as valuable, there will be more authentic change that reflects the voices and values of each community.

This program will teach students how to build change from the bottom up, empowering students, families, and community members to become the drivers of positive change.

This post-baccalaureate certificate (PBC) will serve teachers, counselors, and non-profit employees working with schools who would like to develop skills in leadership and community engagement. The need for these skills is especially urgent among the growing population of professionals working with students in poverty in both urban and suburban communities in Maryland.

**Admission Requirements**

- A baccalaureate degree from a regionally accredited college or university** with a minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

*See Exceptions to Policy* in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Non-immigrant international students: See additional admission information in International Graduate Admissions. (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Certificate Requirements**
This PBC in Community Engagement and Leading School Change will consist of the following four courses (12 units):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILPD 670</td>
<td>SPECIAL TOPICS IN INSTRUCTIONAL LEADERSHIP</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 675</td>
<td>LEADERSHIP AND ACTION RESEARCH</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 743</td>
<td>LEARNING COMMUNITIES AND ORGANIZATIONAL CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>SOCI 543</td>
<td>SOCIOLOGY OF RACE AND ETHNICITY</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Program completers will be able to:

1. Build, maintain, and evaluate a coherent system of academic and social supports, discipline, services, extracurricular activities, and accommodations to meet the full range of needs of each student (National Educational Leadership Preparation Standard 1, Component 3).

2. Engage families, community, and school personnel in strengthening student learning in and out of the school (National Educational Leadership Preparation Standard 5, Component 2).

3. Build and sustain productive partnerships with communities and public and private sectors to promote school improvement and student development (National Educational Leadership Preparation Standard 5, Component 3).

4. Advocate for the needs and priorities of the school, district, students, families, and the community (National Leadership Preparation Standard 5, Component 4).

**Early Childhood Education M.Ed.**

Degree: Master of Education
https://www.towson.edu/coe/departments/earlychildhood/grad/earlychildhood/

Program Director: Dr. Stephen Schroth
Phone: 410-704-4832
Email: ecedgrad@towson.edu

The M.Ed. in Early Childhood Education is an advanced degree program designed to prepare the degree candidate for a future professional role, to increase competence in a current career role or to provide a step toward further study in the field of early childhood education. It is not an initial teaching certification or licensure program, but an opportunity for increased professional development at the graduate level. The M.Ed. in Early Childhood Education is recommended for practitioners in a wide range of programs for children from birth through age 8 in a variety of community settings. Their roles may include administration, supervision and mentoring in early childhood programs; pre-elementary or primary grade teaching; family/community support; early intervention; resource and referral; program licensing; infants and toddlers specialist; and many others. Guiding principles include an interdisciplinary perspective, collaboration, mentoring and advocacy, with a foundation of the most current knowledge base in early childhood and best practice for all young children and families.

The M.Ed. in Early Childhood Education is aligned with National Association for the Education of Young Children (NAEYC) Standards for Early Childhood Professional Preparation in Advanced Programs. The 33-unit program consists of seven required courses and four elective courses that are designed to provide each student with a deeper understanding of the knowledge base in the field, while supporting individual areas of professional specialization and academic interest. The faculty in the Department of Early Childhood Education has developed specific courses to support students in their professional development and in their future contributions to the field of early childhood education through their chosen career paths.

National Association for the Education of Young Children (NAEYC) Standards for Early Childhood Professional Preparation in Advanced Programs recognizes possible specializations as “areas of focus” that include, but are not limited to:

• Early Childhood Accomplished Teacher: Advanced professional study to develop candidates as master teachers and mentors in their professional settings and may prepare candidates for NBPTS certification.

• Early Childhood Administrator/Program Director: Advanced professional study to prepare candidates to become or to increase their effectiveness as administrators, supervisors or directors in
schools, centers and non-traditional programs for young children and families.
• Early Childhood Family Specialist: Advanced professional study to prepare candidates to specialize in work with the families of young children in a variety of roles and settings, and to meet the requirements for a post-baccalaureate Family-Professional Collaboration Certificate.

Admission Requirements

• A baccalaureate degree from an accredited college or university**.
• A minimum undergraduate GPA of 3.00 is required for full admission and 2.75 for conditional admission to the program. All GPA calculations are based on the last 60 units of undergraduate and post-baccalaureate study.
• A current résumé to be submitted with the application for admission as well as all post-secondary transcripts. Submit the online application at www.towson.edu/academics/graduate/admissions.
• Experience/background in the field with young children and families.
• Two professional narrative letters of recommendation.
• A brief (two-page) admission essay discussing the applicant's experiences working with young children and families, and rationale for earning a master's degree related to professional goals and career aspirations.

One or more of the following:

• An undergraduate degree or graduate course work in Early Childhood Education, child development, family studies or a related field OR
• Teacher certification in early childhood education OR
• Teacher certification in elementary education plus 6 units in early childhood education OR
• A minimum of three years of professional experience in an early childhood program or related setting serving young children from birth to age 8 OR
• Undergraduate courses in the following areas:
  • educational psychology or psychology of learning
  • child growth and development
  • curriculum and methods in early childhood education

Exceptional candidates who do not meet the specific experience/background criteria above may be considered for admission if they intend to work in settings with children from birth through age 8. In these instances, an interview with the program director is required.

NOTE: The M.Ed. in Early Childhood Education is an advanced program and does not lead to initial teacher certification in early childhood education. Individuals interested in post-baccalaureate initial certification should apply for the M. Ed. Certification Option.

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

M.Ed. Certification Option

The program offers a certification option for Early Childhood Education graduate students who already have a background in the field of early childhood education, in addition to increased professional development at the graduate level. The M.Ed. in Early Childhood Education is recommended for graduate students with undergraduate degrees or significant experience in early childhood education, child development, or child and family studies, or who are practicing professionals working with young children and families. The M.Ed. Certification Option consists of the seven required courses and four elective courses that are geared toward certification, as well as additional units in specific areas to meet certification requirements. These additional units will be determined based on prior course work, and will likely include courses in the teaching of reading and internship. The M.Ed. Certification Option will likely require more than the 33 units for the basic M.Ed.

In addition to the admissions requirements above, applicants for the M.Ed. Certification Option must also provide qualifying scores on the Praxis CORE exam (as determined by MSDE) or other approved testing alternative (qualifying SAT, ACT, or GRE scores).

Degree Requirements

The Master of Education in Early Childhood Education requires a minimum of 33 units, including the following:

• Completion of required prerequisite courses
• Course work for the degree
• Goals Statement: At the beginning of the program, students will identify an individualized area of focus to guide their professional growth in their graduate study and will submit a Goals Statement. This document will serve as a plan so that students may achieve their individual professional and academic objectives.
• Graduate Professional Portfolio: Students present a professional portfolio as an exit requirement of the program. Along with ECED 773 (or ECED 898), the portfolio will provide a capstone experience. It will demonstrate integrated graduate-level learning and evidence of essential professional dispositions, and will reflect the students’ growth as professionals and leaders in their areas of specialization within the field of early childhood education. As an ongoing collection of graduate work, it will serve as a synthesis of learning throughout degree course work and reflect NAECY Standards for Advanced Professional Preparation.

### Code | Title | Units
--- | --- | ---
ECED 607 | LEARNER DIVERSITY, CULTURAL RESPONSIVENESS, AND INCLUSION IN EARLY CHILDHOOD EDUCATION | 3
ECED 609 | GROWTH AND DEVELOPMENT OF YOUNG CHILDREN | 3
ECED 610 | LEARNING ENVIRONMENTS: CURRICULUM AND TECHNOLOGY | 3
ECED 611 | TEACHER AS RESEARCHER: RESEARCH METHODS IN EDUCATION | 3
ECED 619 | ASSESSMENT, OBSERVATION AND EVALUATION IN EARLY CHILDHOOD EDUCATION | 3
ECED 665 | CURRICULUM THEORY AND DEVELOPMENT | 3
ECED 773 | SEMINAR IN EARLY CHILDHOOD EDUCATION | 3
Electives
These courses support the student’s individualized area of focus as indicated on the initial Goals Statement, and are to be selected from departmental courses or up to 6 units from another department with permission.

<table>
<thead>
<tr>
<th>Total Units</th>
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<tbody>
<tr>
<td>33</td>
</tr>
</tbody>
</table>

**Course Sequence**

The first two courses of the graduate program are ECED 611 and ECED 609. These two courses must be completed before other courses are taken, except for students who begin degree course work during the summer. The final, or capstone, course is ECED 773. In ECED 773, students are provided an opportunity to develop a creative and interdisciplinary statement of their professional identity, as they articulate their views on why they care about children and why they do what they do. All other course work must be completed either prior to or concurrent with taking this course. All students must complete ECED 773 with the grade of “A” or “B” (the course may be repeated) or successfully complete ECED 898.

**Thesis Option**

As an alternative to ECED 773, students may elect the ECED 898. This option is available for students who may wish to pursue doctoral studies at a later date or who have identified a strong commitment to a specific topic of inquiry they wish to pursue in great depth. Students who elect the Thesis Option will take the 6-unit ECED 898 in place of the 3-unit ECED 773 and 3 elective units. Students must meet with adviser one term prior to enrolling in this course.

**Post-Baccalaureate Certificate Options within the M.Ed.**

**Post-Baccalaureate Family-Professional Collaboration Certificate**

Family/home collaboration is a vital aspect of Early Childhood professional practice. Graduate students interested in developing expertise as a family specialist may complete the requirements for the Post-Baccalaureate Certificate in Family-Professional Collaboration within their master’s degree program. These students must also meet with the director of the Post-Baccalaureate Certificate Program in Family Studies for advising on course requirements for the certificate program. Students take the following courses as three of their electives in the M.Ed. in order to obtain the Family Studies Certificate:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMST 601</td>
<td>APPLIED FAMILY RELATIONSHIPS</td>
<td>3</td>
</tr>
<tr>
<td>FMST 610</td>
<td>FAMILY-PROFESSIONAL COLLABORATION</td>
<td>3</td>
</tr>
<tr>
<td>FMST 620</td>
<td>PROJECT IN FAMILY FOCUSED PROGRAM DEVELOPMENT</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 9

For more information about the Post-Baccalaureate Family-Professional Collaboration Certificate, see the description in the Interdisciplinary Programs section of the catalog.

**Post-Baccalaureate Certificate Program in Autism Studies**

Graduate students interested in developing expertise in Autism Studies may complete the requirements for the Post-Baccalaureate Certificate in Autism Studies within their master’s degree program. These students must also meet with the director of the Post-Baccalaureate Certificate Program in Autism Studies for advising on course requirements for the certificate program. Students will take the following courses as three of their electives in the M.Ed. in order to obtain the Autism Studies Certificate:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDHP 770</td>
<td>SPECIAL TOPICS IN THE FIELD OF AUTISM</td>
<td>3</td>
</tr>
<tr>
<td>IDHP 791</td>
<td>DIRECTED READINGS IN THE FIELD OF AUTISM</td>
<td>3</td>
</tr>
<tr>
<td>IDHP 792</td>
<td>INDEPENDENT STUDY IN THE FIELD OF AUTISM</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 9

National Board for Professional Teaching Standards Preparation: NAEYC Standards addressed in the M.Ed. required courses are aligned with the National Board for Professional Teaching Standards. Graduate students who are teachers in public school settings may further focus their elective courses to work toward preparation of the portfolio and documentation required for this certification and recognition as master teachers.

**NAEYC STANDARD 1. PROMOTING CHILD DEVELOPMENT AND LEARNING**

Candidates prepared in early childhood degree programs are grounded in a child development knowledge base. They use their understanding of young children’s characteristics and needs, and of multiple interacting influences on children’s development and learning, to create environments that are healthy, respectful, supportive, and challenging for each child.

1a. Knowing and understanding young children’s characteristics and needs, from birth through age 8.
1b. Knowing and understanding the multiple influences on early development and learning.
1c. Using developmental knowledge to create healthy, respectful, supportive, and challenging learning environments for young children.

**NAEYC STANDARD 2. BUILDING FAMILY AND COMMUNITY RELATIONSHIPS**

Candidates prepared in early childhood degree programs understand that successful early childhood education depends upon partnerships with children’s families and communities. They know about, understand, and value the importance and complex characteristics of children’s families and communities. They use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children’s development and learning.

2a: Knowing about and understanding diverse family and community characteristics.
2b: Supporting and engaging families and communities through respectful, reciprocal relationships.
2c: Involving families and communities in young children’s development and learning.

**NAEYC STANDARD 3. OBSERVING, DOCUMENTING, AND ASSESSING TO SUPPORT YOUNG CHILDREN AND FAMILIES**

Candidates prepared in early childhood degree programs understand that child observation, documentation, and other forms of assessment are central to the practice of all early childhood professionals. They know about and understand the goals, benefits, and uses of assessment. They know about and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with
families and other professionals, to positively influence the development of every child.
3a: Understanding the goals, benefits, and uses of assessment including its use in development of appropriate goals, curriculum, and teaching strategies for young children.
3b: Knowing about and using observation, documentation, and other appropriate assessment tools and approaches, including the use of technology in documentation, assessment and data collection.
3c: Understanding and practicing responsible assessment to promote positive outcomes for each child, including the use of assistive technology for children with disabilities.
3d: Knowing about assessment partnerships with families and with professional colleagues to build effective learning environments.

**NAEYC STANDARD 4. USING DEVELOPMENTALLY EFFECTIVE APPROACHES**
Candidates prepared in early childhood degree programs understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children's ages, characteristics, and the settings within which teaching and learning occur. They understand and use positive relationships and supportive interactions as the foundation for their work with young children and families. Candidates know, understand, and use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.
4a: Understanding positive relationships and supportive interactions as the foundation of their work with young children.
4b: Knowing and understanding effective strategies and tools for early education, including appropriate uses of technology.
4c: Using a broad repertoire of developmentally appropriate teaching / learning approaches.
4d: Reflecting on own practice to promote positive outcomes for each child.

**NAEYC STANDARD 5. USING CONTENT KNOWLEDGE TO BUILD MEANINGFUL CURRICULUM**
Candidates prepared in early childhood degree programs use their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for each and every young child. Candidates understand the importance of developmental domains and academic (or content) disciplines in early childhood curriculum. They know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and can identify resources to deepen their understanding. Candidates use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child.
5a: Understanding content knowledge and resources in academic disciplines: language and literacy; the arts music, creative movement, dance, drama, visual arts; mathematics; science, physical activity, physical education, health and safety; and social studies.
5b: Knowing and using the central concepts, inquiry tools, and structures of content areas or academic disciplines.
5c: Using own knowledge, appropriate early learning standards, and other resources to design, implement, and evaluate developmentally meaningful and challenging curriculum for each child.

**NAEYC STANDARD 6. BECOMING A PROFESSIONAL**
Candidates prepared in early childhood degree programs identify and conduct themselves as members of the early childhood profession. They know and use ethical guidelines and other professional standards related to early childhood practice. They are continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources. They are informed advocates for sound educational practices and policies.
6a: Identifying and involving oneself with the early childhood field.
6b: Knowing about and upholding ethical standards and other early childhood professional guidelines.
6c: Engaging in continuous, collaborative learning to inform practice; using technology effectively with young children, with peers, and as a professional resource.
6d: Integrating knowledgeable, reflective, and critical perspectives on early education.
6e: Engaging in informed advocacy for young children and the early childhood profession.

**NAEYC STANDARD 7. EARLY CHILDHOOD FIELD EXPERIENCES**
Field experiences and clinical practice are planned and sequenced so that candidates develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood in at least two of the three early childhood age groups (birth age 3, 3 through 5, 5 through 8 years) and in the variety of settings that offer early education (early school grades, child care centers and homes, Head Start programs).
7a: Opportunities to observe and practice in at least two of the three early childhood age groups (birth age 3, 3-5, 5-8).
7b: Opportunities to observe and practice in at least two of the three main types of early education settings (early school grades, child care centers and homes, Head Start programs).

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**Educational Technology Certificate**
Post-Baccalaureate Certificate
https://www.towson.edu/coe/departments/edtech/grad/technology-certificate/

Program Director: Dr. Liyan Song
Phone: 410-704-5751
Email: lsong@towson.edu

This program is designed to prepare professionals to integrate technology into classroom teaching or to coordinate the planning and integration of educational technologies at the school, district or state level. Understanding the fundamentals of Educational Technology is a critical need for leaders in today's schools.

**Admission Requirements**
- A baccalaureate degree from a regionally accredited college or university** with a minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

**See Exceptions to Policy in Graduate Admissions**
Non-immigrant international students: See additional admission information in International Graduate Admissions. (https://
Certificate Requirements
This post-baccalaureate certificate program in Educational Technology consists of the following four courses (12 units):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTC 541</td>
<td>FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 667</td>
<td>INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 674</td>
<td>SPECIAL TOPICS IN INSTRUCTIONAL TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 731</td>
<td>THEORY AND PRACTICE FOR INTEGRATING DIGITAL RESOURCES INTO LEARNING AND TEACHING</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 12

The coursework from this program can be applied towards the M.S. in Instructional Technology.

Outcome 1: students will be able to demonstrate information literacy and technological competency.

Outcome 2: students will be able to apply appropriate instructional design principles in the design and development of instruction.

Outcome 3: students will be able to evaluate and apply technology integration models/framework for educational purposes.

Elementary Education M.Ed.
Degree: Master of Education
https://www.towson.edu/coe/departments/elementary/grad/elementary/

Program Director: Dr. Robert Blake Jr.
Phone: 410-704-6299
Email: rblake@towson.edu

The Master of Education degree in Elementary Education is an advanced curriculum and instruction program that provides leadership skills needed for teachers to navigate an ever more complex school and social system. The program is designed for those involved in instructional and curricular decision-making in schools and districts and those committed to quality professional growth. Course, program goals and learner outcomes are based on the professional setting to ensure transfer of theory to practice. The program of study helps the student achieve the following goals:

- Develop advanced capabilities in cultural competency, design thinking, action inquiry, equity, creative curriculum design, and innovative data-focused instruction.
- Understand the diverse nature of learners, society, and the impact on learning.
- Assume specialty roles in areas identified as important to the school community and the changing educational landscape.
- Use technology and media to enhance teaching and learning.
- Understand and use appropriate assessment and evaluation within the teaching process.

- Engage in scholarly activities to promote student achievement as well as one's own professional development.
- Think, reflect, and critically analyze the educational processes and professional practices.

The goals and objectives of the degree program are based on MSDE Professional Development Standards and the core propositions endorsed by the National Board for Professional Teaching Standards. The areas addressed by the standards are reflected in the required and elective courses.

Admission Requirements
- Completion of a bachelor’s degree from a regionally accredited college or university**
- An overall minimum undergraduate GPA of 3.00 based on the last 60 units of total undergraduate and post-baccalaureate study
- Maryland teaching certification, eligibility for teaching certification or permission of the program director
- Minimum one-year teaching/training experience beyond undergraduate program and internship

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Resume
- Essay describing the student’s professional goals for advanced graduate study
- Two Letters of Recommendation
- A teaching certificate

NOTE: This master’s degree program is not accompanied by automatic state certification. Non-certified applicants should contact the director or their adviser prior to enrolling in course work.

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements
- Completion of required prerequisite courses
- Completion of ELED 775/SCED 781, with a grade of “A” or “B” (the course may be repeated only once) or completion of 6 units of ELED 897 or ELED 898.
- Completion of 33 units of required courses and electives as specified.

Non-Thesis Option with Seminar

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 660</td>
<td>MATTERS OF DIVERSITY, EQUITY, AND EMPOWERMENT IN LEARNING COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 761</td>
<td>INQUIRY FOR PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>ELED 647</td>
<td>ADVANCED PROCESSES OF TEACHING AND LEARNING</td>
<td>3</td>
</tr>
</tbody>
</table>
Thesis Option

Use technology and media to enhance teaching and learning.

Total Units

Electives

Electives may be selected from one or more areas of focus, based on the graduate student’s professional goals. Areas of study include curriculum and instruction, leadership, technology, diversity and learning, assessment and evaluation, and content areas. Students may select electives from other departments in consultation with their adviser. A maximum of 6 units may be taken at the 500 level.

Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELED 665</td>
<td>CURRICULUM THEORY AND DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ELED 775</td>
<td>INTEGRATED PROFESSIONAL PRACTICE SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(By permission only. Students must meet with adviser one term prior to enrolling in this course)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units

Thesis Option

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 660</td>
<td>MATTERS OF DIVERSITY, EQUITY, AND EMPOWERMENT IN LEARNING COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 761</td>
<td>INQUIRY FOR PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>ELED 647</td>
<td>ADVANCED PROCESSES OF TEACHING AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>ELED 665</td>
<td>CURRICULUM THEORY AND DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ELED 897</td>
<td>ELEMENTARY EDUCATION THESIS</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>or ELED 898 ELEMENTARY EDUCATION THESIS</td>
<td></td>
</tr>
</tbody>
</table>

Electives

Electives may be selected from one or more areas of focus, based on the graduate student’s professional goals. Areas of study include curriculum and instruction, leadership, technology, diversity and learning, assessment and evaluation, and content areas. Students may select electives from other departments in consultation with their adviser. A maximum of 6 units may be taken at the 500 level.

Total Units

1. Students must meet with adviser one term prior to enrolling in the thesis course.

2. Engage in scholarly activities to promote student achievement as well as one’s own professional development.

7. Think, reflect, and critically analyze the educational processes and professional practices.

Foundations of Special Education Certificate

Post-Baccalaureate Certificate

https://www.towson.edu/coe/departments/specialed/grad/special-education-certificate/

Program Director: Dr. Andrea Parrish
Phone: 410-704-3835
Email: aparrish@towson.edu

This post-baccalaureate certificate is designed to provide individuals with the skill development and knowledge base established by the Council for Exceptional Children’s (CEC) Standards. Courses emphasize inclusive practices, collaboration and consultation among professionals, and the translation of evidence-based instructional practices to instruction, using a cross-categorical disability approach. This series of coursework is designed to support professionals who have not previously completed (or have had limited exposure to) formal coursework in special education. Therefore, courses will emphasize fundamental concepts and contemporary issues in the field of special education today.

These themes include the history, laws, and practices governing special education; strategies for supporting students with disabilities in their Least Restrictive Environment; incorporating Universal Design for Learning to support all learners; effective communication and support to families; disproportionality in special education and its impact on learners; educational and assessment trends which affect students with special needs; appropriate instructional strategies to support students with disabilities and English Language Learners; and interventions and management strategies to support the positive behaviors of students in the classroom.

This program is designed to teach professionals effective instructional supports for students who are at risk for or identified with disabilities, as well as those from culturally and linguistically diverse backgrounds.

Admissions Requirements

- A baccalaureate degree in general education (not Special Education) from a regionally accredited college or university**
- 3.0 GPA (2.75-2.99 conditional admission)
- Current teaching certification (not in Special Education)
  - Note: Teachers certified in Special Education may be considered, if they only earned certification from Praxis II
  - Letter of recommendation
  - International students must also submit passing Praxis I scores

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

The certificate consists of 18 units of coursework as listed below:
The coursework from this program can be applied towards the M.Ed. in Special Education (https://catalog.towson.edu/graduate/degree-certificate-programs/education/special-education-med).

1. Learner Development and Individual Learning Differences - Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.

2. Learning Environments - Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination.

3. Curricular Content Knowledge - Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.


5. Instructional Planning and Strategies - Beginning special education professionals select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.

6. Professional Learning and Ethical Practice - Beginning special education professionals use foundational knowledge of the field and the their professional Ethical Principles and Practice Standards to inform special education practice, to engage in lifelong learning, and to advance the profession.

7. Collaboration - Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

Human Resource Development: Educational Leadership M.S.

Degree: Master of Science
https://www.towson.edu/coe/departments/leadership/grad/hr/

Program Director: Dr. Carla Finkelstein

Phone: 410-704-2974
Email: cfinkelstein@towson.edu

Program Director (online version): Marilyn Nicholas
Phone: 410-704-2987
Email: mnicholas@towson.edu

This program will be transitioning to the Transformational Educational Leadership (MS) in Spring 2019.

The Master of Science degree in Human Resource Development is an interdisciplinary program designed to provide students with specific knowledge and practical skills within a variety of human resource fields. The curriculum is designed to meet the needs of individuals with varied academic backgrounds and professional experience. The program emphasizes the application of theory and research to practical human resource issues within business, government, nonprofit organizations and education.

The Educational Leadership Track within the Human Resource Development Program is designed for certified teachers and other licensed professionals working in schools who aspire to become educational leaders and administrators at local and state levels. This program is approved by the Maryland State Department of Education (MSDE) for those seeking certification as Administrator I.

Please note that only one degree can be awarded in Human Resource Development; students who have completed a concentration in HRD (General) will not receive a second degree in HRD/Educational Leadership.

Admission Requirements

- Certification as a teacher or licensure as a school professional and currently working in a school or educational setting in the school of Maryland.
- Minimum of three years of teaching or relevant professional experience in a public or private school.
- College transcript documenting successful completion of a special education course (undergraduate or graduate).
- Certification as a teacher or licensure as a school professional and minimum GPA required for admission is 3.00. Students who have a minimum GPA of 2.80 may be considered for admission.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Two letters of recommendation (one must be from a current school administrator or educational leader who can attest to the applicant’s professional experience and suitability for leadership)
- Copy of current teaching certificate or other professional licensure
- One-page personal statement indicating why the applicant is interested in pursuing graduate study in this track. The statement should describe why the applicant is pursuing graduate study in this track and what he/she hopes to learn in order to become an effective educational leader.
- An updated professional resume

Degree Requirements

- Students must take a minimum of 36 units as prescribed in their program and selected in consultation with the adviser.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 605</td>
<td>WORKING WITH FAMILIES OF STUDENTS WITH EXCEPTIONALITIES</td>
<td>3</td>
</tr>
<tr>
<td>SPED 607</td>
<td>CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES</td>
<td>3</td>
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<tr>
<td>SPED 631</td>
<td>CLASSROOM STRATEGIES AND INTERVENTIONS FOR DIVERSE STUDENT POPULATIONS</td>
<td>3</td>
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<tr>
<td>SPED 637</td>
<td>INCLUSION FOR THE CLASSROOM TEACHER</td>
<td>3</td>
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<tr>
<td>SPED 641</td>
<td>ED STD W/DIS:CM &amp; I</td>
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</tr>
<tr>
<td>SPED 644</td>
<td>UNIVERSAL DESIGN FOR LEARNING AND DIFFERENTIATED INSTRUCTION</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 18

Towson University
• Students must submit a portfolio upon completion of internship experiences, and aligned with state, national, and departmental standards and assessments.

• Demonstration of proficiency by attaining a passing grade on the comprehensive examination. Students must take the comprehensive examination prior to enrolling in the internship. Students must have a GPA of 3.0 to take the Comprehensive Exam, demonstrate proficiency by attaining a passing grade on the comprehensive exam. Students only have the opportunity to take the exam twice. If a student does not pass the exam twice, they must meet with the graduate program advisor and/or department chair before moving forward with his/her program.

• Students must have a 3.0 to register for ILPD 797

• Attainment of highest levels on assessment of professional dispositions.

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<thead>
<tr>
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<td>LEADERSHIP OF THE SCHOOLS</td>
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<td>ILPD 667</td>
<td>CURRICULUM &amp; ASSESSMENT FOR INSTRUCTIONAL DEVELOPMENT</td>
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<td>ILPD 781</td>
<td>SEMINAR IN SUPERVISION</td>
<td>3</td>
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<tr>
<td>ILPD 603</td>
<td>LEGAL AND ETHICAL ISSUES IN EDUCATION</td>
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<tr>
<td>ILPD 740</td>
<td>EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION</td>
<td>3</td>
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<tr>
<td>ILPD 797</td>
<td>INTERNSHIP IN INSTRUCTIONAL LEADERS</td>
<td>3</td>
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Electives
Select 18 units from the following courses or others in consultation with adviser.

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<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
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<tr>
<td>ILPD 614</td>
<td>CLASSROOM ASSESSMENT FOR INSTRUCTIONAL LEADERS</td>
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<tr>
<td>ILPD 668</td>
<td>LEADERSHIP &amp; GROUP DYNAMICS</td>
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<tr>
<td>ILPD 670</td>
<td>SPECIAL TOPICS IN INSTRUCTIONAL LEADERS</td>
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<tr>
<td>ILPD 675</td>
<td>LEADERSHIP AND ACTION RESEARCH</td>
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<tr>
<td>ILPD 739</td>
<td>LEADERSHIP THEORY &amp; PRACTICE FOR EDUCATIONAL LEADERS</td>
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<tr>
<td>ILPD 742</td>
<td>TRANSFORMATIONAL LEADERS AND PROFESSIONAL DEVELOPMENT</td>
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<tr>
<td>ILPD 743</td>
<td>LEARNING COMMUNITIES AND ORGANIZATIONAL CHANGE</td>
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<tr>
<td>ILPD 744</td>
<td>INTERPERSONAL RELATIONS AND GROUP DYNAMICS: THEORY, RESEARCH, AND APPLICATION</td>
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<tr>
<td>ILPD 745</td>
<td>SCHOOL BUDGETING AND FISCAL PLANNING</td>
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<tr>
<td>ISTC 702</td>
<td>EDUCATIONAL LEADERSHIP AND TECHNOLOGY</td>
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</table>

Total Units 36

The Instructional Leadership and Professional Development Department offers two MSDE-approved programs for Administrator I preparation: a Master of Science (Human Resource Development/Educational Leadership) and a Certificate of Advanced Studies (Organizational Change). Both fulfill the Educational Leadership Constituent Council (ELCC) standards required for national and state recognition and accreditation.
ELCC Standard 4.0: A building-level education leader applies knowledge that promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources on behalf of the school by collecting and analyzing information pertinent to improvement of the schools educational environment; promoting an understanding, appreciation, and use of the diverse cultural, social, and intellectual resources within the school community; building and sustaining positive school relationships with families and caregivers; and cultivating productive school relationships with community partners.

ELCC 4.1: Candidates understand and can collaborate with faculty and community members by collecting and analyzing information pertinent to the improvement of the schools educational environment.

ELCC 4.2: Candidates understand and can mobilize community resources by promoting an understanding, appreciation, and use of diverse cultural, social, and intellectual resources within the school community.

ELCC 4.3: Candidates understand and can respond to community interests and needs by building and sustaining positive school relationships with families and caregivers.

ELCC 4.4: Candidates understand and can respond to community interests and needs by building and sustaining productive school relationships with community partners.

ELCC Standard 5.0: A building-level education leader applies knowledge that promotes the success of every student by acting with integrity, fairness, and in an ethical manner to ensure a school system of accountability for every student’s academic and social success by modeling school principles of self-awareness, reflective practice, transparency, and ethical behavior as related to their roles within the school; safeguarding the values of democracy, equity, and diversity within the school; evaluating the potential moral and legal consequences of decision making in the school; and promoting social justice within the school to ensure that individual student needs inform all aspects of schooling.

ELCC 5.1: Candidates understand and can act with integrity and fairness to ensure a school system of accountability for every student’s academic and social success.

ELCC 5.2: Candidates understand and can model principles of self-awareness, reflective practice, transparency, and ethical behavior as related to their roles within the school.

ELCC 5.3: Candidates understand and can safeguard the values of democracy, equity, and diversity within the school.

ELCC 5.4: Candidates understand and can evaluate the potential moral and legal consequences of decision making in the school.

ELCC 5.5: Candidates understand and can promote social justice within the school to ensure that individual student needs inform all aspects of schooling.

ELCC Standard 6.0: A building-level education leader applies knowledge that promotes the success of every student by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context through advocating for school students, families, and caregivers; acting to influence local, district, state, and national decisions affecting student learning in a school environment; and anticipating and assessing emerging trends and initiatives in order to adapt school-based leadership strategies.

ELCC 6.1: Candidates understand and can advocate for school students, families, and caregivers.

ELCC 6.2: Candidates understand and can act to influence local, district, state, and national decisions affecting student learning in a school environment.

ELCC 6.3: Candidates understand and can anticipate and assess emerging trends and initiatives in order to adapt school-based leadership strategies.

ELCC Standard 7.0: A building-level education leader applies knowledge that promotes the success of every student through a substantial and sustained educational leadership internship experience that has school-based field experiences and clinical internship practice within a school setting and is monitored by a qualified, on-site mentor.

ELCC 7.1: Substantial Field and Clinical Internship Experience: The program provides significant field experiences and clinical internship practice for candidates within a school environment to synthesize and apply the content knowledge and develop professional skills identified in the other Educational Leadership Building-Level Program Standards through authentic, school-based leadership experiences.

ELCC 7.2: Sustained Internship Experience: Candidates are provided a six-month, concentrated (912 hours per week) internship that includes field experiences within a school-based environment.

ELCC 7.3: Qualified On-Site Mentor: An on-site school mentor who has demonstrated experience as an educational leader within a school and is selected collaboratively by the intern and program faculty with training by the supervising institution.

**Instructional Technology Ed.D.**

Degree: Doctor of Education

https://www.towson.edu/coe/departments/edtech/grad/instructiontech/

Program Director: Dr. Bill Sadera
Phone: 410-704-2731
Email: bsadera@towson.edu

The Doctor of Education (Ed.D.) degree in Instructional Technology will review applications twice per year, May 1 and November 1. The Ed.D. is based upon the understanding of education settings (schools and beyond) as learning communities immersed in a world of technology within which students are nurtured and challenged to meet the high expectations established for them; community leaders are engaged in these communities to support them; and teachers, supervisors and administrators must take the lead in integrating technology into these communities through continuous professional development. Thus, the program focuses on the development of instructional technology expertise to meet the present and future needs of technology integration in instruction across the educational spectrum.

The objectives of the Ed.D. in Instructional Technology are to:

- Develop knowledge and skills in the theory, foundation and philosophy to employ instructional technology in a wide range of educational practice.
- Provide advanced skills and abilities for teachers and trainers who are innovative change agents for integrating technology into education and human resource development organizations.
- Acquire advanced skills in research, assessment and evaluation strategies in the applications of technology in education and training environments.
- Provide experiences for employing technology effectively in pre-K through 16 learning environments to promote reform and enhance learning.
- Develop knowledge, skills and abilities for teaching via online and digital environments to create and ensure high-quality and effective learning communities.
- Create skilled and highly capable professionals who are able to lead educational organizations to make effective decisions about the appropriate uses of technology in learning and teaching.
For additional program information, please refer to the Ed.D Policy Handbook.

**Admission Requirements**

- Successful completion of a master's degree in instructional technology or related field from a regionally accredited college or university** *
- An overall GPA of 3.00 or above for undergraduate degree work is required. Graduate work should be at a GPA level of 3.75, though GPAs as low as 3.40 can be considered.
- For international students, a TOEFL score of 600 or above is required.
- Interview may be required upon the request of the Admissions Committee of the Instructional Technology faculty.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Letter of intent describing professional goals in seeking the degree, areas of interest/specialization and why the candidate sees the program as a good fit for him/her.
- GRE general scores in analytic, quantitative and verbal areas.
- Letters of recommendation from two professionals, including one from a professional familiar with the academic work of the candidate. Only letters on organizational letterhead will be accepted.
- Academic writing sample (APA style)
- Digital learning sample (https://www.towson.edu/coe/departments/edtech/grad/instructiontech/admission/sample.html) and reflection paper that demonstrates the integration of technology into the applicant’s field of expertise (such as instruction or training)

Application materials are reviewed by the admission committee using a competitive review process. In reviewing applications, the committee will seek evidence of prerequisite knowledge in the following areas: instructional design, educational psychology, research design and statistics. Students who do not have this prerequisite knowledge may be asked to complete one credit-directed reading activity to improve background knowledge and help prepare for doctoral course work.

A limited number of students are accepted into the doctoral program each year in order to maintain a low student-to-faculty ratio. Application materials must be submitted in full by the following deadlines for consideration of acceptance for fall and spring terms:

- Fall admission: May 1
- Spring admission: November 1

**Non-immigrant international students**: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Degree Requirements**

The doctoral program requires 63 graduate units beyond the master’s degree. Course work in the program includes 15 units in the program core, 9 units in research methodology, 18 units of specialization elective course work (see recommendations (https://www.towson.edu/coe/departments/edtech/grad/instructiontech/specializations.html)), 9 units of doctoral seminar and 12 units of dissertation research.

After completing all course work and prior to beginning the dissertation, students must pass a comprehensive written exam and/or submit a portfolio based on the core courses and one specialization area. Upon passing/approval, students will be admitted to the dissertation sequence.

### Code | Title | Units
--- | --- | ---
ISTC 700 | ASSESSMENT IN INSTRUCTIONAL TECHNOLOGY | 3
ISTC 707 | LEARNING ENVIRONMENTS IN A DIGITAL AGE | 3
ISTC 709 | LEGAL AND ETHICAL ISSUES IN INSTRUCTIONAL TECHNOLOGY | 3
ISTC 711 | INNOVATION, CHANGE AND ORGANIZATIONAL STRUCTURES | 3
ISTC 741 | RESEARCH FOUNDATIONS OF INSTRUCTIONAL TECHNOLOGY | 3

### Research Methodology Courses

- EDUC 789 | RESEARCH METHODS, DESIGN, AND ANALYSIS | 3
- EDUC 790 | ADVANCED MEASUREMENTS AND STATISTICS IN EDUCATION | 3
- EDUC 791 | ADVANCED QUALITATIVE RESEARCH METHODS | 3

### Seminars and Internship

- ISTC 780 | SEMINAR I: INVESTIGATING AND EVALUATING RESEARCH IN INSTRUCTIONAL TECHNOLOGY | 3
- ISTC 782 | INVESTIGATING AND EVALUATING RESEARCH IN ISTC II | 3
- ISTC 797 | GRADUATE INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY | 3

### Dissertation Research

- ISTC 998 | INSTRUCTIONAL TECHNOLOGY DISSERTATION | 12

**Specialization/Elective Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>18</td>
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</table>

Selection of elective courses must be made with the advice and approval of the student's doctoral adviser. All elective units may be in instructional technology. With prior permission, 12 units may be taken outside the College of Education. All elective course work must be at the 600 level or higher. With approval, courses completed as part of a Towson University C.A.S. program may be applied as part of the specialization.

| Total Units | 63 |


1. Students will develop the ability to implement instructional technology in a wide range of educational settings, based on their knowledge of the theory, foundation and philosophy of the discipline, as well as their skills in synthesizing such information.

2. Students will enhance their skills and abilities for integrating technology into education and human resource development organizations.

3. Students will acquire advanced skills in research, assessments, and evaluation strategies in the applications of technology in education and training environments.

4. Students will, through experience, improve their ability to employ technology effectively in Pre-K through 16 learning environments in order to promote reform and enhance learning.

5. Students will become highly skilled and capable professionals who are able to lead educational organizations into making effective
Instructional Design and Development Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/coe/departments/edtech/grad/instructional-design-certificate/

Program Director: Dr. Liyan Song
Phone: 410-704-5751
Email: lsong@towson.edu

The post-baccalaureate certificate in instructional technology is an applied professional program that helps to educate leaders. The certificate program is open to professionals who are seeking to improve their skills and knowledge in technology integration. Students in Instructional Design and Development develop competencies in instructional design and related media. The track is ideal for students who wish to design training or instruction in business, industry, government or the military.

This program is designed to develop instructional design and media-related competencies for those who wish to work in training or instructional settings in business, industry, government, the military or medical education. This program is ideal for students who wish to design training or instruction in higher education, business, industry, government, or the military.

Admission Requirements
• A baccalaureate degree from a regionally accredited college or university** with a minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Non-immigrant international students: See additional admission information in International Graduate Admissions. (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

Certificate Requirements
This proposed PBC program in Instructional Design and Development will consist of the following four existing courses (12 units):

<table>
<thead>
<tr>
<th>Code</th>
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<td>MULTIMEDIA DESIGN</td>
<td>3</td>
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<tr>
<td>ISTC 667</td>
<td>INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
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<tr>
<td>ISTC 717</td>
<td>DISTANCE EDUCATION IN THEORY AND PRACTICE</td>
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<tr>
<td>ISTC 767</td>
<td>ADVANCED THEORY AND INSTRUCTIONAL DESIGN</td>
<td>3</td>
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</tbody>
</table>

Total Units: 12

In addition, coursework from this PBC can be applied towards a Master's in Instructional Technology. Understanding the fundamentals of Instructional Design is a critical need for leaders in today's schools.

1. Students will be able to demonstrate information literacy and technological competency.
2. Students will be able to apply appropriate instructional design principles in the design and development of instruction/training.
3. Students will be able to implement and evaluate distance-based technologies for teaching or training environments.

Instructional Technology M.S.

Degree: Master of Science
https://www.towson.edu/coe/departments/edtech/grad/instructiontechms/

Program Director: Dr. Liyan Song
Phone: 410-704-5751
Email: lsong@towson.edu

Program Director: David Robinson
Phone: 410-704-6301
Email: derobins@towson.edu

The Master of Science degree in Instructional Technology is an applied professional program that helps to educate leaders in three technology fields: training and development, school library media, and educational computing and media.

The Instructional Technology graduate program is intended for both current professionals in the fields of media, design, computing, education and libraries as well as those who are seeking advanced degrees and an upgrade in their skills and knowledge base related to technology. The program is hands-on and practical with a considerable focus of most courses being inventive and authentic learning projects.

Students select one of three concentrations. The first, Instructional Design and Development, offers a flexible program of study designed to develop instructional design and media-related competencies for those who wish to work in training or instructional settings in business, industry, government, the military or medical education. The second, School Library Media, meets the Maryland State Department of Education requirements for the Library Media Specialist Certification and is designed for students who wish to serve as directors of school library centers. The third, Educational Technology, 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.

The program is most often completed by students on a part-time basis, although full-time study is encouraged. A majority of the graduate students in the Instructional Technology program are full-time working professionals who take classes in the late afternoon or early evening. Professionals seeking to advance or change careers comprise a substantial portion of the student population in the Instructional Technology program. These include students who intend to become school library media specialists, industry training specialists and leaders in educational computing and technology.

Please note that only one degree in Instructional Technology can be awarded; students who complete more than one concentration in Instructional Technology will earn only one degree.

Admission Requirements
• A minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based
upon the last 60 units of undergraduate and post-baccalaureate study.

• Technological literacy including the ability to use application programs is a necessary background requirement for Concentrations I, II and III.

**Instructional Design and Development Concentration**

Prerequisites: None.

**Degree Requirements**

**Thesis Option (minimum 36 units)**

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<th>Code</th>
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<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
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<tr>
<td>ISTC 541</td>
<td>FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY</td>
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<td>ISTC 663</td>
<td>APPLIED PSYCHOLOGY OF LEARNING</td>
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<td><strong>Level II: Elective Sequence</strong></td>
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<td><strong>Total Units</strong></td>
<td>36</td>
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</table>

**Non-Thesis Option (minimum 36 units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td><strong>Level I: Core Sequence</strong></td>
<td></td>
</tr>
<tr>
<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 541</td>
<td>FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 663</td>
<td>APPLIED PSYCHOLOGY OF LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 667</td>
<td>INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Level II: Elective Sequence</strong></td>
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<tr>
<td>HRD elective is required</td>
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<tr>
<td>Individually selected elective units at the 600-700 level</td>
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<tr>
<td></td>
<td><strong>Level III: Advanced Sequence</strong></td>
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<tr>
<td>ISTC 655</td>
<td>MULTIMEDIA DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 685</td>
<td>RESEARCH IN INSTRUCTIONAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 767</td>
<td>ADVANCED THEORY AND INSTRUCTIONAL DESIGN</td>
<td>3</td>
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<tr>
<td>ISTC 787</td>
<td>INSTRUCTIONAL TECHNOLOGY CAPSTONE</td>
<td>3</td>
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<tr>
<td></td>
<td><strong>Total Units</strong></td>
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**School Library Media Concentration**

Prerequisites: Completion of the following courses or their equivalents:

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<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>SCED 200</td>
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<td>ISTC 301/501</td>
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<td>PSYC 201</td>
<td>EDUCATIONAL PSYCHOLOGY</td>
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<td>SPED 301</td>
<td>INTRODUCTION TO SPECIAL EDUCATION</td>
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**Degree Requirements**

**Thesis Option (minimum 36 units)**

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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Level I</strong></td>
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</tr>
<tr>
<td>ISTC 615</td>
<td>COLLECTION DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 653</td>
<td>THE ORGANIZATION OF KNOWLEDGE</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 667</td>
<td>INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Level II</strong></td>
<td></td>
</tr>
<tr>
<td>EDUC 717</td>
<td>CHILDREN'S LITERATURE AND OTHER MATERIALS FOR TEACHING READING</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 541</td>
<td>FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 651</td>
<td>INFORMATION LITERACY AND ACCESS</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 702</td>
<td>EDUCATIONAL LEADERSHIP AND TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>SCED 518</td>
<td>YOUNG ADULT LITERATURE</td>
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<tr>
<td></td>
<td><strong>Level III</strong></td>
<td></td>
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<tr>
<td>ISTC 601</td>
<td>SCHOOL LIBRARY MEDIA ADMINISTRATION</td>
<td>3</td>
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<tr>
<td>ISTC 789</td>
<td>PRACTICUM AND PORTFOLIO IN SCHOOL LIBRARY MEDIA</td>
<td>3</td>
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<tr>
<td>ISTC 897</td>
<td>INSTRUCTIONAL TECHNOLOGY THESIS</td>
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**Non-Thesis Option (minimum 36 units)**

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<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Level II</strong></td>
<td></td>
</tr>
<tr>
<td>EDUC 717</td>
<td>CHILDREN'S LITERATURE AND OTHER MATERIALS FOR TEACHING READING</td>
<td>3</td>
</tr>
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<tr>
<td>ISTC 651</td>
<td>INFORMATION LITERACY AND ACCESS</td>
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<tr>
<td>SCED 518</td>
<td>YOUNG ADULT LITERATURE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Level III</strong></td>
<td></td>
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<tr>
<td>ISTC 601</td>
<td>SCHOOL LIBRARY MEDIA ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 789</td>
<td>PRACTICUM AND PORTFOLIO IN SCHOOL LIBRARY MEDIA</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 685</td>
<td>RESEARCH IN INSTRUCTIONAL TECHNOLOGY</td>
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<tr>
<td>Individually selected elective units at the 600-700 level</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td>36</td>
</tr>
</tbody>
</table>

**Educational Technology Concentration**

Prerequisite: Maryland State Department of Education certification as a classroom teacher, administrator or specialist.
which school libraries contribute to student achievement. Other educators. Candidates provide leadership by articulating ways and professional growth and lead professional development activities for and the community. Candidates are committed to continuous learning by collaborating and connecting with teachers, administrators, librarians, learning environments that focus on student learning and achievement. Candidates advocate for dynamic school library programs and positive ALA/AASL Standard 4: Advocacy and Leadership

Candidates advocate for dynamic school library programs, resources, and services in support of the mission of the library program within the school according to the ethics and principles of library science, education, management, and administration.

Reading Education M.Ed.

Degree: Master of Education
https://www.towson.edu/coe/departments/elementary/grad/reading/

Program Director: Dr. Meghan Liebfreund
Phone: 410-704-4492
Email: mliebfreund@towson.edu

The Master of Education in Reading Education program is designed to prepare reading teachers or reading specialists, primarily for PreK-12 education but also for community colleges, industry, adult education programs, commercial education centers and private practice. The 36-unit program is highly structured with nine required courses and three electives (two of which must be in the area of literacy). It is developmental in design. Students grow in both their knowledge and application as they proceed through the program.

The Graduate Reading Education Program at Towson University does not subscribe to a particular position on reading. It closely reflects the broad, comprehensive knowledge and pedagogical skills and strategies outlined in the 2010 Standards for Reading Professionals developed by the International Literacy Association.

The goals of the M.Ed. in the Reading Education program are to prepare reading teachers or reading specialists who have a dynamic understanding of the reading process, a wide array of resources for enhancing literacy for all learners, the competencies to coach others (classroom teachers, paraprofessionals, parents, etc.), and the competencies to advocate for the best literacy environments.

The program is designed to prepare the degree candidate to:

- Provide specialized literacy instruction and assessment, in cooperation with other professionals, to students at all levels.
- Provide literacy services individually or in groups.
- Communicate with colleagues, parents and the community about literacy issues, including conducting professional development workshops on literacy topics.
- Coach and/or mentor colleagues.
- Advocate for literacy development among all populations.
- Read and interpret literacy research.
- Continue to grow professionally by reading professional journals and by participating in reading conferences and workshops.
- Master essential dispositions of educators (caring for all students, collaboration with stakeholders, and commitment to professional practice).

The M.Ed. in Reading Education program is grounded in five philosophical beliefs:

- Literacy learning involves not only reading, but also writing, listening, speaking and viewing.
• Literacy instruction must be research-based and therefore requires reading specialists to be competent in interpreting and applying research findings.
• Literacy instruction must be responsive to the individual differences among learners.
• Literacy instruction must be inclusive and celebrate the diversity of learners.
• Literacy instruction and assessment must be closely connected so that instruction is developed, monitored and modified using multiple sources of assessment data.

The M.Ed. in Reading Education program can be completed on a full- or part-time basis. Most courses are offered in the early evening (e.g., 4:20-6:50 p.m.) one night per week. All nine required courses on campus are offered in fall or spring terms and many are offered during the summer.

The Reading Clinic
Director: Shelly Huggins
Hawkins Hall 107H, 410-704-2558
readingclinic@towson.edu

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.

Admission Requirements
Candidates for admission must submit an application essay that addresses the applicant’s experience and/or approach to caring for all students, collaboration with other professionals and commitment to professional practice. Candidates for admission to the Master of Education in Reading Education program must also meet the criteria for admission to all graduate programs at the university: a 3.00 GPA for the last 60 units of undergraduate and post-baccalaureate study. Students can be admitted conditionally to the M.Ed. in Reading Education program with a 2.75 GPA. Those admitted conditionally must receive an “A” or “B” in the first three REED courses they take in the program. Candidates who completed their bachelor's degree more than 5 years ago with less than a 3.00 can be admitted to the program by documenting five years of successful education-related work experience.

Candidates in the M.Ed. in Reading Education Program are not required to have or be eligible for a teaching certificate. This is to allow individuals interested in careers that do not require a state teaching certification (e.g., community college developmental reading, adult literacy education, private schools, the publishing industry) to pursue the degree. It is, however, important to understand that completing the M.Ed. in Reading Education does not carry automatic state certification. Maryland State Certification for Reading Specialist has three requirements:

• Eligibility for teacher certification in early childhood, elementary, secondary or special education
• Three years of classroom teaching experience
• M.Ed. in Reading Education from an approved program (e.g., Towson University)

To be admitted to the program, send all official transcripts to University Admissions, and write the admissions essay (which covers how you are caring, committed, and collaborative in the field of education) and submit it along with the online graduate application.

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
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<tr>
<td><strong>Required Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>REED 601</td>
<td>READING THEORY AND PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>REED 609</td>
<td>READING ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>REED 621</td>
<td>READING DISABILITIES</td>
<td>3</td>
</tr>
<tr>
<td>REED 663</td>
<td>STRATEGIC USE OF MATERIALS</td>
<td>3</td>
</tr>
<tr>
<td>REED 665</td>
<td>TEACHING READING AND WRITING IN THE CONTENT AREAS PREK-12</td>
<td>3</td>
</tr>
<tr>
<td>REED 626</td>
<td>CLINICAL INTERNSHIP IN READING ¹</td>
<td>3</td>
</tr>
<tr>
<td>REED 726</td>
<td>ADVANCED CLINIC INTERNSHIP IN READING ¹</td>
<td>3</td>
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<tr>
<td>REED 729</td>
<td>SEMINAR IN READING</td>
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<tr>
<td>REED 745</td>
<td>PROFESSIONAL DEVELOPMENT IN LITERACY</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is considerable flexibility in elective course selection in order to meet the unique program needs of individual candidates. Two of the three electives must be literacy courses. Please check with your assigned adviser for guidance. Suggested courses include (but are not limited to) the following:</td>
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<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>REED 628</td>
<td>GUIDED READING</td>
</tr>
<tr>
<td>REED 632</td>
<td>WORD STUDY FOR IMPROVING LITERACY</td>
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<tr>
<td>REED 650</td>
<td>SOCIAL, CULTURAL, AND CURRICULAR CONTEXTS FOR SECOND LANGUAGE LEARNING</td>
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<tr>
<td>REED 651</td>
<td>INSTRUCTION AND ASSESSMENT FOR SECOND LANGUAGE LEARNERS</td>
</tr>
<tr>
<td>REED 652</td>
<td>INTRODUCTION TO LINGUISTICS FOR TEACHERS OF LANGUAGE AND LITERACY</td>
</tr>
<tr>
<td>REED 660</td>
<td>INTEGRATING TECHNOLOGY IN LITERACY INSTRUCTION</td>
</tr>
<tr>
<td>REED 670</td>
<td>SPECIAL TOPICS IN READING (e.g., Adolescent Literacy; Writing Instruction)</td>
</tr>
<tr>
<td>REED 695</td>
<td>INDIVIDUALIZED STUDY IN READING</td>
</tr>
<tr>
<td>REED 710</td>
<td>MULTICULTURAL LITERATURE FOR CHILDREN AND ADOLESCENTS</td>
</tr>
<tr>
<td>REED 712</td>
<td>CRITICAL CONVERSATION: EARLY LITERACY, RESEARCH, POLICY AND PRACTICE</td>
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<tr>
<td>REED 714</td>
<td>ADOLESCENT LITERACY</td>
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<td>REED 740</td>
<td>GRANT WRITING IN EDUCATION</td>
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<td>REED 751</td>
<td>LANGUAGE, LITERACY AND CULTURE</td>
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<td>REED 752</td>
<td>LITERACY THEORY AND RESEARCH</td>
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<tr>
<td>EDUC 610</td>
<td>THEORY, RESEARCH AND PRACTICE IN TEACHING COMPOSITION (Maryland Writing Project Summer Institute)</td>
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</table>

Other Electives
There are two required clinical practica or internships in the program: REED 626, and REED 726. They are both 3-unit experiences that require 45 contact hours with clients, parents and fellow clinicians each term. (These courses are known as Reading Clinic and are typically scheduled for 4:30 p.m. during the academic school year.) In addition to working with one client, the students enrolled in the advanced internship are responsible for providing parent workshops on a variety of topics as well as serving as coaches to novice teachers. If a student withdraws from REED 626 or REED 726 without consulting with the instructor, he or she must petition the director of the program in order to re-enroll in the course. All REED graduate students are responsible for understanding professional expectations. In addition to fulfilling all academic requirements, successful completion requires demonstrated professional behavior, including, but not limited to, punctuality, attendance, professional attire, discretion, respect for confidentiality, effective and appropriate communication with students, parents and colleagues, and acceptance of diversity.

Program Exit Requirements

Students must earn the grade of “A” or “B” in REED 626, REED 726 and REED 729. Each course may be repeated once, if necessary. Students not earning an “A” or “B” in each of those courses are dismissed from the program.

Throughout the program, students collect key assignments, along with the grade sheets, which become artifacts in their Program Portfolio. At the conclusion of the REED 729 course, students are required to present their Program Portfolio to faculty and to new students in the program. They are also required to submit a Portfolio Reflective Essay.

Element 1.1
Candidates understand major theories and empirical research that describe the cognitive, linguistic, motivational and sociocultural foundations of reading and writing development, processes and components, including word recognition, language comprehension, strategic knowledge and reading writing connections.

Element 1.2
Candidates understand the historically shared knowledge of the profession and changes over time in the perceptions of reading and writing development, processes and components.

Element 1.3
Candidates understand the role of professional judgment and practical knowledge for improving all students reading development and achievement.

Element 2.1
Candidates use foundational knowledge to design or implement an integrated, comprehensive and balanced curriculum.

Element 2.2
Candidates use appropriate and varied instructional approaches, including those that develop word recognition, language comprehension, strategic knowledge and reading writing connections.

Element 2.3
Candidates use a wide range of texts (e.g., narrative, expository, and poetry) from traditional print, digital, and online resources.

Element 3.1
Candidates demonstrate foundational knowledge of adult learning theories and related research about organizational change, professional development and school culture.

Element 3.2
Candidates use a variety of classroom configurations (i.e., whole class, small group and individual) to differentiate instruction.

Element 3.3
Candidates display positive dispositions related to their own reading and writing and the teaching of reading and writing, and pursue the development of individual professional knowledge and behaviors.

Element 3.4
Candidates participate in, design, facilitate, lead and evaluate effective and differentiated professional development programs.
Candidates understand and influence local, state or national policy decisions.

Reading Education Certificate

Certificate of Advanced Study
https://www.towson.edu/coe/departments/elementary/grad/readingcas/

Program Director: Dr. Meghan Liebfreund
Phone: 410-704-4492
Email: mliebfreund@towson.edu

Graduate Reading Programs
Information Line: 410-704-5775

This program is not currently admitting new students.

The Certificate of Advanced Study (C.A.S.) in Reading Education is a post-master's program that reflects the university and college missions and helps develop advanced knowledge and leadership skills necessary for meeting the challenges of leading, redesigning and restructuring literacy education across the Pre-16 continuum.

The C.A.S. in Reading Education is an outcomes-based program designed to meet the standards outlined by the International Literacy Association (ILA) for administrators or coordinators who recognize and support reading professionals as they plan, implement and evaluate reading instruction. Such reading professionals administer literacy, bilingual, compensatory and ELL programs in schools or other institutional settings. They direct the organization, management and assessment of school, district or institutional literacy programs. Academic preparation for reading coordinators includes additional course work in reading and course work in professional development, grant writing, program administration and evaluation.

Admission Requirements

Candidates must have a master's degree in Reading Education or related field from a regionally accredited college or university**.

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) plus the following:

- Three letters of professional reference, one of which must be job-related
- Professional portfolio, including:
  a. student assessment report
  b. professional writing sample
  c. professional development materials

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

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<thead>
<tr>
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<tr>
<td>REED 751</td>
<td>LANGUAGE, LITERACY AND CULTURE</td>
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</tr>
<tr>
<td>REED 752</td>
<td>LITERACY THEORY AND RESEARCH</td>
<td>3</td>
</tr>
<tr>
<td>REED 660</td>
<td>INTEGRATING TECHNOLOGY IN LITERACY INSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>REED 745</td>
<td>PROFESSIONAL DEVELOPMENT IN LITERACY</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 740</td>
<td>EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION</td>
<td>3</td>
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</tbody>
</table>

Electives

Students’ elective choices will enable them to further specialize in different areas by taking inter-related courses. There is considerable flexibility in elective course selection in order to meet the needs of individual candidates. Suggested courses include the following:

- Second-Language Learning Courses
  - REED 650 SOCIAL, CULTURAL, AND CURRICULAR CONTEXTS FOR SECOND LANGUAGE LEARNING
  - REED 651 INSTRUCTION AND ASSESSMENT FOR SECOND LANGUAGE LEARNERS
  - REED 652 INTRODUCTION TO LINGUISTICS FOR TEACHERS OF LANGUAGE AND LITERACY

- Educational Research Courses
  - EDUC 615 APPLIED EDUCATIONAL STATISTICS
  - EDUC 761 INQUIRY FOR PRACTICE
  - EDUC 765 QUALITATIVE METHODS IN EDUCATION

- Technology Courses
  - ISTC 605 WEB-BASED INSTRUCTION IN EDUCATION
  - ISTC 663 APPLIED PSYCHOLOGY OF LEARNING
  - ISTC 667 INSTRUCTIONAL DEVELOPMENT
  - ISTC 687 COMPUTER-BASED INSTRUCTION
  - ISTC 700 ASSESSMENT IN INSTRUCTIONAL TECHNOLOGY
  - ISTC 702 EDUCATIONAL LEADERSHIP AND TECHNOLOGY

- Administration Courses
  - EDUC 611 MENTORING THE PRE-SERVICE CANDIDATE: EFFECTIVE PRACTICES
  - ELED 665 CURRICULUM THEORY AND DEVELOPMENT
  - ILPD 781 SEMINAR IN SUPERVISION

- Other Literacy Courses
  - REED 628 GUIDED READING
  - REED 632 WORD STUDY FOR IMPROVING LITERACY
  - REED 670 SPECIAL TOPICS IN READING EDUCATION
  - REED 710 MULTICULTURAL LITERATURE FOR CHILDREN AND ADOLESCENTS
  - REED 712 CRITICAL CONVERSATION: EARLY LITERACY, RESEARCH, POLICY AND PRACTICE

Total Units 30

These three courses are designed to prepare students for the Praxis II TESOL exam and the MSDE TESOL certification.

Exit Requirements

Students collect key artifacts from each of their required courses. During their final course, students are required to submit their portfolio to the program director.
ILA Standard 1: Foundational Knowledge
Teacher Educator/Administrator Level: Understand major theories and empirical research evidence that describe the cognitive, linguistic, motivational, and sociocultural foundations of reading and writing development, processes and components.

ILA Standard 2: Curriculum and Instruction
Teacher Educator/Administrator Level: Use a wide range of texts (e.g., narrative, expository, and poetry) from traditional print, digital, and online resources.

ILA Standard 3: Assessment and Evaluation
Teacher Educator/Administrator Level: Use assessment information to plan and evaluate instruction.

ILA Standard 4: Diversity
Teacher Educator/Administrator Level: Recognize, understand, and value the forms of diversity that exist in society and their importance in learning to read and write.

ILA Standard 5: Literate Environment
Teacher Educator/Administrator Level: Design a social environment that is low-risk, includes choice, motivation, and scaffolded support to optimize students’ opportunities for learning to read and write.

ILA Standard 6: Professional Learning and Leadership
Teacher Educator/Administrator Level: Participate in, design, facilitate, lead, and evaluate effective and differentiated professional development programs.

Secondary Education M.Ed.
Degree: Master of Education
https://www.towson.edu/coe/departments/secondary/gradsecondary/

Program Director: Dr. Ashley Lucas
Phone: 410-704-5897
Email: scedmed@towson.edu

The degree can be completed through part-time study. Secondary Master of Education candidates include full-time teachers in area middle and high schools as well as international students. Courses are offered in the late afternoons, evenings, weekends and summers.

Admission Requirements
• Maryland teaching certification or permission of the program director.
• A 3.00 GPA based upon the last 60 units of undergraduate and post-baccalaureate study.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:
• Resume
• Essay describing the student's professional goals for advanced graduate study
• Two Letters of Recommendation
• A teaching certificate.

NOTE: Applicants certified in another area (e.g., elementary education) but not certified as a secondary teacher should be aware that completion of the master's degree is not accompanied by automatic state certification in grades 6-12.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

Degree Requirements
• Maintain a 3.00 GPA (no more than two courses with “C” grade are allowed).
• Complete no more than three 500-level courses, including transfer courses.
• Complete no more than 12 units of special format courses (e.g., independent study).
• Complete program of study within seven years, including transfer courses.
• Complete the capstone course SCED 781 with a grade of “A” or “B” (the course may be repeated only once) or successfully complete 6 units of SCED 898.

Students choose one of the following program options: Master of Education with Seminar or Master of Education with Thesis.

Non-Thesis with Capstone Seminar Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 601</td>
<td>CONCEPTS AND ISSUES IN EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>EDU 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(to be completed within first 9 units of course work)</td>
<td></td>
</tr>
<tr>
<td>EDU 761</td>
<td>INQUIRY FOR PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>SCED 647</td>
<td>ADVANCED PROCESSES OF TEACHING AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>SCED 741</td>
<td>CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>SCED 781</td>
<td>INTEGRATED PROFESSIONAL PRACTICE SEMINAR (to be taken in the last 6 units of course work)</td>
<td>3</td>
</tr>
</tbody>
</table>
Evaluating 1,2
At least one course must be selected from the following, or by obtaining approval from the program director:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 660</td>
<td>MATTERS OF DIVERSITY, EQUITY, AND EMPOWERMENT IN LEARNING COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>SCED 649</td>
<td>TEACHING GIFTED STUDENTS IN THE SECONDARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>SPED 601</td>
<td>SPECIAL EDUCATION: CURRICULUM &amp; METHODS OF INSTRUCTION FOR SECONDARY TRANSITION</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Units: 33

1. NOTE: Earn a Graduate Certificate in Family-Professional Collaboration with your elective units. See the Family-Professional Collaboration heading in the College of Liberal Arts section for more information.
2. All electives are planned in terms of the needs and goals of the individual student and must be approved by the program director.

### Thesis Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 601</td>
<td>CONCEPTS AND ISSUES IN EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE (to be completed within first 9 units of course work)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 761</td>
<td>INQUIRY FOR PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>SCED 647</td>
<td>ADVANCED PROCESSES OF TEACHING AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>SCED 741</td>
<td>CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>SCED 898</td>
<td>SECONDARY EDUCATION THESIS 1</td>
<td>6</td>
</tr>
</tbody>
</table>

**Electives**

At least one course must be selected from the following, or by obtaining approval from the program director:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 660</td>
<td>MATTERS OF DIVERSITY, EQUITY, AND EMPOWERMENT IN LEARNING COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>SCED 649</td>
<td>TEACHING GIFTED STUDENTS IN THE SECONDARY SCHOOL</td>
<td>3</td>
</tr>
<tr>
<td>SPED 601</td>
<td>SPECIAL EDUCATION: CURRICULUM &amp; METHODS OF INSTRUCTION FOR SECONDARY TRANSITION</td>
<td>6</td>
</tr>
</tbody>
</table>

Total Units: 33

1. The thesis course is 3 units and must be taken twice (in consecutive terms) for a total of 6 units.
2. All electives are planned in terms of the needs and goals of the individual student and must be approved by the program director.

1. To develop advanced competencies in curriculum development, assessment, evaluation and instructional design.
2. To develop an understanding of the diverse nature of learners in society.
3. To develop capacity for assuming teacher leadership roles.
4. To use technology to enhance learning.
5. To understand and use appropriate assessment and evaluation (assessment literacy).
6. To engage in scholarly activities.

7. To think and reflect critically about the educational process and professional practice (Essential Dispositions for Educators).

### Special Education M.Ed.

Degree: Master of Education

https://www.towson.edu/coe/departments/specialed/gradspecialed/

Program Director: Dr. Andrea Parrish
Phone: 410-704-3835
Email: aparrish@towson.edu

The Master of Education degree in Special Education is an applied professional program designed to meet the critical need for special educators. Two concentrations support this offering: Special Education Certification and Special Education Teacher as Leader in Autism Spectrum Disorder.

Please note that only one degree in Special Education can be awarded; students who complete more than one concentration in Special Education will not receive two different degrees.

### Special Education Concentration

Program Adviser: Kati Stein
Phone: 410-704-6001
Email: kstein@towson.edu

The degree program is for professionally certified teachers seeking a graduate degree in the area of special education. The Special Education Certification program is an initial certification/endorsement in the area of special education. It provides the skill development and knowledge base established by the Council for Exceptional Children's Standards for Beginning Special Educators and will meet the requirements for the Maryland State Department of Education's Special Education Generic Certification at the infant/primary (birth-grade 3), elementary/middle (grades 1-8) or secondary/adult (grades 6-12) levels. The degree program emphasizes the following themes: collaboration and consultation, translation of effective, research-based instructional and management strategies into practice, and cross-categorical, rather than disability-specific, approaches. A majority of the graduate students in the Special Education program are full-time working professionals, taking classes in the afternoon or evenings.

### Admission Requirements

- A baccalaureate degree from a regionally accredited college or university
- An overall minimum GPA of 3.00 for full admission to the program and a 2.75 GPA for conditional admission, based on the last 60 units of total undergraduate and post-baccalaureate study
- Current professional teaching certificate

NOTE: A valid professional teaching certificate is a prerequisite for admission to the M.Ed. program. Prior to enrolling in any course work, applicants who do not hold a current teaching certificate should contact the MAT program office at 410-704-5388 to obtain information about earning a professional teaching certificate. A special education track is available in the MAT program.

International students must have passing TOEFL scores and have completed the Praxis Core.
Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions** (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPED 637</td>
<td>INCLUSION FOR THE CLASSROOM TEACHER</td>
<td>3</td>
</tr>
<tr>
<td>Core Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 525</td>
<td>FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12)</td>
<td>3</td>
</tr>
<tr>
<td>SPED 604</td>
<td>ACTION RESEARCH IN SPECIAL EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>SPED 605</td>
<td>WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES</td>
<td>3</td>
</tr>
<tr>
<td>SPED 631</td>
<td>CLASSROOM STRATEGIES AND INTERVENTIONS FOR DIVERSE STUDENT POPULATIONS</td>
<td>3</td>
</tr>
<tr>
<td>SPED 632</td>
<td>ASSESSMENT ISSUES FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS</td>
<td>3</td>
</tr>
<tr>
<td>SPED 646</td>
<td>USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>Curriculum/Methods Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 527</td>
<td>CURRICULUM/METHODS OF SOCIAL EMOTIONAL AND MOTOR DEVELOPMENT FOR STUDENTS WITH DISABILITIES PREK-12 (EC/EL)</td>
<td>3</td>
</tr>
<tr>
<td>or SPED 601</td>
<td>SPECIAL EDUCATION: CURRICULUM &amp; METHODS OF INSTRUCTION FOR SECONDARY TRANSITION</td>
<td></td>
</tr>
<tr>
<td>SPED 607</td>
<td>CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES</td>
<td>3</td>
</tr>
<tr>
<td>SPED 641</td>
<td>ED STD W/DIS:CM&amp;I</td>
<td>3</td>
</tr>
<tr>
<td>Internship and Exit Requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 741</td>
<td>INTERNSHIP: STUDENTS WITH DISABILITIES</td>
<td>6</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Passing Praxis II: Special Education Specialty 0354 or 5354 is a graduation requirement. A copy of scores must be submitted to the Special Education graduate director prior to graduation.

Maryland State Department of Education teacher recertification requirements are the student’s responsibility and are not a requirement of this program.

The development and presentation of a portfolio that demonstrates and aligns with the professional association accreditation standards of the Council for Exceptional Children will take the place of the master’s thesis.

**Teacher as Leader in Autism Spectrum Disorder Concentration**

Program Coordinator: Katherine Holman

410-704-3613

kholman@towson.edu

The Teacher as Leader in Autism Spectrum Disorder is an applied professional program designed to meet the increasing and specific needs related to educating students with an autism spectrum disorder (ASD). The degree program is designed for professionals who currently hold certification in special education or a related field (psychology, speech-language pathology, occupational therapy, physical therapy, social work) and are seeking specialized knowledge and opportunities to apply this knowledge to better meet the educational needs of students with ASD. The degree program emphasizes the following themes related to ASD: specific knowledge about core areas of impairment, application of research-based instructional and classroom management strategies, effective collaboration and consultation, action research, and leadership. Each course includes an “application project” to allow the student hands-on experience with implementation and reflection of teaching and leadership practices as related to ASD.

**General Admission Requirements**

- A baccalaureate degree from an accredited college or university
- An overall minimum GPA of 3.00 for full admission to the program and a 2.75 GPA for conditional admission, based on the last 60 units of total undergraduate and post-baccalaureate study
- Letter of Recommendation
- Admission essay

Note: Successful completion of this program will yield a master’s degree, but no additional certification from MSDE. Certification in special education or a related field is highly recommended, but not required.

**Degree Requirements**

**Special Education: Teacher as Leader in Autism Spectrum Disorder (36 units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 604</td>
<td>ACTION RESEARCH IN SPECIAL EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>SPED 605</td>
<td>WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES</td>
<td>3</td>
</tr>
<tr>
<td>SPED 620</td>
<td>EDUCATING STUDENTS WITH AUTISM SPECTRUM DISORDERS</td>
<td>3</td>
</tr>
<tr>
<td>SPED 621</td>
<td>FORMAL AND INFORMAL ASSESSMENT TECHNIQUES FOR STUDENTS WITH ASD</td>
<td>3</td>
</tr>
<tr>
<td>SPED 622</td>
<td>SOCIAL THINKING AND CONNECTEDNESS FOR STUDENTS ON THE AUTISM SPECTRUM</td>
<td>3</td>
</tr>
<tr>
<td>SPED 623</td>
<td>BEHAVIOR MANAGEMENT FOR STUDENTS WITH ASD</td>
<td>3</td>
</tr>
<tr>
<td>SPED 624</td>
<td>EVIDENCE-BASED STRATEGIES AND INTERVENTIONS FOR STUDENTS WITH ASD</td>
<td>3</td>
</tr>
<tr>
<td>SPED 644</td>
<td>UNIVERSAL DESIGN FOR LEARNING AND DIFFERENTIATED INSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>Curriculum/Methods Courses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPED 625</td>
<td>CURRICULUM AND METHODS OF INSTRUCTION FOR STUDENTS WITH ASD I</td>
<td>3</td>
</tr>
<tr>
<td>SPED 626</td>
<td>CURRICULUM AND METHODS OF INSTRUCTION FOR STUDENTS WITH ASD II</td>
<td>3</td>
</tr>
<tr>
<td>SPED 627</td>
<td>CO-TEACHING AND INCLUSION OF STUDENTS WITH ASD II</td>
<td>3</td>
</tr>
<tr>
<td>SPED 628</td>
<td>INTEGRATING INSTRUCTIONAL AND ASSISTIVE TECHNOLOGIES TO SUPPORT STUDENTS WITH ASD</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Teacher as Leader in Autism Spectrum Disorders
CEC Advanced Preparation Standard 1 Assessment

1.0 Special education specialists use valid and reliable assessment practices to minimize bias.

1.1 Special education specialists minimize bias in assessment.

1.2 Special education specialists design and implement assessments to evaluate the effectiveness of practices and programs.

CEC Advanced Preparation Standard 2 Curricular Content Knowledge

2.0 Special education specialists use their knowledge of general and specialized curricula to improve programs, supports, and services at classroom, school, community, and system levels.

2.1 Special education specialists align educational standards to provide access to challenging curriculum to meet the needs individuals with exceptionalities.

2.2 Special educators continuously broaden and deepen professional knowledge, and expand expertise with instructional technologies, curriculum standards, effective teaching strategies, and assistive technologies to support access to and learning of challenging content.

2.3 Special education specialists use understanding of diversity and individual learning differences to inform the selection, development, and implementation of comprehensive curricula for individuals with exceptionalities.

CEC Advanced Preparation Standard 3 Programs, Services, and Outcomes

3.0 Special education specialists facilitate the continuous improvement of general and special education programs, supports, and services at the classroom, school, and system levels for individuals with exceptionalities.

3.1 Special education specialists design and implement evaluation activities to improve programs, supports, and services for individuals with exceptionalities.

3.2 Special education specialists use understanding of cultural, social, and economic diversity and individual learner differences to inform the development and improvement of programs, supports, and services for individuals with exceptionalities.

3.3 Special education specialists apply knowledge of theories, evidence-based practices, and relevant laws to advocate for programs, supports, and services for individuals with exceptionalities.

3.4 Special education specialists use instructional and assistive technologies to improve programs, supports, and services for individuals with exceptionalities.

3.5 Special education specialists evaluate progress toward achieving the vision, mission, and goals of programs, services, and supports for individuals with exceptionalities.

CEC Advanced Preparation Standard 4 Research & Inquiry

4.0 Special education specialists conduct, evaluate, and use inquiry to guide professional practice.

4.1 Special education specialists evaluate research and inquiry to identify effective practices.

4.2 Special education specialists use knowledge of the professional literature to improve practices with individuals with exceptionalities and their families.

4.3 Special education specialists foster an environment that is supportive of continuous instructional improvement and engage in the design and implementation of research and inquiry.

CEC Advanced Preparation Standard 5 Leadership and Policy

5.0 Special education specialists provide leadership to formulate goals, set and meet high professional expectations, advocate for effective policies and evidence-based practices and create positive and productive work environments.

5.1 Special education specialists model respect for and ethical practice for all individuals and encourage challenging expectations for individuals with exceptionalities.

5.2 Special education specialists support and use linguistically and culturally responsive practices.

5.3 Special education specialists create and maintain collegial and productive work environments that respect and safeguard the rights of individuals with exceptionalities and their families.

5.4 Special education specialists advocate for policies and practices that improve programs, services, and outcomes for individuals with exceptionalities.

5.5 Special education specialists advocate for the allocation of appropriate resources for the preparation and professional development of all personnel who serve individuals with exceptionalities.

CEC Advanced Preparation Standard 6 Professional and Ethical Practice

6.0 Special education specialists use foundational knowledge of the field and professional Ethical Principles and Practice Standards to inform special education practice, engage in lifelong learning, advance the profession, and perform leadership responsibilities to promote the success of professional colleagues and individuals with exceptionalities.

6.1 A comprehensive understanding of the history of special education, legal policies, ethical standards, and emerging issues informs special education specialist leadership.

6.2 Special education specialists model high professional expectations and ethical practice, and create supportive environments that safeguard the legal rights and improve outcomes for individuals with exceptionalities and their families.

6.3 Special education specialists model and promote respect for all individuals and facilitate ethical professional practice.

6.4 Special education specialists actively participate in professional development and learning communities to increase professional knowledge and expertise.

6.5 Special education specialists plan, present, and evaluate professional development focusing on effective and ethical practice at all organizational levels.

6.6 Special education specialists actively facilitate and participate in the preparation and induction of prospective special educators.
6.7 Special education specialists actively promote the advancement of the profession.

CEC Advanced Preparation Standard 7 Collaboration

7.0 Special education specialists collaborate with stakeholders to improve programs, services, and outcomes for individuals with exceptionalities and their families.

7.1 Special education specialists use culturally responsive practices to enhance collaboration.

7.2 Special education specialists use collaborative skills to improve programs, services, and outcomes for individuals with exceptionalities.

7.3 Special education specialists collaborate to promote understanding, resolve conflicts, and build consensus for improving program, services, and outcomes for individuals with exceptionalities.

Certification:

1. Learner Development and Individual Learning Differences - Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.

2. Learning Environments - Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination.

3. Curricular Content Knowledge - Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.


5. Instructional Planning and Strategies - Beginning special education professionals select, adapt, and use a repertoire of evidence-based instructional strategies to advance learning of individuals with exceptionalities.

6. Professional Learning and Ethical Practice - Beginning special education professionals use foundational knowledge of the field and their professional Ethical Principles and Practice Standards to inform special education practice, to engage in lifelong learning, and to advance the profession.

7. Collaboration - Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

Teaching English Learners Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/coe/departments/elementary/grad/english-learners-certificate/

Program Director: Dr. Meghan Liebreund
Phone: 410-704-4492

Email: mliebreund@towson.edu

This program will enable teachers that have either recently graduated or have been in the field to learn about and implement instructional strategies to help ESOL students succeed academically. The program provides four courses, which also help prepare teachers for the Praxis II ESOL examination, which in Maryland can lead to ESOL certification.

In addition, this PBC provides a lead into the Graduate Reading Program because all of the courses are already a part of the existing Graduate Reading Program. If students choose this route, they would leave with Reading Specialist and ESOL Certification. However, they could use this PBC to apply to other Master’s programs, such as our Leadership or Technology programs; or, they could simply complete this PBC to gain the background knowledge needed to work with English learners and their families using the WIDA standards.

This program will serve current educators who want to develop their ability to work effectively with English learners and their families. It will enable teachers that have either recently graduated or have been in the field for a while to learn about and implement instructional strategies to help ESOL students succeed academically.

Admission Requirements

- A minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study
- Certification as a teacher or licensure as a school professional is required

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

The program consists of the following four courses (12 units):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REED 650</td>
<td>SOCIAL, CULTURAL, AND CURRICULAR CONTEXTS FOR SECOND LANGUAGE LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>REED 651</td>
<td>INSTRUCTION AND ASSESSMENT FOR SECOND LANGUAGE LEARNERS</td>
<td>3</td>
</tr>
<tr>
<td>REED 652</td>
<td>INTRODUCTION TO LINGUISTICS FOR TEACHERS OF LANGUAGE AND LITERACY</td>
<td>3</td>
</tr>
<tr>
<td>REED 665</td>
<td>TEACHING READING AND WRITING IN THE CONTENT AREAS PREK-12</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

These courses will prepare teachers for the licensure examination, which leads to ESOL certification in Maryland. In addition, coursework from this program currently exists in the Graduate Reading Program and can be applied to the M.Ed. in Reading Education (https://catalog.towson.edu/graduate/degree-certificate-programs/education/reading-education-med).

Students will learn about and be able to apply the WIDA standards:
English Language Development Standard 1 - English language learners communicate for Social and Instructional purposes within the school setting.

English Language Development Standard 2 - English language learners communicate, ideas and concepts necessary for academic success in the content area of Language Arts.

English Language Development Standard 3 - English language learners communicate, ideas and concepts necessary for academic success in the content area of Mathematics.

English Language Development Standard 4 - English language learners communicate, ideas and concepts necessary for academic success in the content area of Science.

English Language Development Standard 5 - English language learners communicate, ideas and concepts necessary for academic success in the content area of Social Studies.

### Teaching MAT

Degree: Master of Arts in Teaching

https://www.towson.edu/coe/departments/teaching/

MAT Program Director: Dr. Pamela Wruble
Phone: 410-704-4935
Email: pwruble@towson.edu (pwruble@towson.edu)

MAT Program Coordinator: Kevin Gray
Phone: 410-704-5529
Email: pgray@towson.edu

MAT Secondary Education Director: Dr. Ashley Lucas
Phone: 410-704-3544
Email: alucas@towson.edu

MAT Elementary Education Director: Dr. Xiaoming (Sarah) Liu
Phone: 410-704-3539
Email: xliu@towson.edu

MAT Early Childhood Education Graduate Director: Dr. Stephen Schroth
Phone: 410-704-4292
Email: sschroth@towson.edu

MAT Early Childhood Education Associate Graduate Director and MAT Coordinator: Lisa Mason
Phone: 410-704-5271
Email: mlmason@towson.edu

MAT Special Education Director: Andrea Parrish
Phone: 410-704-3835
Email: aparrish@towson.edu

The Master of Arts in Teaching (MAT) is designed for those without formal training in the field of education who wish to enter the teaching profession. It is well suited to recent graduates and to those seeking to change careers. A graduate of this program will be eligible for initial teacher certification within the General Education concentrations of Early Childhood (ECED), Elementary (ELED) or Secondary Education (SCED). A student may also choose a Special Education track in Early Childhood, Elementary/Middle or Secondary Education. In addition to completing the MAT program requirements, the Maryland State Department of Education (MSDE) requires that all applicants for state teaching licensure successfully complete the PRAXIS II exam or other approved testing alternative in their area of specialization. Teacher candidates pursuing certification as French or Spanish world language teachers must provide a passing score on the ACTFL OPI exam at the Advanced Low level prior to beginning EDUC 798. Teacher candidates pursuing certification as Chinese world language teachers must provide a passing score on the ACTFL OPI at the Intermediate High level prior to beginning EDUC 798. All world language teacher candidates must pass the ACTFL WPT at the Intermediate High level as an MSDE certification requirement.

Teacher candidates with a concentration in General Education have two options for program completion: One-Year and Extended Year. The One-Year option requires a full-time commitment to courses and field placements. This program encompasses a summer, fall and extended spring term. The Extended Year option allows teacher candidates to design a course of study to fit their schedules (generally one, two or three evening courses per term). Teacher candidates who select the Extended Year option may be required to participate in a minimum of one day of daytime field experience per course during the fall and spring terms. Both options require teacher candidates to complete substantial daytime observation/participation hours during their enrollment in EDUC 797 and become full-time interns for EDUC 798 in the 18-week extended final term. Participation in the Extended Year option requires teacher candidates to complete all MAT program requirements within seven years.

The Special Education tracks are only available as Extended Year options.

Field placements and internships for teacher candidates pursuing a General Education certification are completed in public professional development schools in partnership with the university. Field placements and internships for teacher candidates pursuing Special Education certification are completed in appropriate special education classroom settings. Teacher candidates are responsible for transportation to the field placements and internships. All placements must be completed in subject areas and grade levels appropriate to the declared MAT field of certification. Understanding of assessment and literacy, application of effective instructional strategies, demonstrated evidence of PreK-12 student learning and development of essential dispositions for educators are integrated throughout the program and assessed in the final term.

### Combined Bachelor's to Master's Program in Teaching

The combined Bachelor’s - Master’s program in Teaching allows students to complete their graduate degrees plus teacher certification in shorter time. Students earn a four-year Bachelor’s degree in a non-education related major and a Master of Arts in Teaching that leads to eligibility for initial teacher certification in Secondary Education or Special Education in the State of Maryland. As early as junior year, students may complete the application process to screen into the combined Bachelor’s – Master’s program in Teaching. The combined degree program allows qualified undergraduates to take courses that will count towards the Master’s of Arts in Teaching while still enrolled as an undergraduate at Towson.

### Selection Criteria for the Combined Program

- Current undergraduate with junior or senior standing at Towson University
- A minimum cumulative GPA of 2.75
- Resume and brief statement of purpose (less than 250 words).
- Completion of the “5th Year Combined Program Agreement.”
The “5th Year Combined Program Agreement,” defines program requirements and acknowledges that selection for the combined program, as an undergraduate, does not guarantee admission to the Master of Arts in Teaching (MAT) Program. To continue into the master’s portion of the combined program, students must complete their bachelor’s degrees from Towson and formally apply to the MAT Program through University Admissions in the final semester of their senior year.

**Combined Bachelors-Master’s Degree Requirements**

- Undergraduate student with 60+ units is screened for the combined major by the academic department.
- Students in the combined program will take up to 9 units of graduate MAT coursework determined most appropriate for the student’s intended teaching certification area.
- In their senior year, combined program students will formally apply to the Master of Arts in Teaching (MAT) Program via University Admissions. The application fee is waived for Towson graduates.
- Combined program students admitted to the master’s program will begin the MAT Program the term AFTER they complete their undergraduate degree.
- Combined program students admitted to the MAT Program may earn their master’s degree in as little as 12 months.

**Areas of Certification**

- **Secondary Education, grades 7-12 (40 credits)**
  - Concentration Areas: Math, English, Biology, Chemistry, Physics, Earth Space Science, Social Studies; (World Languages-PreK-12 in Spanish, French, Chinese)
- **Special Education (39-40 credits)**
  - Concentration Areas: Math, English, Biology, Chemistry, Physics, Earth Space Science, Social Studies; (World Languages PreK-12 in Spanish, French, Chinese)
  - Concentration Areas: Infant/Primary (birth-3rd grade), Elementary (1st-8th grade), Secondary (6th-12th grade)
  - All students will complete a 1-year teaching internship (September to May).

**Withdrawal and Ineligibility**

- Students may withdraw by informing the program director in writing. Students who complete the bachelor’s but decide not to continue with the M.A.T. portion of the program will terminate their program with the fulfillment of all requirements for the undergraduate degree.
- A student who is ineligible to participate or who withdraws from the combined degree program cannot double-count any courses for both undergraduate and graduate degrees.

**Admission Requirements**

- A baccalaureate degree from a regionally accredited college or university**.
- A 3.00 GPA is required for full admission. A GPA between 2.75 and 2.99 may qualify the applicant for conditional admission. GPA calculations for admission are based upon the cumulative units of the degree or the last 60 units of undergraduate and post-baccalaureate study.
- Early Childhood and Elementary certifications for both General Education and Special Education require a well-rounded content background, including specific courses in English, math, science and the social sciences. These requirements are aligned with professional association accreditation standards. In addition, Special Education teacher candidates enrolled in the Early Childhood and Elementary/ Middle Education programs must take two graduate-level reading courses as prerequisites to the program: ECED 618 or ELED 611; and EDUC 717. Contact the MAT office for evaluation of transcripts to determine any needed content area course work. This should be done prior to application.
- Certification in Secondary General Education requires a minimum of 36 specific units in a content major (biology, chemistry, earth-space science, English, math, physics, social science or one of the world languages including Chinese, French or Spanish). Certification in Secondary Special Education requires a minimum of 21 specific units in a content major (biology, English, math or social science). Content major requirements are aligned with professional association accreditation standards. Contact the MAT office for evaluation of transcripts to determine any needed content area course work. This should be done prior to application.
- Passing scores as determined by MSDE on the PRAXIS Core Exam: Reading, Writing and Mathematics or other approved testing alternative (SAT, ACT or GRE).

**Non-immigrant international students**: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Exceptions to Policy**: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Application Procedures**

Access the “Graduate Admissions” website at https://www.towson.edu/academics/graduate/admissions/apply/ for electronic submission of admission documents.

- Graduate application
- Official transcripts from all colleges attended
- Official copy of passing scores on the PRAXIS Core Exam: Reading, Writing and Mathematics or other approved testing alternative (SAT, ACT or GRE). Passing scores are determined by MSDE.
- A brief (one- to two-page) admission essay discussing the applicant’s reasons for entering the teaching profession
- Two professional narrative letters of reference
- Résumé

It is recommended that application and all admission credentials be submitted by March 15 for the summer term including the One-Year option, May 15 for the fall term, and October 15 for the spring term. Late applications will be considered if space is available.

**Program Completion**

In order to successfully complete the MAT program and graduate, teacher candidates must maintain a 3.00 GPA in the graduate program, earn no more than two grades of “C” in MAT course work, receive satisfactory grades on all content prerequisites prior to entering EDUC 798, receive a grade of “C” or greater in EDUC 797 prior to entering EDUC 798, and earn a grade of “S” in EDUC 798. Additionally, all teacher candidates must present a Summative Portfolio and receive scores of “3” or higher for all InTASC and COE Standards as a program exit/graduation requirement.
**Degree Requirements for General Education**

The MAT program in Early Childhood or Elementary General Education requires 42 units of course work. The MAT program in Secondary General Education requires 40 units of course work to include 37 graduate units and 3 undergraduate units in secondary methods.

### Early Childhood General Education

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>EDU 730</td>
<td>PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY</td>
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<tr>
<td>EDU 731</td>
<td>CURRICULUM AND ASSESSMENT</td>
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<tr>
<td>EDU 797</td>
<td>INTERNSHIP I/SEMINAR ¹</td>
<td>6</td>
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<tr>
<td>EDU 798</td>
<td>INTERNSHIP II WITH SEMINAR ²</td>
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<tr>
<td>SPED 637</td>
<td>INCLUSION FOR THE CLASSROOM TEACHER</td>
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**Core Courses**

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<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>ECED 604</td>
<td>MATH/SCIENCE IN THE EARLY CHILDHOOD EDUCATION PROGRAM</td>
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<tr>
<td>ECED 608</td>
<td>INTEGRATED CURRICULUM AND AUTHENTIC LEARNING IN EARLY CHILDHOOD EDUCATION</td>
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<tr>
<td>ECED 614</td>
<td>WORKING WITH LINGUISTICALLY DIVERSE YOUNG CHILDREN AND THEIR FAMILIES</td>
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</tr>
<tr>
<td>ECED 618</td>
<td>THINKING THROUGH THE PROCESSES AND ACQUISITION OF LITERACY</td>
<td>3</td>
</tr>
<tr>
<td>ECED 621</td>
<td>ASSESSMENT OF READING AND WRITING IN EARLY CHILDHOOD EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ECED 623</td>
<td>STRATEGIES FOR TEACHING READING &amp;WRITING: BALANCED LITERACY APPROACHES IN ECED CLASSROOM</td>
<td>3</td>
</tr>
<tr>
<td>EDU 717</td>
<td>CHILDREN’S LITERATURE AND OTHER MATERIALS FOR TEACHING READING</td>
<td>3</td>
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</table>

**Total Units**: 42

¹ A lab fee is attached to EDU 797. Extended Year option teacher candidates must complete a minimum of one day each week in a Professional Development School (PDS) as an internship requirement. One-Year option teacher candidates must complete a minimum of two days each week in a PDS as an internship requirement. Successful completion of EDU 797 is a prerequisite to enrollment in EDU 798.

² A lab fee is attached to EDU 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a PDS. EDU 798 is completed in the final spring term.

### Secondary General Education

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<td>INCLUSION FOR THE CLASSROOM TEACHER</td>
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**Secondary Education Methods Course**

| ISTC 501 | INTEGRATING INSTRUCTIONAL TECHNOLOGY                      | 3     |
| EDU 734 | THE TEACHER AS RESEARCHER                                 | 3     |
| EDU 735 | PROSEMINAR: PROBLEMS AND ISSUES                           | 3     |
| SCED 560 | USING READING AND WRITING IN THE SECONDARY SCHOOL         | 4     |
| SCED 561 | TEACHING READING IN THE SECONDARY CONTENT AREAS           | 3     |
| SCED xxx | Secondary Education Methods Course                       | 3     |

Select one of the following:

| SCED 423 | TEACHING MATHEMATICS IN THE SECONDARY SCHOOLS             | 3     |
| SCED 353 | TEACHING MODERN FOREIGN LANGUAGE                          | 3     |
| SCED 355 | TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOL           | 3     |
| SCED 357 | TEACHING ENGLISH IN THE SECONDARY SCHOOL                  | 3     |
| SCIE 380 | TEACHING SCIENCE IN THE SECONDARY SCHOOLS                 | 3     |

**Total Units**: 40

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¹ A lab fee is attached to EDU 797. Extended Year option teacher candidates must complete a minimum of one day each week in a Professional Development School (PDS) as an internship requirement. One-Year option teacher candidates must complete a minimum of two days each week in a PDS as an internship requirement. Successful completion of EDU 797 is a prerequisite to enrollment in EDU 798.

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A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a PDS. EDUC 798 is completed in the final spring term.

A lab fee is attached to this course.

**Degree Requirements for Special Education**

The MAT program in Early Childhood and Elementary/Middle Special Education requires 39 units of course work. The MAT program in Secondary Special Education requires 40 units of course work.

Special Education MAT teacher candidates must submit a copy of their score on the PRAXIS II Special Education: Core Knowledge and Applications exam to the Special Education program director as a graduation requirement.

**Early Childhood Special Education**

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<tr>
<td>EDUC 798</td>
<td>INTERNSHIP II WITH SEMINAR ³</td>
<td>6</td>
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<tr>
<td>SPED 525</td>
<td>FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12)</td>
<td>3</td>
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<tr>
<td>SPED 605</td>
<td>WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES</td>
<td>3</td>
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<tr>
<td>SPED 607</td>
<td>CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES</td>
<td>3</td>
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<tr>
<td>SPED 632</td>
<td>ASSESSMENT ISSUES FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS</td>
<td>3</td>
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<tr>
<td>SPED 637</td>
<td>INCLUSION FOR THE CLASSROOM TEACHER</td>
<td>3</td>
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<tr>
<td>SPED 641</td>
<td>ED STD W/DIS:CM&amp;I</td>
<td>3</td>
</tr>
<tr>
<td>SPED 646</td>
<td>USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION ¹</td>
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**Elementary/Middle Special Education Courses**

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<th>Code</th>
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<tbody>
<tr>
<td>EDUC 787</td>
<td>INSTRUCTIONAL PRACTICES IN THE DEVELOPMENT OF LITERACY</td>
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<tr>
<td>ELED 621</td>
<td>LITERACY ASSESSMENT IN THE ELEMENTARY CLASSROOM</td>
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Total Units: 39

1 A lab fee is attached to this course.
2 A lab fee is attached to EDUC 797. Teacher candidates must complete a minimum of one day each week in a special education classroom as an internship requirement. Successful completion of EDUC 797 is a prerequisite to enrollment in EDUC 798.
3 A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a special education classroom. EDUC 798 is completed in the final spring term.

**Secondary Special Education**

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Total Units: 39

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3 A lab fee is attached to EDUC 798. All teacher candidates complete 18 weeks of full-time, five days per week internship in a special education classroom. EDUC 798 is completed in the final spring term.
and use positive relationships and supportive interactions as the settings within which teaching and learning occur. They understand and its details vary depending on children's ages, characteristics, and families and other professionals, to positively influence the development and communities. They use this understanding to create respectful, reciprocal relationships that support and empower families, and to involve all families in their children's development and learning.

**NAEYC Standard 3. Observing, Documenting, and Assessing to Support Young Children and Families**

Candidates prepared in early childhood degree programs understand that child observation, documentation, and other forms of assessment are central to the practice of all early childhood professionals. They know about and understand the goals, benefits, and uses of assessment. They know about and use systematic observations, documentation, and other effective assessment strategies in a responsible way, in partnership with families and other professionals, to positively influence the development of every child.

**NAEYC Standard 4. Using Developmentally Effective Approaches**

Candidates prepared in early childhood degree programs understand that teaching and learning with young children is a complex enterprise, and its details vary depending on children’s ages, characteristics, and the settings within which teaching and learning occur. They understand and use positive relationships and supportive interactions as the foundation for their work with young children and families. Candidates know, understand, and use a wide array of developmentally appropriate approaches, instructional strategies, and tools to connect with children and families and positively influence each child's development and learning.

**NAEYC Standard 5. Using Content Knowledge to Build Meaningful Curriculum**

Candidates prepared in early childhood degree programs use their knowledge of academic disciplines to design, implement, and evaluate experiences that promote positive development and learning for each and every young child. Candidates understand the importance of developmental domains and academic (or content) disciplines in early childhood curriculum. They know the essential concepts, inquiry tools, and structure of content areas, including academic subjects, and can identify resources to deepen their understanding. Candidates use their own knowledge and other resources to design, implement, and evaluate meaningful, challenging curriculum that promotes comprehensive developmental and learning outcomes for every young child.

**NAEYC Standard 6. Becoming a Professional**

Candidates prepared in early childhood degree programs identify and conduct themselves as members of the early childhood profession. They know and use ethical guidelines and other professional standards related to early childhood practice. They are continuous, collaborative learners who demonstrate knowledgeable, reflective and critical perspectives on their work, making informed decisions that integrate knowledge from a variety of sources. They are informed advocates for sound educational practices and policies.

**NAEYC Standard 7. Early Childhood Field Experiences**

Field experiences and clinical practice are planned and sequenced so that candidates develop the knowledge, skills and professional dispositions necessary to promote the development and learning of young children across the entire developmental period of early childhood – in at least two of the three early childhood age groups (birth – age 3, 3 through 5, 5 through 8 years) and in the variety of settings that offer early education (early school grades, child care centers and homes, Head Start programs).

**Elementary Education MAT**

**ACEI Standard 1. Development, Learning, and Motivation**

1.0 Development, Learning, and Motivation—Candidates know, understand, and use the major concepts, principles, theories, and research related to development of children and young adolescents to construct learning opportunities that support individual students’ development, acquisition of knowledge, and motivation.

**ACEI Standard 2. Curriculum Standards**

2.1 Reading, Writing, and Oral Language—Candidates demonstrate a high level of competence in use of English language arts and they know, understand, and use concepts from reading, language and child development, to teach reading, writing, speaking, viewing, listening, and thinking skills and to help students successfully apply their developing skills to many different situations, materials, and ideas;

2.2 Science—Candidates know, understand, and use fundamental concepts of physical, life, and earth/space sciences. Candidates can design and implement age-appropriate inquiry lessons to teach science,
to build student understanding for personal and social applications, and to convey the nature of science;

2.3 Mathematics—Candidates know, understand, and use the major concepts and procedures that define number and operations, algebra, geometry, measurement, and data analysis and probability. In doing so they consistently engage problem solving, reasoning and proof, communication, connections, and representation;

2.4 Social studies—Candidates know, understand, and use the major concepts and modes of inquiry from the social studies—the integrated study of history, geography, the social sciences, and other related areas—to promote elementary students’ abilities to make informed decisions as citizens of a culturally diverse democratic society and interdependent world;

2.5 The arts—Candidates know, understand, and use—as appropriate to their own understanding and skills—the content, functions, and achievements of the performing arts (dance, music, theater) and the visual arts as primary media for communication, inquiry, and engagement among elementary students;

2.6 Health education—Candidates know, understand, and use the major concepts in the subject matter of health education to create opportunities for student development and practice of skills that contribute to good health;

2.7 Physical education—Candidates know, understand, and use—as appropriate to their own understanding and skills—human movement and physical activity as central elements to foster active, healthy life styles and enhanced quality of life for elementary students.

ACEI Standard 3. Instruction Standards

3.1 Integrating and applying knowledge for instruction—Candidates plan and implement instruction based on knowledge of students, learning theory, connections across the curriculum, curricular goals, and community;

3.2 Adaptation to diverse students—Candidates understand how elementary students differ in their development and approaches to learning, and create instructional opportunities that are adapted to diverse students;

3.3 Development of critical thinking and problem solving—Candidates understand and use a variety of teaching strategies that encourage elementary students’ development of critical thinking and problem solving;

3.4 Active engagement in learning—Candidates use their knowledge and understanding of individual and group motivation and behavior among students at the K-6 level to foster active engagement in learning, self-motivation, and positive social interaction and to create supportive learning environments;

3.5 Communication to foster collaboration—Candidates use their knowledge and understanding of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the elementary classroom.

ACEI Standard 4. Assessment Standards

4.0 Assessment for instruction—Candidates know, understand, and use formal and informal assessment strategies to plan, evaluate and strengthen instruction that will promote continuous intellectual, social, emotional, and physical development of each elementary student.

ACEI Standard 5. Professional Standards

5.1 Professional growth, reflection, and evaluation—Candidates are aware of and reflect on their practice in light of research on teaching, professional ethics, and resources available for professional learning; they continually evaluate the effects of their professional decisions and actions on students, families and other professionals in the learning community and actively seek out opportunities to grow professionally.

5.2 Collaboration with families, colleagues, and community agencies—Candidates know the importance of establishing and maintaining a positive collaborative relationship with families, school colleagues, and agencies in the larger community to promote the intellectual, social, emotional, physical growth and well-being of children.

English MAT

NCTE Standards

1) Content Knowledge (Reading Texts). Candidates demonstrate knowledge of English language arts subject matter content that specifically includes literature and multimedia texts as well as knowledge of the nature of adolescents as readers.

1.1 Candidates are knowledgeable about texts—print and non-print texts, media texts, classic texts and contemporary texts, including young adult—that represent a range of world literatures, historical traditions, genres, and the experiences of different genders, ethnicities, and social classes; they are able to use literary theories to interpret and critique a range of texts.

1.2 Candidates are knowledgeable about how adolescents read texts and make meaning through interaction with media environments.

2) Content knowledge (Using Language and Writing); Candidates demonstrate knowledge of English language arts subject matter content that specifically includes language and writing as well as knowledge of adolescents as language users.

2.1 Candidates can compose a range of formal and informal texts taking into consideration the interrelationships among form, audience, context, and purpose; candidates understand that writing is a recursive process; candidates can use contemporary technologies and/or digital media to compose multi-modal discourse.

2.2 Candidates know the conventions of English language as they relate to various rhetorical situations (grammar, usage, and mechanics); they understand the concept of dialect and are familiar with relevant grammar systems (e.g. descriptive and prescriptive); they understand principles of language acquisition; they recognize the influence of English language history on ELA content; and they understand the impact of language on society.

2.3 Candidates are knowledgeable about how adolescents compose texts and make meaning through interaction with media environments.

3) Content Pedagogy. Planning Literature and Reading Instructions in ELA. Candidates plan instruction and design assessments for reading and the study of literature to promote learning for all students.

3.1 Candidates use their knowledge of theory, research, and practice in English Language Arts to plan standards-based, coherent and relevant learning experiences utilizing a range of different texts across
genres, periods, forms, authors, cultures, and various forms of media and instructional strategies that are motivating and accessible to all students, including English language learners, students with special needs, students from diverse language and learning backgrounds, those designated as high achieving, and those at risk of failure.

3.2 Candidates design a range of authentic assessments (e.g., formal and informal, formative and summative) of reading and literature that demonstrate an understanding of how learners develop and that address interpretive, critical, and evaluative abilities in reading, writing, speaking, listening, viewing, and presenting.

3.3 Candidates plan standards-based, coherent and relevant learning experiences in reading that reflect knowledge of current theory and research about the teaching and learning of reading and that utilize individual and collaborative approaches and a variety of reading strategies.

3.4 Candidates design or knowledgeably select appropriate reading assessments that inform instruction by providing data about student interests, reading proficiencies, and reading processes.

3.5 Candidates plan instruction that incorporates knowledge of language—structure, history, and conventions—to facilitate students’ comprehension and interpretation of print and non-print texts.

3.6 Candidates plan instruction which, when appropriate, reflects curriculum integration and incorporates interdisciplinary teaching methods and materials.

4) Content Pedagogy: Planning Composition Instruction in ELA. Candidates plan instruction and design assessments for composing texts (i.e. oral, written, and visual) to promote learning for all students.

4.1 Candidates use their knowledge of theory, research, and practice in English Language Arts to plan standards-based, coherent and relevant composing experiences that utilize individual and collaborative approaches and contemporary technologies and reflect an understanding of writing processes and strategies in different genres for a variety of purposes and audiences.

4.2 Candidates design a range of assessments for students that promote their development as writers, are appropriate to the writing task, and are consistent with current research and theory. Candidates are able to respond to student writing in process and to finished texts in ways that engage students’ ideas and encourage their growth as writers over time.

4.3 Candidates design instruction related to the strategic use of language conventions (grammar, usage, and mechanics) in the context of students’ writing for different audiences, purposes, and modalities.

4.4 Candidates design instruction that incorporates students’ home and community languages to enable skillful control over their rhetorical choices and language practices for a variety of audiences and purposes.

5) Learners and Learning: Implementing English Language Arts Instruction. Candidates plan, implement, assess, and reflect on research-based instruction that increases motivation and active student engagement, builds sustained learning of English language arts, and responds to diverse students’ context-based needs.

5.1 Candidates plan and implement instruction based on ELA curricular requirements and standards, school and community contexts, and knowledge about students’ linguistic and cultural backgrounds.

5.2 Candidates use data about their students’ individual differences, identities, and funds of knowledge for literacy learning to create inclusive learning environments that contextualize curriculum and instruction and help students participate actively in their own learning in ELA.

5.3 Candidates differentiate instruction based on students’ self-assessments and formal and informal assessments of learning in English language arts; candidates communicate with students about their performance in ways that actively involve them in their own learning.

5.4 Candidates select, create, and use a variety of instructional strategies and teaching resources, including contemporary technologies and digital media, consistent with what is currently known about student learning in English Language Arts.

6) Professional Knowledge and Skills (Theories and Research); Candidates demonstrate knowledge of how theories and research about social justice, diversity, equity, student identities, and schools as institutions can enhance students’ opportunities to learn in English language arts.

6.1 Candidates plan and implement English language arts and literacy instruction that promotes social justice and critical engagement with complex issues related to maintaining a diverse, inclusive, equitable society.

6.2 Candidates use knowledge of theories and research to plan instruction responsive to students’ local, national and international histories, individual identities (e.g., race, ethnicity, gender expression, age, appearance, ability, spiritual belief, sexual orientation, socioeconomic status, and community environment), and languages/dialects as they affect students’ opportunities to learn in ELA.

7) Professional Knowledge and Skills (Professional Interaction and Leadership); Candidates are prepared to interact knowledgeably with students, families, and colleagues based on social needs and institutional roles, engage in leadership and/or collaborative roles in English language arts professional learning communities, and actively develop as professional educators.

7.1 Candidates model literate and ethical practices in ELA teaching, and engage in/reflect on a variety of experiences related to ELA.

7.2 Candidates engage in and reflect on a variety of experiences related to ELA that demonstrate understanding of and readiness for leadership, collaboration, ongoing professional development, and community engagement.

Mathematics MAT

NCTM Standard 1: Content Knowledge
Effective teachers of secondary mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.

NCTM Standard 2: Mathematical Practices
Effective teachers of secondary mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that
understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.

NCTM Standard 3: Content Pedagogy
Effective teachers of secondary mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics-specific technological tools in their teaching to develop all students’ mathematical understanding and proficiency. They provide students with opportunities to do mathematics — talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.

NCTM Standard 4: Mathematical Learning Environment
Effective teachers of secondary mathematics exhibit knowledge of adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.

NCTM Standard 5: Impact on Student Learning
Effective teachers of secondary mathematics provide evidence demonstrating that as a result of their instruction, secondary students’ conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a productive disposition toward mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.

NCTM Standard 6: Professional Knowledge and Skills
Effective teachers of secondary mathematics are lifelong learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.

NCTM Standard 7: Secondary Mathematics Field Experiences and Clinical Practice
Effective teachers of secondary mathematics engage in a planned sequence of field experiences and clinical practice under the supervision of experienced and highly qualified mathematics teachers. They develop a broad experiential base of knowledge, skills, effective approaches to mathematics teaching and learning, and professional behaviors across both middle and high school settings that involve a diverse range and varied groupings of students. Candidates experience a full-time student teaching/internship in secondary mathematics directed by university or college faculty with secondary mathematics teaching experience or equivalent knowledge base.

Science MAT
NSTA Standard 1: Content Knowledge
Effective teachers of science understand and articulate the knowledge and practices of contemporary science. They interrelate and interpret important concepts, ideas, and applications in their fields of licensure.

NSTA Standard 2: Content Pedagogy
Effective teachers of science understand how students learn and develop scientific knowledge. PR eService teachers use scientific inquiry to develop this knowledge for all students.

NSTA Standard 3: Learning Environments
Effective teachers of science are able to plan for engaging all students in science learning by setting appropriate goals that are consistent with knowledge of how students learn science and are aligned with state and national standards. The plans reflect the nature and social context of science, inquiry, and appropriate safety considerations. Candidates design and select learning activities, instructional settings, and resources — including science-specific technology, to achieve these goals; and they plan fair and equitable assessment strategies to evaluate if the learning goals are met.

NSTA Standard 4: Safety
Effective teachers of science can, in a P-12 classroom setting, demonstrate and maintain chemical safety, safety procedures, and the ethical treatment of living organisms needed in the P-12 science classroom appropriate to their area of licensure.

NSTA Standard 5: Impact on Student Learning
Effective teachers of science provide evidence to show that P-12 students’ understanding of major science concepts, principles, theories, and laws have changes as a result of instruction by the candidate and that student knowledge is at a level of understanding beyond memorization. Candidates provide evidence for the diversity of students they teach.

NSTA Standard 6: Professional Knowledge and Skills
Effective teachers of science strive continuously to improve their knowledge and understanding of the ever changing knowledge base of both content, and science pedagogy, including approaches for addressing inequities and inclusion for all students in science. They identify with and conduct themselves as part of the science education community.

Social Studies MAT
NCSS Standard 1.1 Culture and Cultural Diversity. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of culture and cultural diversity.

NCSS Standard 1.2 Time, Continuity, and Change. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of time, continuity, and change.

NCSS Standard 1.3 People, Places, and Environment. Candidates in social studies should possess the knowledge, capabilities, and dispositions to
organize and provide instruction at the appropriate school level for the study of people, places, and environment.

NCSS Standard 1.4 Individual Development and Identity. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of individual development and identity.

NCSS Standard 1.5 Individuals, Groups and Institutions. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of individuals, groups, and institutions.

NCSS Standard 1.6 Power, Authority, and Governance. Candidates in social studies should possess the knowledge, capabilities, and disposition to organize and provide instruction at the appropriate school level for the study of power, authority and governance.

NCSS Standard 1.7 Production, Distribution, and Consumption. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of production, distribution, and consumption of goods and services.

NCSS Standard 1.8 Science, Technology and Society. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of science, technology and society.

NCSS Standard 1.9 Global Connections. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of global connections and interdependence.

NCSS Standard 1.10 Civic Ideals and Practices. Candidates in social studies should possess the knowledge, capabilities, and dispositions to organize and provide instruction at the appropriate school level for the study of civic ideals and practices.

NCSS Standard 3.1 Course or Courses on Teaching Social Studies. Institutions preparing social studies teachers should provide and require prospective social studies teachers to complete a course or courses dealing specifically with the nature of the social studies and with ideas, strategies, and techniques for teaching social studies at the appropriate licensure level.

NCSS Standard 3.2 Qualified Social Studies Faculty. Institutions preparing social studies teachers should provide faculty in the social studies and social studies education components of the program who are recognized as (a) exemplary teachers, (b) scholars in the field of social studies and social studies education, and (c) informed about middle and secondary school classrooms and teaching.

Special Education MAT

CEC Initial Preparation Standard 1: Learner Development and Individual Learning Differences

1.0 Beginning special education professionals understand how exceptionalities may interact with development and learning and use this knowledge to provide meaningful and challenging learning experiences for individuals with exceptionalities.

1.1 Beginning special education professionals understand how language, culture, and family background influence the learning of individuals with exceptionalities.

1.2 Beginning special education professionals use understanding of development and individual differences to respond to the needs of individuals with exceptionalities.

CEC Initial Preparation Standard 2 Learning Environments

2.0 Beginning special education professionals create safe, inclusive, culturally responsive learning environments so that individuals with exceptionalities become active and effective learners and develop emotional well-being, positive social interactions, and self-determination.

2.1 Beginning special education professionals through collaboration with general educators and other colleagues create safe, inclusive, culturally responsive learning environments to engage individuals with exceptionalities in meaningful learning activities and social interactions.

2.2 Beginning special education professionals use motivational and instructional interventions to teach individuals with exceptionalities how to adapt to different environments.

2.3 Beginning special education professionals know how to intervene safely and appropriately with individuals with exceptionalities in crisis.

CEC Initial Preparation Standard 3 Curricular Content Knowledge

3.0 Beginning special education professionals use knowledge of general and specialized curricula to individualize learning for individuals with exceptionalities.

3.1 Beginning special education professionals understand the central concepts, structures of the discipline, and tools of inquiry of the content areas they teach, and can organize this knowledge, integrate cross-disciplinary skills, and develop meaningful learning progressions for individuals with exceptionalities.

3.2 Beginning special education professionals understand and use general and specialized content knowledge for teaching across curricular content areas to individualize learning for individuals with exceptionalities.

3.3 Beginning special education professionals modify general and specialized curricula to make them accessible to individuals with exceptionalities.

CEC Initial Preparation Standard 4 Assessment

4.0 Beginning special education professionals use multiple methods of assessment and data-sources in making educational decisions.

4.1 Beginning special education professionals select and use technically sound formal and informal assessments that minimize bias.

4.2 Beginning special education professionals use knowledge of measurement principles and practices to interpret assessment results and guide educational decisions for individuals with exceptionalities.

4.3 Beginning special education professionals in collaboration with colleagues and families use multiple types of assessment information in making decisions about individuals with exceptionalities.
4.4 Beginning special education professionals engage individuals with exceptionalities to work toward quality learning and performance and provide feedback to guide them.

**CEC Initial Preparation Standard 5 Instructional Planning and Strategies**

5.1 Beginning special education professionals consider an individual's abilities, interests, learning environments, and cultural and linguistic factors in the selection, development, and adaptation of learning experiences for individual with exceptionalities.

5.2 Beginning special education professionals use technologies to support instructional assessment, planning, and delivery for individuals with exceptionalities.

5.3 Beginning special education professionals are familiar with augmentative and alternative communication systems and a variety of assistive technologies to support the communication and learning of individuals with exceptionalities.

5.4 Beginning special education professionals use strategies to enhance language development and communication skills of individuals with exceptionalities.

5.5 Beginning special education professionals develop and implement a variety of education and transition plans for individuals with exceptionalities across a wide range of settings and different learning experiences in collaboration with individuals, families, and teams.

5.6 Beginning special education professionals teach to mastery and promote generalization of learning.

5.7 Beginning special education professionals teach cross-disciplinary knowledge and skills such as critical thinking and problem solving to individuals with exceptionalities.

**CEC Initial Preparation Standard 6 Professional Learning and Ethical Practice**

6.0 Beginning special education professionals use foundational knowledge of the field and the their professional Ethical Principles and Practice Standards to inform special education practice, to engage in lifelong learning, and to advance the profession.

6.1 Beginning special education professionals use professional Ethical Principles and Professional Practice Standards to guide their practice.

6.2 Beginning special education professionals understand how foundational knowledge and current issues influence professional practice.

6.3 Beginning special education professionals understand that diversity is a part of families, cultures, and schools, and that complex human issues can interact with the delivery of special education services.

6.4 Beginning special education professionals understand the significance of lifelong learning and participate in professional activities and learning communities.

6.5 Beginning special education professionals advance the profession by engaging in activities such as advocacy and mentoring.

6.6 Beginning special education professionals provide guidance and direction to paraeducators, tutors, and volunteers.

**CEC Initial Preparation Standard 7 Collaboration**

7.0 Beginning special education professionals collaborate with families, other educators, related service providers, individuals with exceptionalities, and personnel from community agencies in culturally responsive ways to address the needs of individuals with exceptionalities across a range of learning experiences.

7.1 Beginning special education professionals use the theory and elements of effective collaboration.

7.2 Beginning special education professionals serve as a collaborative resource to colleagues.

7.3 Beginning special education professionals use collaboration to promote the well-being of individuals with exceptionalities across a wide range of settings and collaborators.

**Foreign Languages MAT**

ACTFL Standard 1. Language, Linguistics, Comparisons. Candidates (a) demonstrate a high level of proficiency in the target language, and they seek opportunities to strengthen their proficiency (See the following supporting explanation and rubrics for required levels of proficiency.); (b) know the linguistic elements of the target language system, recognize the changing nature of language, and accommodate for gaps in their own knowledge of the target language system by learning on their own; and (c) know the similarities and differences between the target language and other languages, identify the key differences in varieties of the target language, and seek opportunities to learn about varieties of the target language on their own.

ACTFL Standard 2. Cultures, Literatures, Cross-Disciplinary Concepts. Candidates (a) demonstrate that they understand the connections among the perspectives of a culture and its practices and products, and they integrate the cultural framework for foreign language standards into their instructional practices; (b) recognize the value and role of literary and cultural texts and use them to interpret and reflect upon the perspectives of the target cultures over time; and (c) integrate knowledge of other disciplines into foreign language instruction and identify distinctive viewpoints accessible only through the target language.

ACTFL Standard 3. Language Acquisition Theories and Instructional Practices. Candidates (a) demonstrate an understanding of language acquisition at various developmental levels and use this knowledge to create a supportive classroom learning environment that includes target language input and opportunities for negotiation of meaning and meaningful interaction and (b) develop a variety of instructional practices that reflect language outcomes and articulated program models and address the needs of diverse language learners.

ACTFL Standard 4. Integration of Standards into Curriculum and Instruction. Candidates (a) demonstrate an understanding of the goal areas and standards of the Standards for Foreign Language Learning and their state standards, and they integrate these frameworks into curricular planning; (b) integrate the Standards for Foreign Language Learning and their state standards into language instruction; and (c) use standards and curricular goals to evaluate, select, design, and adapt instructional resources.

ACTFL Standard 5. Assessment of Language and Cultures. Candidates (a) believe that assessment is ongoing, and they demonstrate knowledge of multiple ways of assessment that are age- and level-appropriate by implementing purposeful measures; (b) reflect on the results of student assessments, adjust instruction accordingly, analyze the
results of assessments, and use success and failure to determine the direction of instruction; and (c) interpret and report the results of student performances to all stakeholders and provide opportunity for discussion.

ACTFL Standard 6. Professionalism. Candidates (a) engage in professional development opportunities that strengthen their own linguistic and cultural competence and promote reflection on practice and (b) know the value of foreign language learning to the overall success of all students and understand that they will need to become advocates with students, colleagues, and members of the community to promote the field.

The College of Fine Arts and Communication

Center for the Arts 3001
Phone: 410-704-3288
Fax: 410-704-6026

The College of Fine Arts and Communication (COFAC) provides graduate education and training in a wide range of fields, including art education, studio art, arts integration, communications management, music education, music performance and theatre. Programs leading to the Master of Arts, Master of Fine Arts, Master of Education, Master of Music, or Master of Science degrees offer students training and practical experience that enhance their creative and analytical abilities to advance their careers or enter doctoral programs. The college also offers Post-Baccalaureate Certificate programs in Arts Integration and Interactive Media Design.

Graduate classes in COFAC are purposefully small, allowing for extensive faculty engagement and student mentoring. To enhance their studies, students and faculty present and perform in several facilities on the Towson University campus. The Center for the Arts is home to the departments of Art + Design, Art History, Art Education; Dance; Music; Theatre Arts; and Interdisciplinary Arts Infusion. The facility includes the Kaplan concert hall; a music recital hall; the Holtzman M.F.A. art gallery; a digital object lab; four theaters, including the Dreyer M.F.A. lab and the Ruth Marder studio theatre; a collaborative interdisciplinary lab; and four state-of-the-art dance studios, including a dance-theatre space. The Center for the Arts also houses the Asian Arts and Culture Center and the Center for the Arts gallery. The Media Center is home to the departments of Communication Studies, Electronic Media & Film and Mass Communication. It houses journalism laboratories, a public communication center, XTSR-AM, digital media laboratories/studios and television station WMJF-TV. The Stephens Hall Theatre provides performance space for dance, opera and musicals. The Van Bokkelen Cinema/Lecture Hall is home to film screenings and media festivals.

Recognized as a center for arts, media and communication in Maryland, the college continues to pursue its mission to enhance communication, media, fine and performing arts, and contribute to the cultural life of Towson and greater Baltimore through an annual program that includes more than 100 music performances; four film series; seven dance events; numerous debates, lectures and workshops; no fewer than four main-stage plays as well as exciting original student work; more than 10 art exhibitions; a variety of festivals (including Women and Minorities in Media); and AileyCamp Baltimore.

The college also sponsors international exchange programs with schools in China, Germany, Ireland, Korea, Russia, Italy, Turkey, Canada and the United Kingdom.

Susan Picinich, Dean
Greg Faller, Associate Dean

Master’s Degree Programs
• Art Education (p. 58)
• Art, Studio (p. 59)
• Communication Management (p. 61)
• Interdisciplinary Arts Infusion (p. 63)
• Music Education (p. 66)
• Music Performance (p. 65)
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Post-Baccalaureate Certificate Programs
• Arts Integration (p. 60)
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Art Education M.Ed.

Degree: Master of Education
https://www.towson.edu/cofac/departments/art/grad/education/

Program Director: Dr. Ray Martens
Phone: 410-704-3819
Email: rmartens@towson.edu

The degree program is designed to provide advanced training in art education, to promote the professional growth of art educators through individual research, and to increase the art educator’s skill and knowledge in art production, art history, aesthetics and art criticism.

Admission Requirements
• A bachelor’s degree in art education from a regionally accredited college or university**, and/or certification as a public school art teacher. Applicant must show evidence of approved undergraduate art education courses taken at the university level.
• A minimum GPA of 3.00 for full admission or 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study. Must have a minimum of one year teaching experience in own self-contained art classroom.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:
• A resume

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

The 33-unit program consists of 15 units of required course work and 18 units of electives. The required courses are taken in a specified sequence culminating in the writing of a master’s project similar in scope to a traditional thesis.
multicultural influences, the need to focus ideas within this climate is foremost in the mentoring of developing artists in the M.F.A. program.

Applicants to the M.F.A. program who are denied admission but display outstanding potential may be invited to participate in post-baccalaureate studies in studio art as pre-admission course work for the M.F.A. program in Studio Art. Upon successful completion, these studies guarantee acceptance into the M.F.A. program in Studio Art.

**Admission Requirements**

- A baccalaureate degree, preferably in art, from a regionally accredited college or university**.
- A minimum GPA of 3.00 for full admission, 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- For international students whose native language is not English, English competency must be certified by the achievement of a minimum of 550 on the Test of English as a Foreign Language (TOEFL)

Submit the online application (http://www.towson.edu/academics/graduate/admissions) plus the following materials:

- A letter of intent: statement of your objectives
- A current résumé
- Two email addresses for letters of recommendation submitted with your application. An email will be sent directly to your references asking them to complete an online recommendation.
- Submit 20 of your most recent works using SlideRoom, and include the date, media, size, and title for each piece of work. There is a $12 fee to set up an account with Sliderroom.

Application Deadlines: February 1 for fall admission, November 1 for spring admission

**Non-immigrant international students**: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

### Degree Requirements

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<tr>
<th>Code</th>
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<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>EDUC 601</td>
<td>CONCEPTS AND ISSUES IN EDUCATION</td>
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<td>EDUC 605</td>
<td>INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE</td>
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<td>ARED 797</td>
<td>SEMINAR IN ART EDUCATION</td>
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<tr>
<td>ARED 880</td>
<td>ART EDUCATION RESEARCH PROJECT</td>
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<td>ARED 881</td>
<td>ART EDUCATION RESEARCH CAPSTONE</td>
<td>3</td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>18</td>
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</tbody>
</table>

**Students select a broad-based number of courses to fulfill their elective units. These can be a variety of courses drawn from studio, art history and art education areas. Courses at the 600 to 800 level should ordinarily be selected; however, a maximum of 9 units in 500-level courses may be taken with the approval of the student’s adviser. Six units may be taken in departments other than art with prior approval.**

**Total Units**: 33

1. Students demonstrate the ability to broaden knowledge and skills as a Teacher/artist through advanced study and performance in art education, studio and/or art history courses.
2. Demonstrate knowledge of philosophical, historical, and practical frameworks of education in America.
3. Expand skills in the design and implementation of comprehensive program and units of study that reflect national and state standards for art education.
4. Develop research and writing skills commensurate with advanced study in art education.

### Art, Studio M.F.A.

Degree: Master of Fine Arts

https://www.towson.edu/cofac/departments/art/grad/studio/

Director: Tonia Matthews

Phone: 410-704-2803

Email: tmatthews@towson.edu

The Master of Fine Arts degree is designed to meet the needs of those who wish to pursue the study of art, either for a career as an artist or as a college-level instructor. The program consists of professional study in painting, photography, interactive media design, digital media, animation, graphic design, illustration, sculpture, printmaking, metalsmithing and jewelry, and interrelated media. M.F.A. students are encouraged to attend full time, but may attend part time for part or all of their degree work. The M.F.A. student enrolled full time also maintains a residency in the Department of Art, working in an assigned studio space. The Department of Art fosters an M.F.A. program that draws from all aspects of a diverse and comprehensive curriculum.

M.F.A. students focus on a specific area of study while also being able to choose from a wide variety of learning experiences. The conceptual and ideological bases for artistic endeavors are explored through art history, graduate seminars and weekly critiques. The main goal of the M.F.A. program is to direct the M.F.A. student to explore, focus and excel.

Through conceptual and ideological dialogue, as well as the availability of technical expertise, the M.F.A. student at Towson is directed toward thematic consistency. While the postmodern environment encourages the integration of new technologies, interdisciplinary approaches and

### Degree Requirements

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<td><strong>Required Courses</strong></td>
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<tr>
<td>600- and 700-level studio art courses in a selected area of study</td>
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<tr>
<td>ART 782</td>
<td>ART TOPICS (ART 782 Art Topics is a 3-unit course that is repeatable)</td>
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<tr>
<td>ART 783</td>
<td>MFA SEMINAR</td>
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<td><strong>Art History Courses</strong></td>
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<td><strong>Studio &amp; Project Courses</strong></td>
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<td>ART 785</td>
<td>MFA STUDIO II</td>
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<tr>
<td><strong>Elective Art Courses</strong></td>
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</table>
Arts Integration Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cofac/departments/gradartsintegrationpbc/

Program Director: Susan J. Rotkovitz, MFA
Phone: 410-704-3658
Email: srotkovitz@towson.edu

The Post-Baccalaureate Certificate in Arts Integration, which is offered by the Arts Integration Institute, is an interdisciplinary approach to arts education incorporating a variety of art forms (Art, Theatre, Dance, Music) as they apply to teaching through the arts in Maryland’s PK-12 schools. Although Towson University is the primary institution offering the PBC, this program is a collaborative effort involving four major institutions. TU’s Arts Integration Institute and University of Maryland’s Artist Teacher Institute focus on professional development for educators. University of Maryland Baltimore County incorporates the arts with non-arts disciplines and evaluates progress through the creation of electronic portfolios. Creating an Electronic Portfolio, a course designed by UMBC and delivered by through Arts Integration Institute, is an elective of our PBC-AI. The component offered by Johns Hopkins University focuses on how themes in the neurological and cognitive sciences intersect with research-based effective instruction and meaningful integration of the arts. In addition, this PBC-AI program works cooperatively with the AEMS (Arts Education in Maryland Schools) Alliance to advocate for more opportunities for teaching and learning in and through the arts at all Maryland schools.

This program is consistent with Towson University’s mission to provide programs that enhance the teaching skills and professional development of educators.

Admission Requirements

- Completion of a Bachelor’s degree from a regionally accredited college or university**.
- Teaching experience is required.
- Approval of program director is required.

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

The Post-Baccalaureate Certificate in Arts Integration comprises six courses of 3 units each, totaling 18 graduate units. The recommended course matrix includes a required core of 9 units and three electives equaling an additional 9 units.

Each participant will work closely with a mentor and/or partnering school system to design a personalized program to suit the participant’s needs.

Select at least three courses from the following:

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>IDFA 602</td>
<td>ARTS ACROSS THE CURRICULUM</td>
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<td>or IDFA 606</td>
<td>ART FORMS</td>
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<td>IDFA 608</td>
<td>ARTS INTEGRATION CAPSTONE SEMINAR</td>
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<td>IDFA 609</td>
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<td>Electives</td>
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Total Units 60

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<td>ENHANCING READING THROUGH THE ARTS</td>
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<td>IDFA 602</td>
<td>ARTS ACROSS THE CURRICULUM (if not taken as a required course)</td>
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<tr>
<td>IDFA 603</td>
<td>DRAMA IN THE CLASSROOM</td>
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<td>IDFA 604</td>
<td>INTERDISCIPLINARY SEMINAR IN THE CONTEMPORARY ARTS</td>
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<tr>
<td>IDFA 605</td>
<td>CREATING AN ELECTRONIC PORTFOLIO</td>
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<tr>
<td>IDFA 606</td>
<td>ART FORMS (if not taken as a required course)</td>
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<tr>
<td>IDFA 607</td>
<td>TEACHING THINKING THROUGH ARTS</td>
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University of Maryland

EDCI 688I Artist Teacher Institute

University of Maryland Baltimore County

ART 690 Independent Study

Johns Hopkins University

887.615 Explorations in Mind, Brain and Teaching

Total Units 18

1 Units from courses taken through any of the cooperating institutions must be transferred to Towson University for eligibility toward the certificate award.

1. Teachers will demonstrate an understanding and knowledge of the complex meanings of arts integration and proficiency in linking them with the Maryland State Curriculum.

2. Teachers will demonstrate the ability to employ principles and elements of all four arts disciplines to introduce learners to the methodologies and interrelationships among art forms, as well as to increase comfort level and appreciation for the importance of the arts as core to a complete education.

3. Teachers will demonstrate the ability to marshal the creativity and critical thinking inherent in the arts to motivate students both in the arts and in other academic areas.

Exceptions to Policy

While students earn credit for the courses taken in the program, they may transfer 6 units from courses taken through any of the cooperating institutions. Towson University students may complete coursework toward the Post-Baccalaureate Certificate in Arts Integration (PBC-AI) at the Arts Integration Institute while studying at Towson University. Towson University students must complete 9 units of coursework toward the certificate at Towson University before transferring coursework from the PBC-AI to their degree programs.
Communication Management M.S.

Degree: Master of Science
https://www.towson.edu/academics/graduate/admissions/apply/international.html

Program Director: Dr. Lingling Zhang
Phone: 410-704-3458
Email: lizhang@towson.edu

The Master of Science in Communication Management offers both professional and research-oriented course work. It is a hybrid program in which students can complete at least 50% (a total of 18 credits), of the 36-credit degree requirement online. Our applied courses help provide the knowledge and skills to research, plan, implement and evaluate activities designed to achieve communication goals in a variety of professional settings. Our theory and methodology courses provide students with the academic tools they need to complete the final components of the program—either comprehensive exams or a thesis. In addition to Mass Communication and Communication Studies courses, students will be able to choose from a wide variety of elective courses offered across the university.

The master’s program is appropriate for both career-oriented individuals who want to advance in their chosen fields and for students who intend to pursue further graduate studies.

Admission Requirements

This program admits fall and summer with three deadlines: February 1, June 1, and August 1.

- A bachelor’s degree from a regionally accredited college or university in the following fields: mass communication; public relations and advertising; communication studies; or related field; or equivalent professional experiences that are documented by the student and approved by the program director.
- A minimum overall undergraduate GPA of 3.00 or higher for full admission.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Completed application
- Transcripts
- Fees
- One letter of recommendation
- A résumé
- A statement in 1,000 words or less (typed, double-spaced), based on your résumé, that:
  - expresses your intent and/or interest;
  - explains your professional and academic experiences with researching, planning, implementing and evaluating communication programs and campaigns; and
  - describes at least four learning objectives—what you want to achieve in this program and why

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

Students in the Master of Science in Communications Management must meet the following degree requirements:

- Completion of prerequisite courses.
- Completion of a total 36 units of course work. All students will complete 15 units of required courses. Thesis students will complete 15 units of electives and 6 units of thesis coursework. Non-thesis students will complete 21 units of electives and take 3 comprehensive exams. A minimum of 27 units must be earned at the 600-800 levels.
- Students may register for the thesis only after completion of all course work.
- Students may take their comprehensive exams during their last semester of course work or after they have completed all the course work.
- To receive a Master of Science in Communication Management, students may not have earned more than one C for any of the required or elective courses.

Non-Thesis Option/Comprehensive Exams

The students with an applied focus will be required to take 36 units of courses and pass three comprehensive exams to complete the program. These will be written, on-campus examinations in the following areas of the communications field: theory, research methods and a communication subject area chosen by the student. The examination questions will be approved by the graduate director and supervised by faculty who teach those courses. Only Mass Communication or Communication Studies graduate and associate graduate faculty can submit comprehensive exam questions. Students may take comprehensive exams after they have completed 30 units of courses or after they have completed all their course work.

NOTE: Students must pass all three comprehensive exams. To provide flexibility in faculty evaluation of comprehensive exam answers, there will be three categories of passing: Low Pass, Pass or Pass with excellence. If students fail an exam, they can retake it once. If students fail an exam a second time, they will be dismissed from the program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 605</td>
<td>COMMUNICATION THEORY</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 606</td>
<td>PRACTICE OF PUBLIC RELATIONS AND ORGANIZATIONAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 631</td>
<td>QUANTITATIVE RESEARCH METHODS IN COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 632</td>
<td>QUALITATIVE RESEARCH METHODS IN COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 639</td>
<td>MASS COMMUNICATION AND CULTURE</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>Select 21 units (at least 9 units from COMM/MCOM) from the Electives listed below</td>
<td>21</td>
</tr>
</tbody>
</table>

Total Units: 36
### Thesis Option

Students with a research focus, or who plan to continue their academic studies past a master's degree, can choose to take 30 units of courses and 6 thesis units. These students will be required to write a thesis under the guidance of a faculty adviser from the department and defend their thesis in front of a department committee. Students may register for thesis units only after they have completed 30 units of course work. The topic of the thesis should be based on students' interests, but it must also be relevant to the communication discipline. The topic will have to be approved by the adviser and thesis committee.

Students must defend a thesis proposal, which will be approved by the adviser and thesis committee before the student can begin collecting his/her data for the thesis. Thesis students will sign up for 6 units of a thesis under the guidance of a faculty adviser from the department and defend their thesis in front of a department committee. Students may register for thesis units only after they have completed 30 units of course work. The topic of the thesis should be based on students' interests, but it must also be relevant to the communication discipline. The topic will have to be approved by the adviser and thesis committee.

Students with a research focus, or who plan to continue their academic studies past a master's degree, can choose to take 30 units of courses and 6 thesis units. These students will be required to write a thesis under the guidance of a faculty adviser from the department and defend their thesis in front of a department committee. Students may register for thesis units only after they have completed 30 units of course work. The topic of the thesis should be based on students' interests, but it must also be relevant to the communication discipline. The topic will have to be approved by the adviser and thesis committee.

NOTE: If students fail the proposal defense (and/or thesis defense), they can retake it only once. If students fail their proposal or thesis defense twice, they will be dismissed from the program.

### Electives from Outside the MCCS Department

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 610</td>
<td>ELEMENTS OF WWW DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ART 620</td>
<td>GRADUATE TYPOGRAPHY</td>
<td>3</td>
</tr>
<tr>
<td>ART 641</td>
<td>INTERACTIVE MEDIA CONCEPT AND THEORY</td>
<td>3</td>
</tr>
<tr>
<td>ART 765</td>
<td>GRADUATE DESIGN FOR THE WWW</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 541</td>
<td>FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 605</td>
<td>WEB-BASED INSTRUCTION IN EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 633</td>
<td>INSTRUCTIONAL VIDEO</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 655</td>
<td>MULTIMEDIA DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ISTC 687</td>
<td>COMPUTER-BASED INSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 563</td>
<td>BUSINESS ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>POSC 509</td>
<td>COMPARATIVE POLITICAL SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>POSC 527</td>
<td>POLITICAL THR I</td>
<td>3</td>
</tr>
<tr>
<td>POSC 528</td>
<td>POLITICAL THR II</td>
<td>3</td>
</tr>
<tr>
<td>POSC 530</td>
<td>AMERICAN POLITICAL THOUGHT</td>
<td>3</td>
</tr>
<tr>
<td>POSC 585</td>
<td>SEMINAR IN POLITICAL THEORY</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 617</td>
<td>EDITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 619</td>
<td>COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 621</td>
<td>BUSINESS WRITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 623</td>
<td>TECHNICAL WRITING AND INFORMATION DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 625</td>
<td>DESIGN LAYOUT &amp; PRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 627</td>
<td>MODERN RHETORIC</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 628</td>
<td>DESIGNING CONTENT FOR THE WEB</td>
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</tr>
<tr>
<td>PRWR 670</td>
<td>TOPICS IN WRITING</td>
<td>1</td>
</tr>
<tr>
<td>PRWR 677</td>
<td>TOPICS IN WRITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 713</td>
<td>FREELANCE WRITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 729</td>
<td>CORPORATE COMMUNICATIONS CONSULTING</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 605</td>
<td>AMERICAN POLITICS IN THE 21ST CENTURY</td>
<td>3</td>
</tr>
<tr>
<td>SOSC 606</td>
<td>SOCIOLOGICAL INSIGHT</td>
<td>3</td>
</tr>
<tr>
<td>WMST 550</td>
<td>B-MORE: BALTIMORE AND URBAN COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>WMST 603</td>
<td>THE DIVERSITY OF WOMEN</td>
<td>3</td>
</tr>
<tr>
<td>WMST 605</td>
<td>WOMEN IN AN INTERNATIONAL CONTEXT</td>
<td>3</td>
</tr>
<tr>
<td>WMST 607</td>
<td>ADVANCED FEMINIST THEORY</td>
<td>3</td>
</tr>
<tr>
<td>WMST 611</td>
<td>WOMEN, PUBLIC POLICY AND SOCIAL CHANGE</td>
<td>3</td>
</tr>
</tbody>
</table>

### Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 605</td>
<td>COMMUNICATION THEORY</td>
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<tr>
<td>MCOM 639</td>
<td>MASS COMMUNICATION AND CULTURE</td>
<td>3</td>
</tr>
</tbody>
</table>

### Thesis

Select 6 units from one of the following:

- MCOM 897: MCOM THESIS
- MCOM 898: MCOM THESIS
- MCOM 899: THESIS CONTINUUM

### Electives

Select 15 units (at least 9 units from COMM/MCOM) from the Electives listed below.

Total Units: 36

### Departmental Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMM 518</td>
<td>COMMUNICATION TRAINING AND DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>COMM 519</td>
<td>ORGANIZATIONAL COMMUNICATION</td>
<td>3</td>
</tr>
<tr>
<td>COMM 522</td>
<td>CONFERENCE AND MEETING MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>COMM 795</td>
<td>INDEPENDENT STUDY IN COMMUNICATION STUDEYs</td>
<td>1-6</td>
</tr>
<tr>
<td>MCOM 502</td>
<td>LITERARY JOURNALMAN</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 507</td>
<td>MULTIMEDIA REPORTING</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 533</td>
<td>MEDIA ETHICS</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 543</td>
<td>INTERNATIONAL ADVERTISING</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 547</td>
<td>ADVERTISING CAMPAIGNS</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 550</td>
<td>PUBLIC OPINION AND THE PRESS</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 551</td>
<td>PUBLIC RELATIONS FOR NONPROFIT ORGANIZATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MCOM 553</td>
<td>STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATIONS CAMPAIGNS.</td>
<td>3</td>
</tr>
</tbody>
</table>
MAIAI is a part-time program, with courses offered on campus exclusively in the evenings to accommodate the working professional.

Admission Requirements

- A baccalaureate degree from a regionally accredited college or university**.
- A minimum GPA of 3.00 for full admission, 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Teaching experience is preferred, but not required.
- A current resume.
- A detailed statement of intent of two to three, double-spaced pages demonstrating the applicant’s readiness for graduate level work and describing the following: background in arts and/or education, why the candidate sees the MAIAI program as a good fit, and professional goals in seeking the degree.

Priority will be given to students whose applications and admission material have been received by April 1 for fall or summer admission and November 1 for spring admission. Students who miss the priority deadline should still apply, but know that spaces may be limited.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

- The M.A. comprises 36 units. Program candidates will qualify for either a Plan A or Plan B curriculum.
- Individuals who have completed the Post-Baccalaureate Certificate in Arts Integration (ARIN-PBC) will follow Plan A. The 18 units taken for the ARIN-PBC will be counted toward the M.A. The 18 additional units must be new course work. There is a seven-year time limit to complete a master’s degree. The seven-year time clock begins with the earliest course applied towards the degree program; this would be the first course taken for the PBC. Credits transferred cannot be used if credit will be older than seven years at the time of graduation.
- Individuals without the ARIN-PBC will follow the Plan B curriculum.

Curriculum Plan A

18 units from the ARIN-PBC, plus 9 units of required courses, plus 9 units of electives. No more than 3 units of Independent Study can be applied toward this plan. No courses older than 7 years can be applied toward this plan.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARIN-PBC Courses</td>
<td>18 units completed as part of the Post Baccalaureate Certificate in Arts Integration</td>
<td>18</td>
</tr>
<tr>
<td>Required Courses</td>
<td>IDFA 610 COLLABORATIVE SYMPOSIUM: THE POWER OF ARTS IN PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IDFA 703 INTERDISCIPLINARY RESEARCH METHODS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>IDFA 710 CAPSTONE IN THE COMMUNITY</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses

1. Arts in Diverse Societies
- ARED 606 Community-Based Arts Teaching
- ARED 607 Artist-Teacher Connection
- ARED 608 Interdisciplinary Art Education
- ARED 609 Multicultural Art Education
- EDUC 660 Matters of Diversity, Equity, and Empowerment in Learning Communities

2. Creative Practice
- IDFA 601 Enhancing Reading Through the Arts
- IDFA 603 Drama in the Classroom
- IDFA 606 Art Forms
- IDFA 607 Teaching Thinking Through Arts
- EDCI 688I Maryland Artist/Teacher Institute (University of Maryland) ¹

3. Theory & Critical Studies in Practice
- IDFA 571 Special Topics in Social Action
- IDFA 602 Arts Across the Curriculum
- IDFA 604 Interdisciplinary Seminar in the Contemporary Arts
- 887.615 Explorations in Mind, Brain and Teaching (Johns Hopkins University) ¹

Total Units 36

¹ Courses completed at other institutions must be approved through the graduate transfer credit (p. 145) process prior to registration.

Curriculum Plan B
18 units of required courses plus 18 units of electives. No more than 6 units of Independent Study can be applied toward this plan.

### Required Courses
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDFA 606</td>
<td>Art Forms</td>
<td>3</td>
</tr>
<tr>
<td>IDFA 607</td>
<td>Teaching Thinking Through Arts</td>
<td>3</td>
</tr>
<tr>
<td>IDFA 610</td>
<td>Collaborative Symposium: The Power of Arts in Practice</td>
<td>3</td>
</tr>
<tr>
<td>IDFA 703</td>
<td>Interdisciplinary Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>IDFA 608</td>
<td>Arts Integration Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td>IDFA 609</td>
<td>Arts Integration Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

### Elective Courses
Select one course from each of the three Dimensions of Learning (9 units): 1. Arts in Diverse Societies, 2. Creative Practice, and 3. Theory & Critical Studies in Practice. Then select three additional courses (9 units) from any of the three Dimensions.

1. Arts in Diverse Societies
- ARED 606 Community-Based Arts Teaching
- ARED 607 Artist-Teacher Connection
- ARED 608 Interdisciplinary Art Education
- ARED 609 Multicultural Art Education
- EDUC 660 Matters of Diversity, Equity, and Empowerment in Learning Communities

2. Creative Practice

Interactive Media Design Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cofac/departments/art/grad/interactivemediadesign/

Program Director: Bridget Z. Sullivan
Phone: 410-704-2802
Email: bsullivan@towson.edu

The online Post-baccalaureate Certificate in Interactive Media Design provides professionals, artists and educators the opportunity to advance their interactive media design knowledge and skills. Students complete four graduate-level studio art courses which address the front-end design and production of websites and interactive media. The certificate emphasizes visual communication, UX concepts, graphic design theories and practices within the applied context of website and interactive media design.

Front-end refers to the design and production of website interfaces as opposed to back-end web design and programming. This certificate does not include such topics as WWW database management, internet infrastructure, systems development, client/server-side programming, network architecture or game design.

All required courses for the certificate are delivered online, permitting students from remote locations to complete the certificate without requiring on-campus attendance.

The Interactive Media Design Certificate consists of 12 units of graduate course work designed to either complement a graduate program of study or to be completed as a stand-alone certificate for individuals seeking additional academic studies for professional growth or to advance their career.

The program is intended for individuals who have completed a bachelor’s degree in art or art education from a regionally accredited college or university or a bachelor’s degree in another discipline from a regionally accredited college or university with a minimum of 6 units of course work in studio art and/or professional experience working in the field of art education or graphic design (Applicants without 6 units of coursework in studio art or professional experience in the field of art education/graphic design can be admitted conditionally to the program and will be required to...
complete ART 602 – Elements of Visual Design prior to enrolling in other IAMD courses.)

For ease of taking the courses online, basic to mid-level computer skills are encouraged. Access to a suitable computer with broadband Internet service is required.

**Admission Requirements**

- A bachelor’s degree in art or art education from a regionally accredited college or university**
- A bachelor’s degree in another discipline from a regionally accredited college or university** with a minimum of 9 units of coursework in studio art and/or professional experience working in the field of art education or graphic design (Applicants without 6 units of coursework in studio art or professional experience in the field of art education/ graphic design can be admitted conditionally to the program and will be required to complete ART 602 – Elements of Visual Design prior to enrolling in other IAMD courses.)
- A minimum GPA of 3.00 for full admission or 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- For international students whose native language is not English, English competency must be certified by the achievement of a minimum of 550 on the Test of English as a Foreign Language (TOEFL) or 6.5 on the IELTS.

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) plus the following:

- A letter of intent: statement of your objectives
- A current résumé

**Non-immigrant international students:** See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Application Deadline**

The IAMD-PBC program admits students for the fall and spring terms only. Priority will be given to students whose applications and transcripts have been received by July 1 for fall admission and December 1 for spring admission. Students who miss the priority deadline may contact the program director via email to inquire if space is still available for the forthcoming term.

**Degree Requirements**

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
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<td>ART 641</td>
<td>INTERACTIVE MEDIA CONCEPT AND THEORY</td>
<td>3</td>
</tr>
<tr>
<td>ART 765</td>
<td>GRADUATE DESIGN FOR THE WWW</td>
<td>3</td>
</tr>
<tr>
<td><strong>Elective Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select a minimum of 3 units from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 610</td>
<td>ELEMENTS OF WWW DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>ART 665</td>
<td>GRADUATE INFORMATION + INTERFACE DESIGN</td>
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</tr>
<tr>
<td>ART 675</td>
<td>GRADUATE SIMULATION DESIGN</td>
<td></td>
</tr>
</tbody>
</table>

| ART 685 | GRADUATE INFORMATION + INTERFACE DESIGN II |       |
| ART 671 | GRADUATE PROGRAMMING FOR DESIGN            |       |

Total Units: 12

Each participant will work closely with the Program Director to design a personalized program to suit the participant’s needs.

1. Students will demonstrate a working knowledge of the concepts and techniques used in World Wide Web authoring.
2. Students will demonstrate a comprehensive understanding and control of typography used to create typography for print and electronic design.
3. Students will demonstrate knowledge of aesthetics, and techniques used to create digital images for the WWW.
4. Students will demonstrate good problem solving and creative thinking skills.

**Music, M.M.**

Degree: Master of Music
Concentrations: Music Performance or Music Composition
https://www.towson.edu/cofac/departments/music/programs/gradperformance/

Program Director: Dr. Terry B. Ewell
Phone: 410-704-2824
Email: tewell@towson.edu

The Master of Music is an applied professional degree designed to develop a high level of musicianship, creative development and research skills within the discipline. Admission requires expertise in the area of concentration equivalent to having earned a Bachelor of Music degree in the area of specialization. Students are expected to have completed sufficient undergraduate courses to meet the requirements for admission.

**Admission Requirements**

- A Bachelor of Music degree with a major in the area of concentration from a regionally accredited college or university**.
- A minimum GPA of 3.00 for full admission or 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Students completing the University of Maryland Baltimore County’s Certificate in Contemporary American Music program may apply under a collaborative agreement.

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) plus the following:

- A Department of Music Supplemental Application.
- Two written evaluations by persons familiar with the applicant’s academic studies and/or musical accomplishment.
- For international students whose native language is not English, competency in the language must be certified by the achievement of a minimum of 550 on the Test of English as a Foreign Language (TOEFL).

Additionally, applicants must undertake a department screening in the form of an audition for the Performance Concentration or portfolio evaluation for the Composition Concentration. Procedures and
requirements are available in the Master of Music Handbook on the Graduate School website (https://www.towson.edu/cofac/departments/music/programs/gradperformance).

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Application Deadline

The program admits students for the fall and spring terms only. Priority will be given to students whose applications and transcripts have been received by February 1 for fall admission and November 1 for spring admission. Students who miss the priority deadline may contact the program director via email to inquire if space is still available for the forthcoming term. Master of Music candidates seeking admission in the fall term must audition for admission on the scheduled audition dates in January, February, or March. Master of Music candidates seeking admission in the spring term must audition on the scheduled audition date in January.

Degree Requirements

The Master of Music requires a minimum of 31 units. Degree candidates are expected to produce acceptable scores on the Music History/Literature and Music Theory Placement Examinations. Students who do not meet these requirements will be required to undertake prescribed course work and/or undertake appropriate remediation. Required course work as a result of the placement examinations may or may not count toward the degree. Specific requirements are located in the Master of Music Handbook.

Music Composition Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| Required Core:
| MUSA 600 | COMPOSITION                                | 12    |
| MUSC 621 | PERSPECTIVES IN MUSIC HISTORY AND CULTURE | 3     |
| MUSC 631 | ADVANCED THEORY                            | 3     |
| MUSC 685 | MUSIC BIBLIOGRAPHY AND RESEARCH            | 3     |
| MUSA 6xx | Ensembles selected with approval of the program director | 2     |
| MUSC 795 | GRADUATE COMPOSITION RECITAL               | 1     |
| Electives:
| Selected with approval from any 500- to 800-level music courses. A maximum of four of the elective units may be taken in lessons and/or ensembles | 7     |

Total Units: 31

Music Performance Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| Required Core:
| MUSA 6xx | Private Lessons in Music Performance on student's major instrument | 12    |
| MUSC 621 | PERSPECTIVES IN MUSIC HISTORY AND CULTURE | 3     |
| MUSC 631 | ADVANCED THEORY                            | 3     |
| MUSC 685 | MUSIC BIBLIOGRAPHY AND RESEARCH            | 3     |

MUSA 6xx Ensembles selected with advising of the program director 2
MUSC 797 GRADUATE PERFORMANCE RECITAL 1

Electives:

Selected with approval from any 500- to 800-level music courses. A maximum of four of the elective units may be taken in lessons and/or ensembles 7

Total Units: 31

1 Students pursuing the M.M. with concentration in Music Performance that do not possess documented experience in pedagogy must take MUSC 542, MUSC 543, MUSC 560, or MUSC 562 as appropriate. Students in voice, guitar, keyboard, or jazz that do not possess documented experience in the literature of their medium must take MUSC 506, MUSC 509, MUSC 519, or MUSC 525 as appropriate.

Exit Requirements

Students must complete the comprehensive review in the form of a recital research paper or written examination. Both options conclude with an oral examination.

1. Developing technical mastery in the art of performing a musical instrument or in the art of writing music. Music performed or composed must be commensurate with graduate standing.
2. Mastering the art of performance in various styles with interpretive nuance and musical insight or the art of composition with artistic integrity and insight commensurate with graduate standing.
3. Acquiring an advanced knowledge and understanding of the theory and history of music performed or composed and developing research skills appropriate for examining and writing effectively about music commensurate with graduate standing.

Music Education M.S.

Degree: Master of Science

https://www.towson.edu/cofac/departments/music/programs/gradeducation/

Program Director: Dr. Kathryn Evans
Phone: 410-704-2257
Email: kevans@towson.edu

The Master of Science degree in Music Education provides a flexible curriculum that allows students to earn up to 15 elective units in a field of specialization. In consultation with the graduate adviser, students may select a group of courses in which they are interested, such as music education, applied music, music theory, music history, music composition or other graduate areas. More than 50 percent of the course work is with graduate students only. Students may elect to work concurrently on the Certificate in Music.

Graduates of this program are usually employed as music teachers in public or private schools in the areas of vocal-general and/or instrumental music. Others are employed as private teachers or administrators, or as church musicians. Applicants seeking Maryland teaching licensure are required to enroll concurrently in the approved program of post-baccalaureate studies in music education as directed by the program director of music education.
ADMISSION REQUIREMENTS

• A bachelor’s degree in music education or music from a regionally accredited college or university, or certification as a public school music teacher
• A minimum GPA of 3.00 for admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

DEGREE REQUIREMENTS

Placement examinations to allow MUED-MS candidates to enroll in graduate music theory and history/culture courses are administered during Department of Music audition dates in January, February, and March. Students may register to take the placement examination on the Department of Music Graduate Programs web page. Successful completion of those examinations is required in order for a candidate to be authorized to enroll in a theory or history/culture class. Students who do not meet minimum requirements may be required to enroll in prescribed courses, which may or may not count toward the degree.

APPLICATION DEADLINE

Priority will be given to students whose applications and transcripts have been received by February 1 for fall admission and November 1 for spring admission. Students who miss the priority deadline may contact the program director via email to inquire if space is still available for the forthcoming term.

Plan A: Master of Science in Music Education with Thesis (minimum 34 units)

<table>
<thead>
<tr>
<th>Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MUED 601</td>
<td>CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>MUED 661</td>
<td>SEMINAR IN INSTRUMENTAL MUSIC</td>
<td>3</td>
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<tr>
<td>or MUED 662</td>
<td>SEMINAR IN CHORAL VOCAL MUSIC</td>
<td></td>
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<tr>
<td>MUED 695</td>
<td>RESEARCH METHODS IN MUSIC EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>MUSA XXX</td>
<td>Performing/Composing Experiences (see Music Applied (MUSA) Private Lessons and Ensembles under Course Descriptions)</td>
<td>3</td>
</tr>
<tr>
<td>MUSC XXX</td>
<td>History or Literature course</td>
<td>3</td>
</tr>
<tr>
<td>MUSC XXX</td>
<td>Theory or Composition course</td>
<td>3</td>
</tr>
<tr>
<td>MUSC 897</td>
<td>MUSIC THESIS</td>
<td>6</td>
</tr>
</tbody>
</table>

Electives

Selected with approval from any 500- to 800-level courses. A maximum of 9 units may be at the 500 level. Students are required to successfully complete the comprehensive examination covering course content in music and music education

Total Units 34

1 Requires approval of program director.

1. Develop graduate-level perspectives on contemporary issues and problems in music education.
2. Create and use appropriate assessment, evaluation, and measurement techniques.
3. Prepare musical performances that are informed by an understanding of applicable theoretical and historical performance practices.
4. Utilize research methods designed to improve practices in schools, classrooms, rehearsals and performances, and interpret and frame the results in a scholarly manner.

Theatre M.F.A.

Degree: Master of Fine Arts

https://www.towson.edu/cofac/departments/theatre/gradtheatre/

Program Director: Tavia La Follette
Phone: 410-704-3918
Email: tlafollette@towson.edu

Program Director: Stephen Nunns
Phone: 410-704-4519
Email: snunns@towson.edu (snunns@towson.edu)

Towson University’s M.F.A. in Theatre Arts cultivates the self-generative artist through an interdisciplinary, process-oriented and collaborative experience. Every student will engage with a diverse range of practical approaches and theoretical perspectives in order to help develop an individual aesthetic that is expressed through the creation of new work. The program is designed as an experimental, self-directed process that will challenge, expand and develop each participant’s artistic vision. It is for artists who cannot be content working in a single discipline or in the traditional conservatory model. The program is dedicated to educating and invigorating world citizens of theatre who engage deeply in our local and global communities, and wish to combine the life of an artist with the skills and sensibilities of entrepreneurs and educators.

Every two years, a small group is selected to work collaboratively and individually on the creation of new theatrical work. The Towson
M.F.A. in Theatre program offers a laboratory atmosphere in which students are encouraged to explore new ideas and approaches. Past student explorations have included Bunraku puppetry; translation of contemporary European drama; object theatre; integration of video with live performance; experiments in autobiographical performance; and community art projects; among others. While the program emphasizes practice, it also expects students to be thoroughly engaged in theoretical pursuits as well. Students conduct serious scholarship and develop a firm grounding in the history of experimental performance.

The 24-month program cultivates both an individual’s vision and aesthetic and an ensemble approach to creation. Over their residency in the program, students work closely with one another on projects initiated by themselves and members of the faculty. The final project is the most challenging aspect of the student’s involvement with the program. It is a confident demonstration of the student’s personal aesthetic and vision that reflects her explorations and discoveries during her residency in the program. The emphasis is on process—not product. Members of the full-time faculty at Towson University teach the majority of classes. However, this curriculum is augmented by seminars and workshops with distinguished visiting artists. Guest artists may facilitate a master class, lecture or demonstration as part of a required class, or work in a residency with the students of the program. Recent guests include Lee Breuer, Holly Hughes, Dan Hurlin, Kari Margolis, Sandglass Theatre, Rinde Eckert and Richard Armstrong.

The program is dedicated to exploring theatre through international contexts. Through a long-standing collaboration with the Center for International Theatre Development, students have toured performances and participated in workshops in countries that include Poland, Egypt, Slovakia and Bulgaria. Artists from countries such as Japan, Russia and South Africa have also had residencies in the program.

**Admission Requirements**

Applicants must hold a bachelor’s degree from a regionally accredited college or university** with a GPA of 3.00 or higher based on the applicant’s last 60 units of undergraduate and post-baccalaureate study. A minimum GPA of 2.75 is required for conditional admission. All matriculated students are accepted conditionally for one year. At the end of the first year of study, students are evaluated for continuance based on their readiness to undertake their final project, as demonstrated by their academic standing, portfolio review and final project proposal.

Candidates are screened by both the M.F.A. program and by University Admissions.

This program admits for fall of even years only.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- A graduate application with required fee
- Official transcripts from every college or university attended
- A personal artistic statement outlining the candidate’s goals as a theatre artist and the specific relevance of the M.F.A. program at Towson to the candidate’s objectives
- A current professional résumé
- Slides, photographs, video, reviews, papers, scripts or other supporting materials in multiple artistic disciplines
- Three letters of recommendation from individuals who can speak to the applicant’s talent, scholarship, collaborative skills and ability to thrive in a self-directed program

- A list of at least three other references, with telephone numbers, whom the department may contact for additional evaluations

An interview may be granted at the discretion of M.F.A. faculty following initial admission screening.

**Non-immigrant international students:** See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Degree Requirements**

The Master of Fine Arts in Theatre requires 60 units. Students will complete this requirement over the course of 24 months.

**Curriculum**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEA 605</td>
<td>PERFORMANCE: ENSEMBLE</td>
<td>3</td>
</tr>
<tr>
<td>THEA 670</td>
<td>PERFORMANCE AND SOCIETY</td>
<td>3</td>
</tr>
<tr>
<td>THEA 760</td>
<td>INTERNATIONAL THEORIES AND AESTHETICS</td>
<td>3</td>
</tr>
<tr>
<td>THEA 608</td>
<td>THEATRE DESIGN TECHNIQUES</td>
<td>3</td>
</tr>
<tr>
<td>THEA 610</td>
<td>THEATRE SYSTEMS</td>
<td>1</td>
</tr>
<tr>
<td>THEA 601</td>
<td>THEORIES OF THE AVANT-GARDE</td>
<td>3</td>
</tr>
<tr>
<td>THEA 602</td>
<td>HISTORY OF EXPERIMENTAL PERFORMANCE</td>
<td>3</td>
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<tr>
<td>THEA 609</td>
<td>TEXT CONSTRUCTION</td>
<td>3</td>
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<tr>
<td>THEA 607</td>
<td>SELF-EMPOWERMENT IN THEATRE</td>
<td>3</td>
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<tr>
<td>THEA 680</td>
<td>SPECIAL TOPICS (Artist as Entrepreneur)</td>
<td>3</td>
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<tr>
<td>THEA 675</td>
<td>SYNTHESIS I: FORMAL ELEMENTS</td>
<td>3</td>
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<td>THEA 720</td>
<td>SYNTHESIS II: DIRECTING</td>
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<tr>
<td>THEA 770</td>
<td>SYNTHESIS III: WORKING WITH DESIGN IN PERFORMANCE</td>
<td>3</td>
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<tr>
<td>THEA 695</td>
<td>INDEPENDENT PROJECT IN THEATRE (First year presentations)</td>
<td>3</td>
</tr>
<tr>
<td>THEA 780</td>
<td>PROJECTS IN PROCESS</td>
<td>3</td>
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<tr>
<td>THEA 740</td>
<td>GRADUATE PROJECT LABORATORY</td>
<td>4</td>
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<tr>
<td>THEA 750</td>
<td>GRADUATE PROJECT AND PERFORMANCE</td>
<td>4</td>
</tr>
<tr>
<td>THEA 880</td>
<td>MFA FINAL PROJECT</td>
<td>9</td>
</tr>
</tbody>
</table>

Total Units 60

A project proposal and portfolio review is required before registering for the final project.

Towson University reserves the right to change degree requirements for the M.F.A. Information on changes will be available on the Towson University M.F.A. in Theatre website or from the graduate program director.
1. Work collaboratively and individually on the creation of new work.
2. Employ a variety of methodologies, drawing from best practices in theatrical and other art forms.
3. Demonstrate a firm grounding in the history of experimental performance and theories of the historical avant-garde, and articulate the relationship between these histories and theories, and their unique individual aesthetic.

The College of Health Professions

Linthicum 116
Phone: 410-704-2132
Fax: 410-704-3479
Email: TU-CHP@towson.edu

The need for highly qualified health professionals with advanced degrees is at an all-time high. Thus, the mission of the College of Health Professions is to provide exceptional graduate learning experiences in a wide range of health care professions that promote and enhance health and well-being. Emphasis is placed on theory-based applications for practice, education, management and research that will prepare graduates to assume roles in a variety of educational, clinical and community settings.

The college offers doctoral, master's and graduate certificate programs. We are committed to the key values of lifelong learning, excellence, ethical and moral conduct, and collaboration and respect for the worth and dignity of all people. Graduates are expected to exhibit the highest ethical principles and professional behaviors in the application of knowledge and critical thinking, and are proficient in the use of skills, effective communication and technology. Internships, clinical experiences and/or independent studies provide opportunities to supplement and enhance each student's academic course work. Students have ready access to an outstanding array of opportunities in the many health care, educational, community and professional organizations in the surrounding area.

Graduate programs in the college are accredited by appropriate professional and educational agencies, thus enabling the successful graduate to sit for her or his professional licensure or certification exam where those credentialing mechanisms exist.

Lisa Plowfield, Dean
Marcie Weinstein, Associate Dean

Doctoral Degree Programs

- Audiology (p. 69)
- Occupational Science (p. 76)
- Occupational Therapy (p. 78)

Master’s Degree Programs

- Health Science (p. 72)
  - Administration
  - Community Health
  - School Health Education
- Nursing (p. 74)
- Occupational Therapy (p. 79)
- Physician Assistant Studies (p. 82)
- Speech-Language Pathology (p. 84)

Post-Baccalaureate Certificate Programs

- Clinician-Administrator Transition (CAT) (p. 71)
- Nursing Education (p. 76)
- Autism Studies (p. 70)

Audiology Au.D.

Degree: Applied Doctorate in Audiology (Au.D.)
https://www.towson.edu/cehdept/asld/grad/audiology/

Program Director: Dr. Jennifer Smart
Phone: 410-704-3105
Email: jsmart@towson.edu

The Applied Doctorate in Audiology program is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association. The Au.D. curriculum consists of a minimum of 99 units including the following requirements: a minimum of 35 units of clinical practicum, which includes a one-year clinical externship and a minimum of 7 units of doctoral thesis preparation.

The program of study is intended to train clinicians who will demonstrate competency:

- in oral, written and other forms of communication;
- in scientific and research foundations of practice;
- in prevention and identification of communication disorders;
- in evaluation and treatment of disorders of auditory, balance, communication and related systems;
- by passing department assessments of clinical and academic competency.

The Au.D. degree will prepare the individual for national certification and state licensure. All clinical requirements of the American Speech-Language-Hearing Association (ASHA) and the Department of Audiology, Speech-Language Pathology and Deaf Studies must be completed before the Au.D. degree is awarded.

Students must abide by professional and ethical standards established by the department and by ASHA. The audiology program requires that students successfully complete on- and off-campus clinical rotations and an off-campus clinical externship. The on-campus clinic and many of the off-campus placements require a criminal background investigation. A criminal record may prohibit a student from participating in clinical rotations and completing the degree program. Furthermore, a criminal record may prohibit an individual from obtaining the required certification and/or licensure required for professional practice. In addition, students must submit documentation of required immunizations.

Students in graduate ASLD programs will be permitted to repeat a maximum of two courses for which grades of “C” or lower were earned for any required or elective courses.

Admission Requirements

- A bachelor’s degree from a regionally accredited college or university** with a minimum GPA of 3.00. All GPA calculations for admission are based upon their entire undergraduate career and/or post-baccalaureate study.
- For international students, a TOEFL score of 600 or above is required (100 iBT) or IELTS score of 7 or above. A U.S. degree does not waive the requirement of TOEFL or IELTS for this program.
• Interview with audiology faculty (face-to-face interview preferred; online or telephone interview may be arranged).
• GRE scores of 290 (verbal and quantitative) on new GRE test.
• Successful completion of the following prerequisite courses:
  • A life science course (e.g., biology) (3)
  • Behavioral Statistics (3)
  • A social science course (e.g., psychology, sociology) (3)
  • Phonetics (3) (NOTE: This course may be taken during Au.D. program)
  • Basic Mathematics (3)
  • A course in physical science (chemistry or physics) (3)
  • Language Development (3) (NOTE: This course may be taken during Au.D. program)

Submit the online application (https://www.towson.edu/academics/graduate/admissions/apply) along with the following:

• A one-to-two-page essay; students may choose one topic from three choices provided in the application materials.
• GRE scores
• Three letters of recommendation (include admissions rating sheet); recommendations from professors are preferred.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements
All course work, examinations, writing and clinic practicum clock-hour requirements of the Department of Audiology, Speech-Language Pathology and Deaf Studies must be completed, and students must demonstrate mastery in four areas of audiology: foundations of practice, prevention and identification, evaluation, and treatment, as specified by the American Speech-Language-Hearing Association (ASHA) before the Au.D. degree is awarded.

Research Project
Each student will complete an Audiology Doctoral Thesis. This project could be an extensive case study or a research project. Projects will be presented to the ASLD faculty in written and oral form for their evaluation.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSD 601</td>
<td>PROFESSIONALISM AND ETHICS</td>
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<tr>
<td>ACSD 603</td>
<td>NEUROANATOMY AND PHYSIOLOGY OF THE AUDITORY AND VESTIBULAR SYSTEMS</td>
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<td>ACSD 604</td>
<td>NEUROANATOMY AND PHYSIOLOGY OF THE CENTRAL AUDITORY AND VESTIBULAR SYSTEMS</td>
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<td>ACSD 605</td>
<td>COUNSELING IN AUDIOLOGY I</td>
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<td>ACSD 606</td>
<td>PHARMACOLOGY IN AUDIOLOGY</td>
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<td>ACSD 607</td>
<td>GENETICS IN AUDIOLOGY</td>
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<tr>
<td>ACSD 611</td>
<td>ACOUSTICS AND PSYCHOCOUSTICS</td>
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<td>ACSD 621</td>
<td>AUDITORY DIAGNOSTICS I</td>
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<td>ACSD 622</td>
<td>AUDITORY DIAGNOSTICS I LABORATORY</td>
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<td>ACSD 636</td>
<td>APPLIED STATISTICS</td>
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<tr>
<td>ACSD 645</td>
<td>COMMUNICATION AND AGING</td>
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<tr>
<td>ACSD 655</td>
<td>HEARING AIDS I: SELECTION, VERIFICATION AND VALIDATION OF AMPLIFICATION</td>
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<td>ACSD 690</td>
<td>AUDIOLOGY CLINIC ON CAMPUS I</td>
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<td>ACSD 705</td>
<td>COUNSELING IN AUDIOLOGY II</td>
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<td>ACSD 706</td>
<td>AUDIOLOGY PRACTICE MANAGEMENT</td>
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<td>ACSD 714</td>
<td>RESEARCH METHODS IN AUDIOLOGY</td>
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<td>ACSD 721</td>
<td>AUDITORY DIAGNOSTICS II</td>
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<td>ACSD 723</td>
<td>MEDICAL AUDIOLOGY</td>
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<td>ACSD 731</td>
<td>CALIBRATION AND INSTRUMENTATION</td>
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<td>ACSD 743</td>
<td>ELECTROPHYSIOLOGIC EVALUATION OF THE PERIPHERAL AUDITORY SYSTEM.</td>
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<td>ACSD 744</td>
<td>ELECTROPHYSIOLOGIC EVALUATION OF THE CENTRAL AUDITORY NERVOUS SYSTEM.</td>
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<td>ACSD 746</td>
<td>AUDIOLOGY CLINIC ON CAMPUS III</td>
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<td>ACSD 747</td>
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<td>ACSD 751</td>
<td>HEARING CONSERVATION</td>
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<td>ACSD 753</td>
<td>PEDIATRICS AND EDUCATIONAL AUDIOLOGY</td>
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<td>ACSD 755</td>
<td>HEARING AIDS II: HEARING AID MODIFICATION</td>
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<tr>
<td>ACSD 796</td>
<td>DOCTORAL THESIS PROPOSAL DEVELOPMENT I</td>
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<tr>
<td>ACSD 797</td>
<td>DOCTORAL THESIS PROPOSAL DEVELOPMENT II</td>
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<td>ACSD 843</td>
<td>VESTIBULAR ASSESSMENT AND REHABILIZATION</td>
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<td>AUDIOLOGY CLINIC OFF CAMPUS III</td>
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<td>ACSD 848</td>
<td>AUDIOLOGY CLINIC OFF CAMPUS IV</td>
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<tr>
<td>ACSD 853</td>
<td>COCHLEAR IMPLANT</td>
<td>3</td>
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<tr>
<td>ACSD 855</td>
<td>HEARING AIDS III: SEMINAR IN ADVANCED AMPLIFICATION</td>
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<td>ACSD 898</td>
<td>AUDIOLOGY DOCTORAL THESIS</td>
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<tr>
<td>ACSD 998</td>
<td>AUDIOLOGY CLINICAL EXTERNSHIP (48 weeks)</td>
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</tbody>
</table>

Total Units: 99

1. Demonstrate competency in oral, written, and other forms of communication.
2. Demonstrate competency in scientific and research foundations of practice.

Autism Studies Certificate

Post-Baccalaureate Certificate

https://www.towson.edu/chp/departments/interprofessional/grad/autismpbc/

Program Director: Dr. Connie Anderson
Phone: 410-704-4049
Email: connieanderson@towson.edu
The interdisciplinary Post-Baccalaureate Certificate Program in Autism Studies is designed to enhance the knowledge and subsequent practice of professionals working with individuals on the autism spectrum and their families, across the life courses. It is grounded in the belief that people on the autism spectrum are integral members of their families and communities, and have the right to fully participate in the educational, social, cultural, political and economic life of society.

As part of its interdisciplinary focus, emphasis is placed on the ability to work collaboratively with individuals on the autism spectrum, their families, other professionals and community members in multiple environments to advocate for and provide needed resources. The program requires completion of 16 units of course work and is designed to accommodate students with at least a baccalaureate degree, who are interested in or already working in the field of autism.

- The curriculum allows students to earn a stand-alone certificate.
- Students may take select courses to advance their knowledge of autism without enrolling in this program.
- The Post-Baccalaureate Certificate also may be earned in conjunction with a master's degree program.
- Master's degree programs with up to 9 units of electives can integrate this certificate program to enhance professional credentials.

**Admission Requirements**

- A bachelor's degree from a regionally accredited college or university.**
- An undergraduate GPA minimum of 3.00 (2.75 for conditional admission) in either the cumulative units of the degree or the last 60 units of the degree. An admission exception policy is in place for eligible candidates with undergraduate degrees obtained at least 5 years ago.
- Completion of the following courses with a grade of "C" or better:
  - Human development across the life span (one lower-division course)
  - Human Biological Science (one lower-division course)
  - Social or Behavioral Science (one lower-division course)
  - Documentation of completion of 30 hours of human service activity as part of field experience, volunteer or paid work in the last five years (e.g., experience with a human service agency or community program, educational or health program, advocacy group, Special Olympics)

For those whose primary employment involves "human service" (e.g., educators, therapists), a resume may serve as evidence of completion of the required service hours.

Students may request a competency in lieu of course work review by the Post-Baccalaureate Certificate Program Committee for the required courses for admission. Students must submit documentation of didactic preparation (e.g., workshops, professional development or related courses) and professional practice that verifies course content mastery.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

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**Certificate Requirements**

The Post-Baccalaureate Certificate Program in Autism Studies consists of a total of 16 units: 10 units of required courses and 6 units of electives.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDHP 621</td>
<td>CONTEMPORARY ISSUES FOR INFANTS AND CHILDREN ON THE AUTISM SPECTRUM</td>
<td>3</td>
</tr>
<tr>
<td>IDHP 623</td>
<td>CONTEMPORARY ISSUES FOR ADOLESCENTS AND ADULTS ON THE AUTISM SPECTRUM</td>
<td>3</td>
</tr>
<tr>
<td>SPED 605</td>
<td>WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES</td>
<td>3</td>
</tr>
<tr>
<td>or FMST 610</td>
<td>FAMILY-PROFESSIONAL COLLABORATION</td>
<td></td>
</tr>
<tr>
<td>IDHP 681</td>
<td>SEMINAR IN AUTISM SPECTRUM ISSUES</td>
<td>1</td>
</tr>
</tbody>
</table>

Electives

- 500-700 level courses in arts; education; family studies; health science; interdisciplinary health professions; kinesiology; nursing; occupational therapy and occupational science; psychology; or speech-language pathology, audiology and deaf studies that directly apply to people on the autism spectrum

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDHP 770</td>
<td>SPECIAL TOPICS IN THE FIELD OF AUTISM</td>
</tr>
<tr>
<td>IDHP 791</td>
<td>DIRECTED READINGS IN THE FIELD OF AUTISM</td>
</tr>
<tr>
<td>IDHP 792</td>
<td>INDEPENDENT STUDY IN THE FIELD OF AUTISM</td>
</tr>
</tbody>
</table>

Total Units: 16

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1. Courses may be taken as part of required or elective courses in student’s graduate program.
2. Courses must have prior written consent and approval from the director of the autism certificate program for learning activities to satisfy requirements of the autism certificate.
3. Courses may be taken in lieu of required electives.

1. Students will demonstrate acquisition of knowledge related to the field of autism that addresses, in multiple environments, issues across the lifespan, direct and support services, and family collaboration.
2. Students will use knowledge of evidence based practice to identify interventions and support systems that enhance quality of life for people on the autism spectrum and their families.
3. Students will apply knowledge of assessment and intervention approaches to analyze effectiveness of services consistent with evidence based practice.
4. Students will use technologies to incorporate selected information into the learner’s knowledge base and value systems.

**Clinician-Administrator Transition (CAT) Certificate**

Post-Baccalaureate Certificate
https://www.towson.edu/chp/departments/interprofessional/grad/clinicianadminpbc/

Director: Dr. Marcie Weinstein
Phone: 410-704-4049
Email: mweinstein@towson.edu
The Post-Baccalaureate Certificate in Clinician-Administrator Transition is designed for health care professionals interested in developing administrative skills. The program focuses on the practical application of administrative theory, and emphasizes leadership and skill development through a sequence designed to introduce concepts and facilitate application of skills using case study, team teaching, information technology and other relevant methodologies. Upon completion of the program, students will possess the knowledge and skills necessary to provide excellence in leadership and day-to-day management in the delivery of health care services.

Individuals enrolled in this 15 unit post-baccalaureate certificate will be able to apply units from this program to master's degree programs in Child Life, Administration and Family Collaboration, Nursing or Health Science if accepted into those programs.

Admission Requirements

Applicants must meet the general requirements for graduate study (p. 138) outlined in the Towson University Graduate Catalog. Additional requirements include:

- Licensure, eligibility for licensure or certification in a clinical area preferred. Non-clinical applications reviewed by program director.
- Bachelor's or master's degree in a clinical or health-related field (occupational therapy, physical therapy, nursing, respiratory therapy, nursing, dietetics, social work, human services, etc.) from a regionally accredited college or university**.
- GPA of at least 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

Once all materials are received and evaluated, applicants will be notified regarding acceptance to the program. Students may be admitted at any time during the year. For information regarding the Clinician-Administrator Transition certificate, please contact the program director.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDHP 600</td>
<td>TRANSITIONS: HEALTHCARE PROFESSIONALS IN A CHANGING ENVIRONMENT</td>
<td>3</td>
</tr>
<tr>
<td>IDHP 605</td>
<td>MANAGING HEALTH CARE PROFESSIONALS</td>
<td>3</td>
</tr>
<tr>
<td>IDHP 610</td>
<td>ADMINISTRATION OF HEALTH CARE ORGANIZATIONS</td>
<td>3</td>
</tr>
<tr>
<td>IDHP/HLTH 647</td>
<td>HEALTH CARE FINANCIAL MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>IDHP/HLTH 651</td>
<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 15

1 This class is the capstone for the CAT program, taken after all others.

1. Display comprehensive understanding of the health care delivery system, including organizational structures, major payers and other stakeholders.
2. Demonstrate knowledge and skills in human resource management, interdisciplinary collaboration, communication, and personal career planning.
3. Demonstrate integration and application of one of the five primary curricular areas of the certificate program: strategic and program planning, financial management, human resources management, health care delivery systems, and ethics in health care administration; to performance as a health care administrator. Students will use technologies to identify, retrieve, and apply relevant information.

Health Science M.S.

Degree: Master of Science
https://www.towson.edu/chp/departments/healthsci/gradhealthsci/

Program Director: Dr. Niya Werts
Phone: 410-704-2378
Email: nwerts@towson.edu

The Master of Science in Health Science is designed to meet needs within the state of Maryland for graduate-trained professionals to work in educational, medical care, community and worksite settings. The program is intended both for people with classroom or work experience in the health sciences or related fields as well as those seeking to expand their expertise to include the field of health science. It is particularly well suited to people who have been in the work force and now wish to receive additional education to enhance their performance as well as their competitiveness on the job.

Students may select one concentration from the following: Community Health, School Health Education or Administration. Students may also elect to take two concentrations. To do so, students must complete the requirements of both concentrations.

A graduate of the Community Health concentration may pursue a career as a health education specialist in a variety of public and private sector agencies. Students holding current credentials in pharmacy, nursing, dentistry, dietetics and other professions may wish to combine their skills and expertise to include the field of health science. It is particularly well suited to people who have been in the work force and now wish to receive additional education to enhance their performance as well as their competitiveness on the job.

The distinction of the M.S. in Health Science program is its emphasis in pragmatic applications derived from theory. The program is based on the core approach of providing a sound academic base in principles of education and training, research and behavioral sciences. While students register for graduate work within the Department of Health Science, support cores from this or other TU departments can be selected to contribute toward their individual professional goals. In addition, with permission of the program director, students may transfer up to 9 graduate units earned in other academic settings to their master's
program of study. Students may elect to pursue a graduate project or thesis, if either activity is consistent with their professional goals.

The M.S. in Health Science is designed to accommodate the needs of students whose personal and professional lives restrict their ability to enroll in a full-time, traditional graduate program. Students are overwhelmingly part time, participating in courses that are primarily offered only during weekday evenings throughout the year. Individuals desiring full-time graduate status may be able to construct programs responsive to their needs. However, the department cannot promise that full-time course work will be possible within any given term or academic year.

Please note that only one degree in Health Science can be awarded; students who complete more than one concentration in Health Science will earn only one degree.

Admission Requirements

Admission to the master’s program in Health Science may be secured in two ways:

1. The master’s program requires a bachelor’s degree from a regionally accredited college or university** in a health science field (e.g., nursing, health education, psychology, etc.) or substantial upper-division course work in those fields, or experience in those same areas (as determined by the program director). In addition, applicants must maintain a minimum GPA of 3.00 to be admitted to the master’s program; conditional admission may be granted to students whose GPA is at least 2.75. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

2. Also eligible for conditional admission are individuals without the stipulated educational or experiential foundation. To qualify for this category of conditional admission, candidates must provide the program director with a personal statement (no more than 500 words) that establishes why they seek admission to the master’s program and how they see themselves using the degree; have at least three years documented full-time work experience; and maintain a GPA of at least 2.75. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

3. All applicants must have taken a 3-credit class in statistics or equivalent with an earned grade of a “B” or better.

The program admits students for the fall and spring terms only. Priority will be given to students whose applications and transcripts have been received by March 1 for fall admission and November 1 for spring admission. Students who miss the priority deadline may contact the program director via email to inquire if space is still available for the forthcoming term.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

The master’s program in Health Science requires successful completion of 36 units. For students in School Health Education, 18 units are identified for the student by the Department of Health Science, with the remainder derived from elective offerings. In Community Health, 18 units are stipulated by the department. For those enrolled in the Administration concentration, 15 units constitute mandatory enrollment. Mandatory enrollment for students who elect two concentrations will derive from the two concentrations comprising their degree program. Only students in good academic standing within the master’s program in Health Science are eligible to request a change in concentration.

School Health Education Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 601</td>
<td>CONTEMPORARY ISSUES IN SCHOOL HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 615</td>
<td>QUALITATIVE AND QUANTITATIVE PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 625</td>
<td>RESEARCH METHODS IN HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 639</td>
<td>INTRODUCTION TO HEALTH BEHAVIOR AND HEALTH PROMOTION</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 643</td>
<td>HEALTH EDUCATION: CURRICULUM DEVELOPMENT AND SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 785</td>
<td>GRADUATE SEMINAR IN HEALTH</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select 18 units from the following: 18

1. HLTH 501   TEACHING ABOUT DRUGS AND SEX
2. HLTH 505   DRUGS IN OUR CULTURE
3. HLTH 551   INTRODUCTION TO ENVIRONMENTAL HEALTH
4. HLTH 601   CONTEMPORARY ISSUES IN SCHOOL HEALTH
5. HLTH 617   HEALTH ADMINISTRATION
6. HLTH 631   PROGRAM PLANNING IN HEALTH EDUCATION
7. HLTH 637   SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING
8. HLTH 645   HEALTH CARE POLICY
9. HLTH 649   PROGRAM EVALUATION
10. HLTH/IDHP 651 PROGRAM PLANNING IN HEALTH EDUCATION
11. HLTH 880   GRADUATE PROJECT IN HEALTH SCIENCE
12. HLTH 897   HEALTH SCIENCE THESIS

Other HLTH/HCMN/GERO elective, or those approved by the program director

Total Units 36

1 Number of units and specific selections dependent on student’s concentration; all electives should be approved by the student’s adviser.

Community Health Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 615</td>
<td>QUALITATIVE AND QUANTITATIVE PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 625</td>
<td>RESEARCH METHODS IN HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 631</td>
<td>PROGRAM PLANNING IN HEALTH EDUCATION</td>
<td>3</td>
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<tr>
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<td>PROGRAM EVALUATION</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 785</td>
<td>GRADUATE SEMINAR IN HEALTH</td>
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</tr>
</tbody>
</table>

Electives

Select 18 units from the following: 18

1. HLTH 501   TEACHING ABOUT DRUGS AND SEX
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 615</td>
<td>QUALITATIVE AND QUANTITATIVE PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 617</td>
<td>HEALTH ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 625</td>
<td>RESEARCH METHODS IN HEALTH</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 633</td>
<td>HEALTH CARE SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 785</td>
<td>GRADUATE SEMINAR IN HEALTH</td>
<td>3</td>
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</tbody>
</table>

Select 21 units from the following:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLTH 501</td>
<td>TEACHING ABOUT DRUGS AND SEX</td>
<td></td>
</tr>
<tr>
<td>HLTH 505</td>
<td>DRUGS IN OUR CULTURE</td>
<td></td>
</tr>
<tr>
<td>HLTH 551</td>
<td>INTRODUCTION TO ENVIRONMENTAL HEALTH</td>
<td></td>
</tr>
<tr>
<td>HLTH 601</td>
<td>CONTEMPORARY ISSUES IN SCHOOL HEALTH</td>
<td></td>
</tr>
<tr>
<td>HLTH 617</td>
<td>HEALTH ADMINISTRATION</td>
<td></td>
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<tr>
<td>HLTH 631</td>
<td>PROGRAM PLANNING IN HEALTH EDUCATION</td>
<td></td>
</tr>
<tr>
<td>HLTH 637</td>
<td>SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING</td>
<td></td>
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<tr>
<td>HLTH 645</td>
<td>HEALTH CARE POLICY</td>
<td></td>
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<tr>
<td>HLTH 649</td>
<td>PROGRAM EVALUATION</td>
<td></td>
</tr>
<tr>
<td>HLTH/IDHP 651</td>
<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td></td>
</tr>
<tr>
<td>HLTH 880</td>
<td>GRADUATE PROJECT IN HEALTH SCIENCE</td>
<td></td>
</tr>
<tr>
<td>HLTH 897</td>
<td>HEALTH SCIENCE THESIS</td>
<td></td>
</tr>
</tbody>
</table>

Other HLTH/HCMN/GERO elective, or those approved by the program director

Total Units 36

1 Number of units and specific selections dependent on student’s concentration; all electives should be approved by the student’s adviser.

### Administration Concentration

1. Assimilate facts, theories and principles basic to health science and to students concentration that establish students information literacy and technological competency
2. Apply the scientific method to problem solving and decision making
3. Speak and write effectively
4. Develop a sense of responsibility and confidence for ones decisions/actions as a health science professional
5. Engage in creative thinking with regard to health science
6. Engage in analytic and inductive thinking with regard to health science

### Nursing M.S.

Degree: Master of Science  
https://www.towson.edu/chp/departments/nursing/grad/nursing/

Program Director: Dr. Kathy Ogle  
Phone: 410-704-4389  
Email: kogle@towson.edu

Nursing is the foundation of the U.S. health care workforce. As the largest of the health professions, nurses serve as the primary contact and advocate for patients, families and communities. With the advent of the Affordable Care Act in 2010, the U.S. health care system witnessed a dramatic shift from acute, episodic care of individuals to population-based health. Population-based health focuses on health outcomes and the distribution of these outcomes among population groups. Population-based advanced nursing practice places a priority on keeping people well, reducing health risks, avoiding or managing chronic conditions and assuming accountability for health outcomes. Advanced nursing roles and responsibilities have expanded dramatically with this health care paradigm shift. Nurses are now being called upon to assume expanded roles in influencing population health at all levels, including administration, education, patient care delivery, and health policy. The master’s program in population-based health nursing at Towson University prepares advanced nurses at the graduate level to develop, implement and evaluate evidence-based population focused health programs, to assume advanced leadership roles in the evolving health care system and to serve as educators to future generations of nurses.

Reference:


### Program and Clinical Requirements

In order to participate in Department of Nursing course work, students must provide evidence of the following:

- Positive antibody titer for Measles, Mumps and Rubella (MMR)
- Positive antibody titer for Varicella
- Positive antibody titer for Hepatitis B (or declination waiver)
- Evidence of freedom from Tuberculosis (annual requirement)
- Evidence of Diphtheria, Tetanus and Pertussis vaccination (at least once every ten years)
- Seasonal influenza vaccination
- Evidence of current health insurance
• Evidence of current Healthcare Provider CPR certification
• Evidence of completed education competencies (either through employer or through Blackboard)
  • HIPAA training
  • Bloodborne Pathogens training
  • Other requirements as defined by clinical placement site(s)

Admission Requirements
Applicants to the Master of Science program must meet the general requirements for graduate study established by the Department of Nursing and as outlined in this catalog. Specifically, they must have:

• A baccalaureate degree with a major in nursing from a regionally accredited college or university and a nationally accredited nursing program**
• A minimum GPA of 3.00
• Completion of an elementary statistics and/or nursing research course (3 or more units) with a grade of C or higher
• Completion of an approved physical assessment course (3 or more units) with a grade of C or higher

Submit the following admission materials:

• A one-page personal statement in which the applicant discusses his or her reasons for seeking admission to the program and how the program will meet the applicant’s professional goals
• A current curriculum vitae or résumé
• The applicant must be licensed as a Registered Nurse (RN) in the State of Maryland or in a compact state (licensure as an RN in Maryland will be verified by the Department of Nursing)
• Three Letters of Recommendation to include emails of recommenders on application form - Professional or Academic

Applicants whose credentials do not meet the stated criteria for admission and believe their situation warrants special consideration are encouraged to contact the department for information related to its individual review policy.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements
The M.S. degree in Nursing requires successful completion of a minimum of 36 units. Fifteen of these units will be determined by the concentration the student selects.

Nursing Education Concentration
Students who desire to teach in a nursing school or work in staff development or education in a health care agency will complete the following courses. These courses constitute the requirements for a Certificate in Nursing Education (15 units). The certificate option may be selected alone, or serve as a component of the master’s program.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 600</td>
<td>ADVANCED CLINICAL PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>NURS 610</td>
<td>CURRICULUM DEVELOPMENT IN NURSING</td>
<td>3</td>
</tr>
<tr>
<td>NURS 612</td>
<td>TEACHING AND LEARNING IN NURSING</td>
<td>3</td>
</tr>
<tr>
<td>NURS 713</td>
<td>EVALUATION IN NURSING EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>NURS 810</td>
<td>TEACHING PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

Clinician-Administrator Transition (CAT) Courses
Students interested in administrative complete the Clinical-Administrator Transition concentration. Students completing this concentration receive the Post-Baccalaureate Certificate in Clinical Administrator Transition. The certificate option may be selected alone, or serve as a component of the master’s program. Course work includes the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDHP 600</td>
<td>TRANSITIONS: HEALTHCARE PROFESSIONALS IN A CHANGING ENVIRONMENT</td>
<td>3</td>
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<tr>
<td>IDHP 605</td>
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<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

This is also an interdisciplinary graduate certificate program offered by the College of Health Professions.
1. Incorporate findings from the sciences and humanities to provide advanced nursing care to diverse populations.
2. Apply research outcome within the advanced nursing setting to improve care, and resolve problems with an emphasis on population-based health.
3. Function as part of an interdisciplinary team to improve health outcomes.
4. Integrate the appropriate use of information technology in the delivery of advanced nursing care for diverse populations.
5. Apply advocacy skills to influence policies related to nursing and health care.
6. Integrate theory, research and practice into a population-based health project.
7. Apply advanced nursing knowledge to a policy or political process.
8. Demonstrate a leadership role in education and health care settings.
9. Apply the concepts of continuous quality improvement to the delivery of advanced nursing care and healthcare services.

Nursing Education Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/chp/departments/nursing/grad/educationpbc/

Program Director: Dr. Kathy Ogle
Phone: 410-704-4389
Email: kogle@towson.edu (eaustin@towson.edu)

The overarching objective of the certificate is that students completing the program develop teaching and evaluation skills through a series of courses designed to facilitate the transition of a clinician to an educator in an academic or health care setting. It is an independent certificate program; however, students in the Nursing Education Post-Baccalaureate Certificate program will study with students selecting the Master of Science degree in Nursing, Nursing Education Concentration. Upon completion of this 15-unit program, students may wish to pursue additional graduate study and apply these units to the M.S. degree.

Program and Clinical Requirements

In order to participate in Department of Nursing course work, students must provide evidence of the following:

- Current health examination (completed within one year prior to admission to Towson University)
- Positive antibody titer for Measles, Mumps and Rubella (MMR)
- Positive antibody titer for Varicella
- Positive antibody titer for Hepatitis B (or declination waiver)
- Evidence of freedom from Tuberculosis (annual requirement)
- Evidence of Diphtheria, Tetanus and Pertussis vaccination (at least once every ten years)
- Seasonal influenza vaccination
- Evidence of current health insurance
- Evidence of current Healthcare Provider CPR certification
- Valid government issued photo identification (driver’s license or passport)
- Evidence of completed education competencies (either through employer or through Blackboard)
- HIPAA training
- Bloodborne Pathogens training
- TB Education training
- Other requirements as defined by clinical placement site(s)

Admission Requirements
Requirements for the post-baccalaureate certificate program are the same as those listed above for the M.S. in Nursing program (p. 74).

Certificate Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURS 600</td>
<td>ADVANCED CLINICAL PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>NURS 610</td>
<td>CURRICULUM DEVELOPMENT IN NURSING</td>
<td>3</td>
</tr>
<tr>
<td>NURS 612</td>
<td>TEACHING AND LEARNING IN NURSING</td>
<td>3</td>
</tr>
<tr>
<td>NURS 713</td>
<td>EVALUATION IN NURSING EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>NURS 810</td>
<td>TEACHING PRACTICUM</td>
<td>3</td>
</tr>
<tr>
<td>Total Units</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

1. Apply a wide range of educational theories to a variety of teaching environments in nursing and health professions.
2. Integrate technology into nursing education in a variety of settings such as academia, acute care and community.
3. Implement the role of the nursing educator in an academic or health service setting.

Occupational Science Sc.D.

Degree: Doctor of Occupational Science (Sc.D.)
https://www.towson.edu/chp/departments/occutherapy/programs/gradoccusci/

Program Director: Dr. Mary Beth Merryman
Phone: 410-704-3499
Email: bmerryman@towson.edu

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 study of occupation involves the investigation of the relationship among the occupations, health and life participation of individuals of all ages within the context of their families, communities and society. The main emphasis of this interdisciplinary doctoral program is to advance education, research and service that promote occupational engagement, participation and well-being of persons, organizations and populations by applying knowledge gained through the study of occupational science. Within the curriculum students address the science of human occupation and occupation in practice.

The doctoral degree requires the completion of at least 90 units beyond a bachelor’s degree.

Admission Requirements

- A master’s degree from a regionally accredited college or university** with an overall GPA of 3.25 in graduate course work. Students are eligible to request conditional admission with an overall GPA of 3.00.
- For applicants who are an Occupational Therapy (OT) provider, a degree or certificate in occupational therapy from a professional...
occupational therapy program accredited by the Accreditation Council for Occupational Therapy Education or by the World Federation of Occupational Therapists. A select number of students from other relevant disciplines who do not hold professional certification also may apply for admission to the program and may be accepted on a limited basis. These students must take OSC 891 during the first semester enrolled.

- Proof of completion of prerequisite course work
- Licensure to practice occupational therapy for applicants who are occupational therapists
- Interview by the doctoral admissions committee
- TOEFL scores of at least 100, IELTS 7.0 overall with a 7.0 in each section for international students

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply/policies.html) plus the following:

- Three letters of recommendation
- Submit a purpose statement (1,000 words or no less than 750 words) that describes the following: 1. understanding of occupational science and in particular your interest in the TU OS doctoral program; 2. your specific research interests; 3. how these research interests fit with occupational science tenets and with specific TU OTOS graduate faculty expertise; and 4. your professional goals related to this degree.
- Undergraduate and/or graduate transcripts
- Copy of licensure to practice, if applicable

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

### Prerequisite Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTH 610</td>
<td>DATA ANALYSIS IN OCCUPATION-BASED RESEARCH AND EVIDENCE-BASED PRACTICE (or equivalent graduate statistics course)</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 613</td>
<td>ADVANCED RESEARCH METHODS IN OCCUPATION BASED PRACTICE (or equivalent)</td>
<td>3</td>
</tr>
</tbody>
</table>

### General Requirements

1. The doctoral degree will require the completion of 90 units beyond a bachelor’s degree; students who hold a master’s degree in a discipline other than occupational therapy will be allowed to transfer a maximum of 30 units from their master’s degree; students who hold a master’s degree in occupational therapy may transfer a maximum of 36 units from their master’s degree. Students who hold a clinical doctoral degree in occupational therapy may transfer a maximum of 45 units from a combination of their master’s degree and their clinical doctorate.

2. A program of study focusing on a particular aspect of occupation will be developed by the student in consultation with his or her adviser. This program of study is to include all planned electives. A minimum of two electives must be at the 700 level. One elective must be an additional education course, and one must be an additional quantitative statistics, mixed methods or qualitative course.

3. Evidence of prior research experience is required. Applicants who do not have appropriate experience may be expected to take master’s-level research course work before beginning the doctoral program research sequence.

4. Students must register for at least one academic term of full-time dissertation research (9 units).

5. The program, including course work and dissertation, must be completed within 10 years.

6. The doctoral degree will require the passing of a comprehensive assessment after completing OCTH 611, OCTH 613 and OSC 742, OSC 744 and OSC 746. Students must pass the comprehensive assessment prior to enrolling in OSC 895. After successful completion, students will be “advanced to candidacy.”

7. The doctoral degree will require successful defense of a dissertation proposal.

8. The doctoral degree will require successful defense of a dissertation (minimum of 12 units), involving applied research in occupational science.

### Degree Requirements

For the most recent course and degree requirements, visit the Department of Occupational Therapy and Occupational Science website at www.towson.edu/ot.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>IDHP 741</td>
<td>ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE</td>
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<tr>
<td>OCTH 603</td>
<td>ISSUES IN OCCUPATIONAL THERAPY (or equivalent or professional issues and advocacy course)</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 604</td>
<td>ACADEMIC AND CLINICAL EDUCATION (or academic assessment and teaching course)</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 611</td>
<td>ADVANCED THEORY AND PHILOSOPHY OF OCCUPATION</td>
<td>3</td>
</tr>
<tr>
<td>OSC 742</td>
<td>ORIGINS AND EVOLUTION OF OCCUPATIONAL SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>OSC 744</td>
<td>PARTICIPATION AND QUALITY OF LIFE OF PEOPLE IN THEIR CONTEXT</td>
<td>3</td>
</tr>
<tr>
<td>OSC 746</td>
<td>PARTICIPATION AND QUALITY OF LIFE IN COMMUNITIES AND POPULATIONS</td>
<td>3</td>
</tr>
<tr>
<td>OSC 890</td>
<td>QUALITATIVE RESEARCH: OCCUPATION AND LIFE NARRATIVE</td>
<td>3</td>
</tr>
<tr>
<td>OSC 895</td>
<td>APPLIED PROJECT; EVERYDAY LIFE AND DIMENSIONS OF OCCUPATION</td>
<td>3</td>
</tr>
<tr>
<td>OSC 997</td>
<td>OSC DISSERTATION</td>
<td>1-9</td>
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**Electives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>OCTH 612</td>
<td>OT HEALTH PROMOTION INITIATIVES IN THE COMMUNITY</td>
<td>3</td>
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<tr>
<td>OCTH 628</td>
<td>CONTEMPORARY OCCUPATIONAL THERAPY PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 678</td>
<td>ASSESSMENT THROUGHOUT THE LIFESPAN</td>
<td>3</td>
</tr>
<tr>
<td>OSC 891</td>
<td>INDEPENDENT STUDY IN OCCUPATIONAL SCIENCE</td>
<td>3</td>
</tr>
</tbody>
</table>
Occupational Therapy OTD

Degree: Doctor of Occupational Therapy (OTD)

There are two options for the Occupational Therapy Doctoral program:

Occupational Therapy Doctorate (Entry-Level) - Accepting applications for Summer 2019
Program Director: Sonia Lawson, PhD, OTR/L, FAOTA
Phone: 410-704-2313
Email: slawson@towson.edu

Post-Professional Occupational Therapy Doctorate - Accepting applications for Fall 2019
Program Director: Kendra Heatwole Shank, PhD, OTR/L
Phone: 410-704-4437
Email: kheatwoleshank@towson.edu

Post-Professional Occupational Therapy

The Post-Professional Occupational Therapy doctorate (PPOT) is an advanced clinical degree for eligible occupational therapists with evidence of successful initial certification by the National Certification Board of Occupational Therapy (NBCOT) as an OTR, and at least a Master’s degree. The PPOT is grounded in the science of occupation and evidence-based advanced practice. The curriculum consists of 33 units, with advanced clinical coursework in an online format. Course content includes advanced clinical assessment and intervention, occupational science and inter-professional studies. Each graduate must complete an individual capstone project during a two-course sequence. The program can be completed on a part-time or full-time basis.

Occupational Therapy (Entry-Level)

The entry level Occupational Therapy doctoral program has applied for accreditation by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE’s telephone number c/o AOTA is (301) 652 AOTA and its web address is www.acoteonline.org. Anticipated program start date Summer 2019.

The program must be granted Candidacy Status, have a pre-accreditation review, complete an on-site evaluation, and be granted Accreditation Status before its graduates 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, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may affect a graduate’s ability to sit for the NBCOT certification examination or attain state licensure.

Licensed occupational therapists can earn a doctorate in Post-Professional Occupational Therapy (PPOT) by completing required coursework in an online format.

The PPOT program consists of 33 units, with advanced clinical coursework focused on children and youth, adults and aging, or other relevant areas such as autism or mental health.

Admission Requirements

All of the following criteria must be met for admission:

• Master’s degree from an accredited institution of higher learning
• GPA of 3.25 in graduate course work—conditional admission with overall GPA of 3.00
• Towson University Graduate Application and fee
• Official transcripts indicating occupational therapy degree and any other post-graduate coursework
• Two Letters of Recommendation
• Resume or Curriculum Vitae
• Personal statement (750 words)
• Proof of NBCOT certification (copy of NBCOT certificate)
• Current licensure in good standing to practice occupational therapy
• Interview at the request of the department

To begin the application process, submit an online application (https://www.towson.edu/academics/graduate/admissions/apply/). Students are admitted to the program on a rolling basis. An Admissions Committee reviews submitted materials after receipt of all components.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

To see Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

All required courses are delivered in an online format. Some courses may require synchronous attendance in online courses as well as use technologies that allow for accurate assessment of certain skill competencies.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTX 778</td>
<td>ADVANCED OCCUPATIONAL THERAPY ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>OCTX 779</td>
<td>ADVANCED OCCUPATIONAL THERAPY INTERVENTIONS</td>
<td>3</td>
</tr>
</tbody>
</table>
OCTH 881  CAPSTONE RESEARCH PROJECT I  3
OCTH 882  CAPSTONE RESEARCH PROJECT II  3

Required Occupational Science Courses:

OSC 742  ORIGINS AND EVOLUTION OF OCCUPATIONAL SCIENCE  3
OSC 744  PARTICIPATION AND QUALITY OF LIFE OF PEOPLE IN THEIR CONTEXT  3
OSC 746  PARTICIPATION AND QUALITY OF LIFE IN COMMUNITIES AND POPULATIONS  3

Required Inter-Professional Education Courses (Choose one from each category):

Leadership/Advocacy

ECED 762  LEADERSHIP AND ADVOCACY IN EARLY EDUCATION AND CARE  3
ECED 764  ETHICS AND SOCIAL JUSTICE IN EDUCATION AND RELATED HUMAN SERVICES  3

Health Care Systems/Administration

HLTH 637  SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING  3
HLTH 657  HEALTH ADVOCACY ACROSS SERVICE SETTINGS  3
HLTH 617  HEALTH ADMINISTRATION  3
ILPD 668  LEADERSHIP & GROUP DYNAMICS  3
ILPD 675  LEADERSHIP AND ACTION RESEARCH  3

Program Evaluation/Grant Funding

IDHP 602  CLINICAL PROGRAM PLANNING,IMPLEMENTATION AND EVALUATION  3
HLTH 649  PROGRAM EVALUATION  3

Elective

One 3 unit elective that complements clinical focus  3

Total Units  33

1. Examine and analyze research evidence related to the application of occupation to support the participation of people in their daily lives.
2. Generate and critique clinical evidence related to the application of occupation to support the participation of people in their daily lives.
3. Demonstrate proficiency in the use of technology to effectively prepare and lead a classroom discussion in an online learning environment.

Occupational Therapy M.S.

Degree: Master of Science
https://www.towson.edu/chp/departments/occuth_therapy/programs/gradoccuth_therapy/

Program Director: Dr. Sonia Lawson
Phone: 410-704-2313

Email: slawson@towson.edu

This program admits fall term only.

The entry-level Master of Science degree in Occupational Therapy is designed to prepare graduates to assume key roles in practice, research, education or administration. Occupational therapists’ responsibilities in these roles are to assure high-quality services for client groups and to advance the practice of occupational therapy.

NOTE: Applicants for the entry-level master’s degree in Occupational Therapy follow procedures for submitting their application materials through the Occupational Therapy Centralized Admission Service (OTCAS). ALL applicants for the master’s degree program in Occupational Therapy must complete the Graduate application and supplemental forms. Contact the Occupational Therapy Admissions Coordinator at 410-704-2653 or OTadmissions@towson.edu for questions regarding the application process.

Program Accreditation

Towson University’s Occupational Therapy program is accredited by the Accreditation Council for Occupational Therapy Education (http://www.aota.org/Education-Careers/Accreditation.aspx) (ACOTE) of the American Occupational Therapy Association located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE’s telephone 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 of Occupational Therapy (NBCOT). After successful completion of this examination, the individual will be an occupational therapist, registered (OTR). In addition, most states require licensure to practice; however, 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.)

For more information about occupational therapy, visit the AOTA website: http://www.aota.org

Course Fees

A course fee will be applied to select courses to cover course materials and supplies.

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 varicella, tetanus, diphtheria and pertussis), a speech and hearing screening, results of a PPD 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 PPD test annually. Failure to comply will prevent registration.

**CPR and First Aid Courses**

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. Failure to comply will prevent registration.

**Criminal Background Check**

Students may be required to obtain a criminal background check and drug screening 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 replacement costs for any items that are found to be damaged or missing due to their actions.

**Admission Requirements**

All of the following criteria must be met for admission.

- A bachelor's degree from a regionally accredited college or university** with a minimum GPA of 3.25 is required for full admission. (All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.) The bachelor's degree must be indicated on the transcript by August 1 in order to begin the program.

- Complete 10 prerequisite courses prior to entering the Professional M.S. Program. Six of the 10 prerequisites must be completed at the time of application. One must be in Anatomy and Physiology I. The remaining four prerequisites must be completed in the spring and summer prior to beginning the program. CLEP scores may not be used for English Composition; online courses, ACE or UExcel exams may not be used for Anatomy and Physiology I and II, and Physics.

- Complete the following prerequisite courses with a "B" or better:
  - English Composition
  - Introductory Sociology
  - Introductory Psychology
  - Abnormal Psychology
  - Basic Statistics
  - Human Anatomy and Physiology I with a lab (taken within the last five years)
  - Human Anatomy and Physiology II with lab (taken within the last five years)
  - Human Growth and Development (covering development across the lifespan)
  - Medical Terminology

- Complete the following prerequisite course with a "C" or better:
  - Physics (including mechanics and a lab)

- Complete and verify at least 60 hours of human service activity or direct occupational therapy observation. These will serve as your observation hours in the OTCAS. Human service work or volunteer experience must have involved direct, hands-on contact with people with disabilities and/or illness and/or other disadvantages. Examples include work/volunteer experience in hospitals, nursing homes, rehabilitation facilities, senior centers, drug rehabilitation programs, programs for the homeless, camps and/or attendant care. The following experiences do not satisfy this requirement: babysitting with children who do not have disabilities and administrative clerical work. All 60 hours of human service activity or direct occupational therapy observation must have been completed within two years of the application deadline. The 60 hours must have been completed in at least three different settings (e.g., hospital, rehabilitation center, school system, out-patient clinic, nursing home/assisted living facility); with a mix of children, adults and older adults; and the applicant must have been in each setting for at least 10 hours.

- Three reference forms: human service activity or occupational therapy supervisor, a professional, and either another professional or faculty member (OTCAS reference forms are to be used)

- Graduate occupational therapy admission essay/personal statement (follow guidelines outlined for OTCAS)

- Complete a group interview and on-site writing sample

- Complete Graduate Application (submitted by invitation after final admission decisions)

The admission procedures are updated regularly. Please check website for most current information.

**Non-immigrant international students**: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)**

**Application Procedure and Guidelines**

The deadline for receipt and verification of applications is February 1. Please note that applications must be submitted to OTCAS at least 6 weeks ahead of this date in order for OTCAS to verify applications. Complete the Towson University graduate application online (https://www.towson.edu/academics/graduate/admissions/apply).

For more information regarding admission prerequisite courses and other aspects of the application process, contact:

Occupational Therapy Admissions Coordinator
Towson University
8000 York Road, Enrollment Services Room 245
Towson, MD 21252-0001
410-704-2653
OTadmissions@towson.edu

**Early Admission Option for Professional M.S. in Occupational Therapy Program**

Students are eligible for early admission to the Professional Master of Science Degree Program if they have:

- a 3.60 GPA (based on the last 60 units of undergraduate and post-baccalaureate course work)
- completed ALL of the prerequisite course requirements as outlined for regular admission
• completed all other aspects of application as outlined for regular admission

All early admission materials must be submitted through OTCAS. Additionally, a formal letter is to be sent to the program Admissions Coordinator indicating the desire to be reviewed early. This letter and all admission materials must be submitted and verified by October 1 (OTCAS allows 4-6 weeks to verify applications). Up to 10 applicants will be selected based on full review of their admission materials and ranked according to their composite score. Any applicant not admitted early will be automatically included in the pool for regular admission.

Submit all materials through the OTCAS. Selected applicants will be invited to apply to the Graduate School to complete their application.

Academic Standards
• Students must maintain a minimum GPA of 3.00 for all courses in the major.
• Students must maintain a minimum GPA of 3.0 in 500- to 800-level course work.
• Students may receive a maximum of two “C” grades (including “C” and “C+” grades).
• Students may repeat a maximum of two courses.
• Students may repeat the same course only once.
• Students may repeat a maximum of one Level II Fieldwork.¹
• Students must have a GPA of 3.00 and cleared by the department to be eligible to enroll in a Level II Fieldwork.

Degree Requirements
The professional Master of Science Degree in Occupational Therapy is 26 months (excluding breaks) completed over 2.5 years and consists of 2 units of undergraduate course work and 80 units of graduate course work, which includes a graduate research project (a total of 82 units of course work). All students complete two 12-week, 480-hour, full-time Level II Fieldwork experiences: one in physical disabilities and one in psychosocial practice (either may be with a children and youth focus), where they apply theoretical knowledge and demonstrate entry-level competence for a licensed occupational therapist. Level II Fieldwork is a full-time commitment often requiring additional time for preparation on the evenings and weekends. Students are advised to eliminate employment during this time. While local sites (within 90 miles of the university) are available, students may need to be assigned out of the local area or out of the state for one or both of the fieldwork experiences. All Level II Fieldwork must be completed within 24 months of completion of academic course preparation.

All students must complete the Occupational Therapy Knowledge Exam (OTKE) as a degree requirement and are billed for the discounted fee associated with this exam.

Completion of an online exit survey is required for graduation clearance in addition to successful completion of all other program requirements.

Required Undergraduate Course
Students must complete the following undergraduate course once accepted into the program.

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<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 427</td>
<td>NEUROMUSCULAR MECHANISMS OF THE UPPER BODY</td>
<td>2</td>
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Total Units

2

Required Graduate Courses
Students must complete required graduate course work.

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTH 521</td>
<td>KINESIOLOGY OF OCCUPATION</td>
<td>3</td>
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<tr>
<td>OCTH 600</td>
<td>FOUNDATIONS OF OCCUPATIONAL THERAPY</td>
<td>4</td>
</tr>
<tr>
<td>OCTH 601</td>
<td>GROUP DYNAMICS IN DIVERSE CONTEXTS</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 603</td>
<td>ISSUES IN OCCUPATIONAL THERAPY</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 606</td>
<td>ADULT AND OLDER ADULT NEUROLOGICAL THERAPY</td>
<td>3</td>
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<tr>
<td>OCTH 607</td>
<td>ADULT AND OLDER ADULT MUSCULOSKELETAL THERAPY</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 610</td>
<td>DATA ANALYSIS IN OCCUPATION-BASED RESEARCH AND EVIDENCE-BASED PRACTICE</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 611</td>
<td>ADVANCED THEORY AND PHILOSOPHY OF OCCUPATION</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 612</td>
<td>OT HEALTH PROMOTION INITIATIVES IN THE COMMUNITY</td>
<td>3</td>
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<tr>
<td>OCTH 613</td>
<td>ADVANCED RESEARCH METHODS IN OCCUPATION BASED PRACTICE</td>
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</tr>
<tr>
<td>OCTH 614</td>
<td>PRINCIPLES OF PSYCHOSOCIAL OCCUPATIONAL THERAPY PRACTICE</td>
<td>5</td>
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<tr>
<td>OCTH 619</td>
<td>ADULT PHYSICAL REHABILITATION LEVEL I FIELDWORK (Remove OCTH 615 from required courses)</td>
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<tr>
<td>OCTH 620</td>
<td>PSYCHOSOCIAL LEVEL I FIELDWORK</td>
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<tr>
<td>OCTH 624</td>
<td>OCCUPATIONAL THERAPY PRACTICE WITH CHILDREN AND YOUTH</td>
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<td>OCTH 626</td>
<td>OCCUPATIONAL THERAPY FIELDWORK FOR CHILDREN AND YOUTH</td>
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<tr>
<td>OCTH 627</td>
<td>ADMINISTRATION AND ORGANIZATION OF OCCUPATIONAL THERAPY SERVICES</td>
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<td>OCTH 635</td>
<td>LEVEL II FIELDWORK I</td>
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<td>OCTH 636</td>
<td>LEVEL II FIELDWORK II</td>
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<tr>
<td>OCTH 678</td>
<td>ASSESSMENT THROUGHOUT THE LIFESPAN</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 781</td>
<td>GRADUATE SEMINAR IN OCCUPATIONAL THERAPY</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 880</td>
<td>GRADUATE PROJECT IN OCCUPATIONAL THERAPY</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units

80

NOTE: Students have the option of earning a graduate certificate in Autism Studies (p. 70) or in Family-Professional Collaboration (p. 88). Students who elect to earn a certificate will be required to extend the length of the master’s degree program in order to complete the entire certificate program.
Suggested Plan of Study

First Year

<table>
<thead>
<tr>
<th>Term (Fall)</th>
<th>Units</th>
<th>Term (Spring)</th>
<th>Units</th>
<th>Summer</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>OCTH 521</td>
<td>3</td>
<td>OCTH 611</td>
<td>3</td>
<td>OCTH 627</td>
<td>3</td>
</tr>
<tr>
<td>OCTH 60</td>
<td>4</td>
<td>OCTH 61</td>
<td>5</td>
<td>OCTH 67</td>
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</tr>
<tr>
<td>OCTH 601</td>
<td>3</td>
<td>OCTH 620</td>
<td>3</td>
<td></td>
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<tr>
<td>OCTH 61</td>
<td>3</td>
<td>BIOL 427</td>
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<tr>
<td>OCTH 613</td>
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<td>16</td>
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Second Year

<table>
<thead>
<tr>
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<th>Minimester</th>
<th>Term (Spring)</th>
<th>Units</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTH 606</td>
<td>3</td>
<td>OCTH 635 or 636</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>OCTH 60</td>
<td>3</td>
<td>OCTH 61</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OCTH 619</td>
<td>3</td>
<td>OCTH 624</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>OCTH 78</td>
<td>3</td>
<td>OCTH 62</td>
<td>3</td>
<td></td>
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<tr>
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<td>OCTH 880</td>
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<tr>
<td></td>
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<td>12</td>
<td>17</td>
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</table>

Third Year

<table>
<thead>
<tr>
<th>Term (Fall)</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>OCTH 636 or 635</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>9</td>
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</tbody>
</table>

Total Units 82

1. Assess clients and formulate intervention plans leading to realistic, attainable goals at all life stages, by using accurate observation and appropriate assessment data, problem solving skills and knowledge of theories and human development.

2. Analyze, adapt, and apply purposeful activities and other modalities for health promotion and therapeutic programs in order to facilitate the ability of clients to lead their lives with a meaningful balance in the areas of human occupation (daily living skills, work and play/leisure).

3. Adapt and promote occupational therapy services at the individual, group, community, and population levels utilizing occupation and non-occupation theoretical models through successful fieldwork experiences.

Physician Assistant Studies M.S.

Degree: Master of Science

https://www.towson.edu/pa

Program Director: Dr. Mark F. McKinnon
Phone: 410-704-2016
Email: mmckinnon@towson.edu

Towson University offers a Master of Science degree in Physician Assistant Studies that is completed concurrently with a Certificate in Physician Assistant Studies at the Community College of Baltimore County - Essex campus (CCBC). The program begins in June of each year and is 26 months in length. In a time-efficient manner, students complete the requirements to sit for the physician assistant certification examination and earn a Master of Science degree in Physician Assistant Studies. The program prepares the physician assistant to assume roles in clinical practice, health care leadership, advocacy for clients, education of others and clinical research, as well as carrying out the other responsibilities of a physician assistant. Such roles are important for physician assistants in a variety of practice, education and administrative positions.

Students are admitted to both TU for the master’s degree in Physician Assistant Studies and CCBC for its Physician Assistant professional certificate. Students will take CCBC and TU courses concurrently throughout the entire program. They must complete all program requirements at both institutions to receive the Master of Science degree and to receive the Certificate in Physician Assistant Studies. Students may not receive either the master’s degree or the certificate without completing all requirements for both. Once all requirements for both the M.S. degree and the certificate are complete, students will be able to sit for the national certification examination.

Accreditation

The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) has granted Accreditation-Continued status to the Towson University CCBC Essex Physician Assistant Program sponsored by Towson University. Accreditation-Continued is an accreditation status granted when a currently accredited program is in compliance with the ARC-PA Standards. Accreditation remains in effect until the program closes or withdraws from the accreditation process or until accreditation is withdrawn for failure to comply with the Standards. The approximate date for the next validation review of the program by the ARC-PA is September 2023. The review date is contingent upon continued compliance with the Accreditation Standards and ARC-PA policy.

Admission Requirements

For the master’s degree program, applicants must meet the following requirements for graduate admission at Towson University:

- This program admits summer term only.
- A bachelor’s or master’s degree from a regionally accredited college or university (with a GPA of 3.00 for full admission)

NOTE: The bachelor’s degree must be completed by May 31 of the applicant year.

- Acceptance to the Physician Assistant certificate program at CCBC
- Completion of prerequisite courses, with a grade of "B" or better: Anatomy (or Anatomy and Physiology I) (4); Physiology (or Anatomy and Physiology II) (4); Biochemistry (3); Microbiology (4); college-level statistics in any discipline (3) and medical terminology (minimum 2 units, 3 preferred).

NOTE:

- No online labs accepted for science courses. Anatomy, Physiology, and Microbiology all require labs.
- Organic Chemistry is not a substitute for Biochemistry.
- Completion of a minimum number of documented hours of experience in a health care setting (800 hours required, 1600 hours preferred)

NOTE:
• No updates to patient contact hours after the application is submitted to CASPA.
• While applicants with hands-on patient care experience in a health care area are preferred, patient contact or medically related experience may include:
  • Clinical hours completed as part of a health care training program
  • Medical or clinical research with or without patient contact
  • Volunteer hospital or clinical experience
  • Documented home health care experience

A full listing of acceptable patient contact experiences can be found within the Physician Assistant Program Application and Admissions Information booklet (https://www.towson.edu/chp/departments/health-sciences/grad/physician-assistant/documents/pa-handbook-2018.pdf).

• Additional requirements for international students include minimum TOEFL score of 550 pBT or 80 iBT (with a minimum score of 20 on each of Listening, Speaking, Reading, and Writing sections), or minimum IELTS of 6.5 (with a minimum of 6.5 in each of the Listen, Speaking, Reading, and Writing sections), official copy of transcript evaluation, copy of permanent residency card, copy of current visa, and official copy of international transcript

NOTE: International applicants are advised to routinely monitor application and admission requirements and updates for international students as stated on the Graduate Admissions website.

• Ability to perform the essential functions of a physician assistant

Applicants must have completed all of their requirements by the time of application. The most successful applicants are those individuals who apply to CASPA as early as possible in the application cycle and have strong GPAs. The program uses a rolling admissions process to review applications even if the September 1 deadline has been met. Additionally, once the class has been filled, the program will no longer review applications even if the September 1 deadline has been met.

Degree Requirements

The master’s degree program in Physician Assistant Studies requires successful completion of a minimum of 59 units from Towson University and 39 units from CCBC-Essex. A GPA of 3.00 or better overall must be obtained in the graduate courses.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PAST 212</td>
<td>Public Health and Preventive Medicine</td>
<td>2</td>
</tr>
<tr>
<td>PAST 214</td>
<td>Psychosocial Issues I</td>
<td>2</td>
</tr>
<tr>
<td>PAST 216</td>
<td>Psychosocial Issues II</td>
<td>2</td>
</tr>
<tr>
<td>PAST 224</td>
<td>Gross Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>PAST 225</td>
<td>Human Pathophysiology</td>
<td>2</td>
</tr>
<tr>
<td>PAST 226</td>
<td>Ethics, Issues and Trends in Physician Assistant Practice</td>
<td>3</td>
</tr>
<tr>
<td>PAST 230</td>
<td>Diagnostic Studies I</td>
<td>2</td>
</tr>
<tr>
<td>PAST 231</td>
<td>Diagnostic Studies II</td>
<td>2</td>
</tr>
<tr>
<td>PAST 232</td>
<td>Diagnostic Studies III</td>
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</tr>
<tr>
<td>PAST 236</td>
<td>Basic Physical Diagnostics</td>
<td>2</td>
</tr>
<tr>
<td>PAST 237</td>
<td>Advanced Physical Diagnostics</td>
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</tr>
<tr>
<td>PAST 250</td>
<td>Introduction to Clinical Practicum</td>
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<td>PAST 251</td>
<td>Clinical Practicum I</td>
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</tr>
<tr>
<td>PAST 252</td>
<td>Clinical Practicum II</td>
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Towson University Courses

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<tr>
<td>PAST 601</td>
<td>RESEARCH METHODS IN PHYSICIAN ASSISTANT PRACTICE</td>
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<tr>
<td>PAST 603</td>
<td>MEDICINE I</td>
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<td>PAST 604</td>
<td>MEDICINE II</td>
<td>6</td>
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<tr>
<td>PAST 605</td>
<td>MEDICINE III</td>
<td>2</td>
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<tr>
<td>PAST 606</td>
<td>PEDIATRICS I</td>
<td>2</td>
</tr>
<tr>
<td>PAST 607</td>
<td>PEDIATRICS II</td>
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<td>PAST 608</td>
<td>MEDICINE IV</td>
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<tr>
<td>PAST 609</td>
<td>PHARMACOLOGY I</td>
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<tr>
<td>PAST 610</td>
<td>PHARMACOLOGY II</td>
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<td>PAST 653</td>
<td>PA CLINICAL PRACTICUM III</td>
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<td>PA CLINICAL PRACTICUM IV</td>
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<td>PAST 730</td>
<td>CLINICAL MANAGEMENT I</td>
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<td>PAST 731</td>
<td>CLINICAL MANAGEMENT II</td>
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<td>PAST 756</td>
<td>FINAL CLINICAL PRACTICUM</td>
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<td>PAST 801</td>
<td>PHYSICIAN ASSISTANT GRADUATE SEMINAR</td>
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<tr>
<td>PAST 802</td>
<td>PHYSICIAN ASSISTANT GRADUATE PROJECT</td>
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</table>

Total Units

98

1. Medical Knowledge: demonstrate core knowledge about biomedical and clinical sciences and the application of this knowledge to patient care.
2. Interpersonal and Communication Skills: demonstrate verbal, nonverbal and written communication skills that result in effective information exchange with patients and all other persons regarding the health care system.
3. Patient Care: demonstrate care that is effective, patient-centered, timely, efficient and equitable for the treatment of health problems and the promotion of wellness.
4. Professionalism: demonstrate a high level of responsibility, ethical practice, sensitivity to a diverse patient population and adherence to legal and regulatory requirements.
5. Systems-Based Practice: demonstrate an awareness of and responsiveness to the larger system of health care to provide patient care that is of optimal value. ALSO incorporated within this goal = Students will use technologies to identify, retrieve, and apply relevant information.

Speech-Language Pathology M.S.

Degree: Master of Science
https://www.towson.edu/chp/departments/asld/grad/speech/

Program Director: Dr. Karen Fallon
Phone: 410-704-2437
Email: kfallon@towson.edu

The Speech-Language Pathology program is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association and the Maryland State Department of Education. The program provides the student with:

1. the study of normal communication processes;
2. an in-depth investigation of communication disorders;
3. development of therapeutic goals, procedures and materials; and
4. extensive clinical experience in on- and off-campus settings.

The program is designed to enable pre-professionals in the field, i.e., those with a bachelor’s degree or the equivalent in speech-language pathology and audiology, to meet the academic and clinical practicum requirements of national and state accrediting, certifying and licensing bodies.

The degree will prepare the individual for national/state certification and state licensure for employment in public school, clinical, hospital or private-practice settings, and to pursue advanced degrees. All clinical practicum clock-hour requirements of the American Speech-Language-Hearing Association (ASHA) and the Department of Audiology, Speech-Language Pathology and Deaf Studies must be completed before the M.S. degree is awarded.

Admission Requirements

Students with a bachelor’s degree in Speech-Language Pathology and Audiology from a regionally accredited college or university** can apply to our Master’s program. Students must have a minimum of 26 units of undergraduate courses in basic communication and swallowing process, communication disorders and differences, and swallowing disorders. Students must have a minimum GPA of 3.00 in the major and a minimum GPA of 3.00 for the last 60 units. The bachelor’s degree must be indicated on the transcript by July 1 in order to begin the program. To apply, students must submit:

1. an online Graduate Application (http://www.towson.edu/academics/graduate/admissions/apply);
2. GRE scores;
3. three letters of recommendation with at least two letters completed by faculty familiar with the applicant’s potential for scholarly and/or clinical work. Email addresses of recommenders must be entered on the application;
4. a one-page, single-spaced personal essay describing why you have chosen this profession.

Students without a bachelor’s degree in Speech-Language Pathology and Audiology have two options for entering the program:

- Students may complete a second bachelor’s degree in communication disorders at an accredited institution (i.e., speech-language pathology and audiology). Students may apply to the second bachelor’s program at Towson University or any other accredited university.
- Students may complete prerequisite course work in communication disorders. They may complete this through a pre-requisite university program or through individual courses at one or more universities. Specifically, they must complete a minimum of 8 of the 9 following undergraduate courses in speech-language pathology and audiology before applying to University Admissions.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Anatomy and Physiology of the Auditory and Vocal Mechanism</td>
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<td>Phonetics of American English</td>
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<td>Speech and Language Development</td>
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<td></td>
<td>Speech Sound Disorders/Articulation &amp; Phonology</td>
<td>3</td>
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<td>Language Disorders</td>
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<td>Speech Science</td>
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<td>Introduction to Audiology</td>
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<td>Introduction to Aural Rehabilitation</td>
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<td></td>
<td>Clinical Observations and Techniques</td>
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</table>

- The American Speech-Language-Hearing Association’s minimum requirements for application for the Certificate of Clinical Competence include transcript credits for course work, CLEP or Advanced Placement (AP) examination credits in each of the following areas: biological sciences, physical sciences, social/behavioral sciences and statistics. In addition to transcript credit, applicants may be required to provide further evidence of meeting these requirements. A behavioral statistics course or its equivalent fulfills the math requirement and is highly recommended. Students without these courses will have to take them as part of their graduate program.
- Speech-language pathologists must have sufficient proficiency in the English language to meet certification standards of the American Speech-Language-Hearing Association. Students who received a degree outside the U.S. are required to submit TOEFL/IELTS scores meeting the following requirement
  - a TOEFL score of 100 on the iBT or 7 on the IELTS
  - a U.S. degree does not waive the requirement of TOEFL or IELTS for this program. In addition, an interview with the graduate program director is required.
- Students are admitted for the fall term only. Completed application and admission credentials must meet the deadline of January 15.
Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

### Degree Requirements

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<th>Title</th>
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<td>SPPA 600</td>
<td>LANGUAGE DEVELOPMENT AND DISORDERS FROM BIRTH THROUGH PRESCHOOL</td>
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</tr>
<tr>
<td>SPPA 604</td>
<td>ACQUIRED NEUROGENIC LANGUAGE AND COGNITIVE DISORDERS I</td>
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<td>ACQUIRED NEUROGENIC LANGUAGE AND COGNITIVE DISORDERS II</td>
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<td>SPPA 606</td>
<td>LANGUAGE DEVELOPMENT AND DISORDERS IN CHILDREN-AGE CHILDREN</td>
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<td>SPPA 610</td>
<td>SPEECH SOUND DISORDERS</td>
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<td>SPPA 614</td>
<td>FLUENCY DISORDERS</td>
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<tr>
<td>SPPA 615</td>
<td>AUTISM SPECTRUM DISORDERS &amp; SPEECH-LANGUAGE PATHOLOGY</td>
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<tr>
<td>SPPA 620</td>
<td>VOICE DISORDERS IN CHILDREN AND ADULTS</td>
<td>3</td>
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<tr>
<td>SPPA 626</td>
<td>NEUROLOGICALLY BASED SPEECH DISORDERS</td>
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<td>SPPA 628</td>
<td>DYSPHAGIA</td>
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<td>SPPA 690</td>
<td>CLINICAL PRACTICUM ON-CAMPUS</td>
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<td>SPPA 680</td>
<td>SPECIAL TOPICS IN SPEECH LANGUAGE PATHOLOGY</td>
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<tr>
<td>SPPA 705</td>
<td>PROFESSIONAL ISSUES IN SPEECH LANGUAGE-PATHOLOGY</td>
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<tr>
<td>SPPA 710</td>
<td>WRITTEN LANGUAGE DEVELOPMENT AND DISORDERS</td>
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<td>SPPA 714</td>
<td>AUGMENTATIVE AND ALTERNATIVE COMMUNICATION</td>
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<td>SPPA 745</td>
<td>ADVANCED CLINICAL PRACTICUM ON-CAMPUS</td>
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<td>SPPA 746</td>
<td>ADVANCED CLINICAL PRACTICUM OFF-CAMPUS</td>
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<tr>
<td>SPPA 747</td>
<td>ADVANCED CLINICAL PRACTICUM IN SCHOOLS</td>
<td>3</td>
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<tr>
<td>SPPA 748</td>
<td>ADVANCED PEDIATRIC PRACTICUM May be replaced with SPPA 746 taken for a second time or SPPA 798</td>
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</tr>
</tbody>
</table>

**Total Units:** 53

Successful completion of a capstone activity is required before graduation. Students may complete either a Comprehensive Examination, or a master’s thesis or mentored research project.

Students must demonstrate acceptable writing skills in all clinical and academic work. Students showing weakness in this area may be advised to take a remedial writing experience in addition to their degree work.

The Department of Audiology, Speech-Language Pathology and Deaf Studies recognizes a special responsibility to the profession to ensure that graduates of master’s degree programs demonstrate attitudes and behaviors consistent with the standards of the profession. Students must abide by the professional and ethical standards established by the department and by ASHA. All students must have a criminal background check complete and on file in advance of beginning clinical practice. In addition, students must submit documentation of required immunizations.

1. Graduates will demonstrate competency in knowledge in normal and disordered communication processes.
2. Graduates will acquire and demonstrate skills in oral and written or other forms of communication including information technology.
3. Graduates will acquire and demonstrate skills in prevention, evaluation and intervention of communication disorders.

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### The College of Liberal Arts

Liberal Arts Building 2213
Phone: 410-704-2128
Fax: 410-704-6392

The College of Liberal Arts offers graduate programs of varying types, emphasizing the insights and traditions of academic disciplines, providing advanced training in areas of professional emphasis and encouraging interdisciplinary perspective. Programs serve both recent graduates and working professionals seeking to advance in their fields or change careers.

These programs develop the ability of students to analyze and interpret information and opinions, to make informed judgments about complex issues and to apply expertise in professional practice. The graduate curricula enable graduates to move comfortably in the world of ideas and values and to appreciate the rich diversity of human culture. Small classes ensure personal attention and an emphasis on writing and the refinement of professional applications. Commitment to graduate education is reflected not only in teaching excellence, but also in the scholarly activity of the faculty. They are mentors to their students, who often have the opportunity to engage in collaborative research or monitored practice. Faculty members participate annually in cooperative ventures within the urban community as well.

Many of the departments, centers and institutes of the college develop creative partnerships with public and private enterprises to ensure that the intellectual resources of Towson University serve the people of the Baltimore metropolitan area.

Terry A. Cooney, Dean
Karen Eskow, Associate Dean

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### Certificates of Advanced Study (post-master’s)

- School Psychology (p. 103)

### Master’s Degree Programs

- Child Life, Administration and Family Collaboration (p. 86)
- Geography and Environmental Planning (p. 89)
- Human Resource Development (p. 91)
- Humanities, Global (p. 90)
- Integrated Homeland Security Management (p. 132)
- Leadership in Jewish Education and Communal Service (p. 96)
- Jewish Studies (p. 94)
- Professional Studies (See Interdisciplinary Programs section (p. 135))
- Professional Writing (p. 97)
• Psychology (p. 99)
  • Clinical (p. 99)
  • Counseling (p. 101)
  • Experimental (p. 102)
• School (p. 103)
• Social Science (p. 105)
• Women's and Gender Studies (p. 107)
• Women's Studies Combined Bachelor's-Master's Programs (http://catalog.towson.edu/undergraduate/liberal-arts/womens-gender-studies/combined-bachelor-master-womens-studies)

Post-Baccalaureate Certificate Programs
• Family-Professional Collaboration (p. 88)
• Jewish Communal Service* (p. 92)
• Jewish Education (p. 93)
• Women's and Gender Studies (p. 110)

Child Life, Administration and Family Collaboration M.S.

Degree: Master of Science
https://www.towson.edu/cla/departments/familystudies/grad/childlife/

Program Director: Lisa A. Martinelli Beasley
Phone: 410-704-3766
Email: lmartinelli@towson.edu

The Master of Science program in Child Life, Administration and Family Collaboration provides advanced education for Certified Child Life Specialists (CCLS) currently working in the field and for those students seeking CCLS certification. This program has a broad scope of curriculum that not only engages students from the eyes of a child life specialist through applied research, but also focuses on family collaboration and prepares students for management and administrative positions.

The program is 39-41 units. Upon completion of this program, students will have earned a graduate degree that includes course work related to Child Life, a Post-Baccalaureate Certificate in Family-Professional Collaboration, as well as course work related to administration. Students may opt to complete the Post-Baccalaureate Certificate in Clinician-Administrator Transition. The curriculum design of this graduate program is intended for students who are interested in pursuing graduate study in Child Life at the entry level as well as practicing Certified Child Life Specialists returning to school to advance their clinical, research and professional knowledge and skills through a graduate degree.

Combined Bachelor's Degree in Introduction to Child Life and Master's in Child Life, Administration and Family Collaboration

Students may also earn the M.S. in Child Life, Administration and Family Collaboration through the bachelor’s to master’s degree program in child life. The B.S./M.S. program (http://catalog.towson.edu/undergraduate/liberal-arts/family-studies/community-development/combined-bachelors-family-human-services-masters-child-life) is designed to allow students to complete combined undergraduate and graduate degrees in a shorter time frame, including 9 units taken during the summer terms. This program is open only to undergraduates pursuing the Introduction to Child Life Track in the Department of Family Studies and Community Development.

Admission Requirements
http://www.towson.edu/cla/departments/familystudies/grad/childlife/admission.html

Application Deadline
Fall admission only. Application deadline: 1/15

Admission Requirements - Applicants with Bachelor's Degrees

Applicants must have a bachelor's degree in family studies, family science, health science, human services, human development, psychology, sociology or another related discipline, obtained at a regionally accredited college or university*. A minimum GPA of 3.0 is required for full admission or a 2.75 for conditional admission.

Applicants must have completed the following courses with a grade of "C" or higher:

• Biological sciences (1 course)
• English composition (minimum of one upper-level course)
• Human development across the lifespan (one lower-level course)
• Infant and/or child development and adolescent development course work (two courses - 6 upper-level units)
• Research methods (one upper-level course)
• Four upper-level courses from the content areas of death and dying, education, expressive therapies, psychology, or sociology

Applicants must have a minimum of 100 hours of volunteer, child life practicum or paid work experience (example, child life assistant) with children with special health care needs in a child life department under the direct supervision of a Certified Child Life Specialist. Applicants with volunteer hours beyond the minimum will be viewed more favorably.

Applicants must submit a completed Volunteer/Work Experience Verification Form for each institution at which volunteer, practicum or work hours in the child life department under the direct supervision of a Certified Child Life Specialist have been collected.

The highest-ranking applicants will be required to interview with the faculty of the Child Life, Administration and Family Collaboration program. Invitations to interview will be made in February. Interviews will take place in March.

*See Exceptions to Policy in Graduate Admissions. (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Non-immigrant international students: See additional admission information in International Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

Admission Materials

Applicants must submit the following materials:

• A Towson University graduate school application with required fee
• Official transcripts from every college or university attended
• An essay not exceeding three double-spaced, 12 point font, 1 inch margin typed pages. The essay should answer the following questions:

1. Briefly describe ways in which the work of a child life specialist contributes to the health care experience of a child and his/her family.
2. How did you become interested in the field of child life?
3. Provide a specific example of a time that you used play to meet the developmental needs of a child in a health care setting.
4. Explain the relevance of research to Child Life. How do you see research informing your role?

• A completed Coursework Verification Form

Form A: Coursework Verification (PDF) (http://www.towson.edu/cla/departments/familystudies/documents/forma_courseworkverification.pdf)

Note - Applicants who are already certified child life specialists may complete Form B to request a competency in lieu of coursework review for any of the courses noted above. This review would include documentation that verifies the individual's mastery of the course content. Successful requests for competency in lieu of coursework should include a didactic (Re: workshops, professional development and/or related undergraduate coursework) preparation and professional practice.

Form B: Competency in Lieu of Coursework Request (PDF) (http://www.towson.edu/cla/departments/familystudies/documents/competency.pdf)

A completed Volunteer/Work Experience Verification Form for each institution at which you volunteered or worked in the child life department under the direct supervision of a Certified Child Life Specialist.

Form C: Volunteer/Work Experience Verification Form (PDF) (http://www.towson.edu/cla/departments/familystudies/documents/volunteer_work_experience_verification_form.pdf)

**PLEASE NOTE: Letters of recommendation and GRE scores are NOT required for admission.**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
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<td>THE HOSPITALIZED CHILD AND FAMILY</td>
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<tr>
<td>FMST 545</td>
<td>INTRODUCTION TO ART THERAPY</td>
<td>3</td>
</tr>
<tr>
<td>FMST 602</td>
<td>CHILD LIFE PROFESSIONAL SEMINAR</td>
<td>1</td>
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<tr>
<td>FMST 603</td>
<td>THERAPEUTIC BENEFITS OF PLAY</td>
<td>3</td>
</tr>
<tr>
<td>FMST 604</td>
<td>BEREAVEMENT, GRIEF AND LOSS: A CHILD LIFE PROSPEROUS</td>
<td>3</td>
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<td>FMST 640</td>
<td>MEDICAL ASPECTS OF ILLNESS: A CHILD LIFE PERSPECTIVE</td>
<td>3</td>
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<tr>
<td>FMST 697</td>
<td>GRADUATE INTERNSHIP IN FAMILY STUDIES AND COMMUNITY DEVELOPMENT</td>
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<td>FMST 601</td>
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<tr>
<td>FMST 610</td>
<td>FAMILY-PROFESSIONAL COLLABORATION</td>
<td>3</td>
</tr>
<tr>
<td>FMST 615</td>
<td>APPLIED RESEARCH METHODS IN FAMILY SCIENCE</td>
<td>3</td>
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<tr>
<td>FMST 620</td>
<td>PROJECT IN FAMILY FOCUSED PROGRAM DEVELOPMENT</td>
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</table>

**Healthcare Administration Courses/Electives**

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<td>TRANSITIONS: HEALTHCARE PROFESSIONALS IN A CHANGING ENVIRONMENT</td>
<td>3</td>
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<tr>
<td>IDHP 605</td>
<td>MANAGING HEALTH CARE PROFESSIONALS</td>
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</tr>
<tr>
<td>IDHP/HLTH 651</td>
<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Units** 41

**Degree Requirements for Students Who Are Child Life Specialists**

Entering students who are already Certified Child Life Specialists are required to complete 6 units of child life course work, 12 units of Family-Professional Collaboration course work, 6 units of Graduate Project/Thesis and 9-15 units of healthcare administration course work. Students who take 9 units of healthcare administration course work must select 6 units of elective course work. Elective courses must meet the approval of the program director.

<table>
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<tr>
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<tbody>
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<tr>
<td>IDHP 605</td>
<td>MANAGING HEALTH CARE PROFESSIONALS</td>
<td>3</td>
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<tr>
<td>IDHP/HLTH 647</td>
<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td>3</td>
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</tbody>
</table>

**Clinician-Administrator Transition Courses**

Students may choose to meet the administration course requirement by either completing the Clinician-Administrator Transition (CAT) course work (15 units), or students may select 9 units of CAT courses and 6 units of elective course work for a total of 15 units 1, 2

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<tbody>
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<td>3</td>
</tr>
<tr>
<td>IDHP 605</td>
<td>MANAGING HEALTH CARE PROFESSIONALS</td>
<td>3</td>
</tr>
<tr>
<td>IDHP/HLTH 651</td>
<td>PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives (6 units) for students who choose to complete 9 units of health-care administration course work**

Electives must be preapproved by the graduate program director or department chairperson and shall be selected from the following content areas: family studies, education, psychology, sociology, health science or related field.


**Family-Professional Collaboration Certificate**

Post-Baccalaureate Certificate  
https://www.towson.edu/cla/departments/familystudies/grad/famprofessionalpbc/

Program Director: Dr. Catherine Breneman  
Phone: 410-704-4871  
Email: cbreneman@towson.edu (keskow@towson.edu)

The Post-Baccalaureate Certificate program in Family-Professional Collaboration is an interdisciplinary graduate program that is designed to enhance the education and subsequent practice of professionals working in school, health and community settings. A focus on family-professional relationships has evolved into an important area of competency for educators, related school personnel and practitioners in health care and community agencies. The courses within the program prepare individuals for applying principles of family-based practice in their own professional work. Individuals already employed in disciplines such as psychology, sociology, education and health care will advance their knowledge of and research skills in family-related areas of study. The program is especially beneficial for professionals who need to enhance skills related to implementing public laws and policies that mandate actively involving families in developing education and health care plans for children with special needs.

The interdisciplinary design of the program allows students to benefit from a carefully designed sequence of study that uses case study research, needs assessment and program development to understand and enhance collaboration with families in the community.

The program's flexibility makes it ideal to accommodate the demands of a working professional's schedule. The curriculum design is intended to work with existing master's degree programs. Many graduate programs that offer up to 9 units of electives can integrate this graduate certificate to enhance a professional’s credentials. The certificate may also be earned as a stand-alone for those not wishing to pursue a master's degree. This program can be completed in one to two years.

**Admission Requirements**

- A baccalaureate degree from a regionally accredited college or university**
- An undergraduate GPA minimum of 3.00 (2.75 for conditional admission) in either the cumulative units of the degree or the last 60 units of the degree. An admission exception policy is in place for eligible candidates with undergraduate degrees obtained at least 5 years ago.
- A résumé included with the online application (http://www.towson.edu/academics/graduate/admissions/apply)
- An interview with the program director

**Non-immigrant international students:** See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Certificate Requirements**

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<tr>
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<th>Title</th>
<th>Units</th>
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<tr>
<td>FMST 601</td>
<td>APPLIED FAMILY RELATIONSHIPS</td>
<td>3</td>
</tr>
<tr>
<td>FMST 610</td>
<td>FAMILY-PROFESSIONAL COLLABORATION</td>
<td>3</td>
</tr>
<tr>
<td>FMST 615</td>
<td>APPLIED RESEARCH METHODS IN FAMILY SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>FMST 620</td>
<td>PROJECT IN FAMILY FOCUSED PROGRAM DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>500-700-level Elective</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 15

1 Other courses must be approved by the program director.
2 Course must be approved by the program director.

Programs that may be well-suited to integrate the graduate certificate in Family-Professional Collaboration within their 9 units of electives include:

- Applied Gerontology
- Elementary Education
- Human Resource Development
- Nursing (community-based)
- Occupational Science
- Occupational Therapy (post-professional occupational therapists)
- Professional Studies
• Reading
• Secondary Education
• Women’s and Gender Studies

Programs that may be well-suited to integrate the graduate certificate in Family-Professional Collaboration with some additional course work include:

• Clinical Psychology
• Counseling Psychology
• Early Childhood Education
• Health Science
• Nursing
• Occupational Therapy (professional master’s degree)
• School Health Education
• School Psychology
• Social Science
• Special Education
• Teaching (MAT)

1. Participate in ethnographic interviews to understand family relationship and world views and to recognize objective and subjective information from a variety of sources.

2. As part of a collaborative team, conduct action research to understand and identify ways to enhance family/professional relationships (University Core Learning Outcome #3).

Geography and Environmental Planning M.A.

Degree: Master of Arts
https://www.towson.edu/cla/departments/geography/gradgeography/

Program Director: Dr. Todd Moore
Phone: 410-704-3973
Email: tmoore@towson.edu

The program prepares graduates for either doctoral programs or a variety of geographically oriented applied positions in private business and government agencies. The program develops a broad knowledge of physical and human geography as well as the ability to analyze and synthesize spatial data and information from a number of fields.

The Master of Arts in Geography and Environmental Planning has two options: Thesis and Non-Thesis.

Combined Bachelor’s to Master’s Program

Students may also earn an M.A. in Geography and Environmental Planning through the Department of Geography and Environmental Planning's combined bachelor's and master's program (http://catalog.towson.edu/undergraduate/liberal-arts/geography-environmental-planning/combined-bachelor-master-geography-environmental-planning). This program allows students to complete their undergraduate and graduate degrees in a shorter time frame.

All students enrolled in the graduate program must demonstrate proficiency in research. Students may choose a thesis or non-thesis option. All non-thesis students must complete a final research project.

Please see the Undergraduate Catalog for information on the combined bachelor's-master's program.

Admission Requirements

• A bachelor’s degree from a regionally accredited college or university** with a minimum of 9 units in geography, with at least a 3.00 GPA in all geography courses, is required for full admission. Students without a background in geography may be admitted conditionally, with the requirement that they take the prerequisite courses in their first year.

• A minimum undergraduate GPA of 3.00 is required for full admission to the program, and 2.75 is required for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) along with the following materials:

• Two letters of recommendation
• A short essay discussing career goals and how this program will help you attain them

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

• All degree candidates must meet with their academic advisers to file intended programs of study. This should be done prior to, or during, the first term of course work. The program can be amended in consultation with the adviser.

• Successful completion of GEOG 375/GEOG 516 or an approved equivalent.

Thesis Option (minimum 36 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 601</td>
<td>SEMINAR ON GEOGRAPHICAL PERSPECTIVES</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 621</td>
<td>RESEARCH TECHNIQUES</td>
<td></td>
</tr>
<tr>
<td>One 600-level human geography seminar</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>One 600-level physical or environmental geography seminar</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Thesis</td>
<td>Select 6 units of the following course:</td>
<td>6</td>
</tr>
<tr>
<td>GEOG 898</td>
<td>GEOGRAPHY THESIS</td>
<td></td>
</tr>
</tbody>
</table>

Electives

18 units of elective courses

Select a minimum of 12 units of GEOG electives

Select a maximum of 6 units of non-GEOG electives

Total Units 36
A graduate degree in Global Humanities provides students with the opportunities to encounter the differences in culture, language, religion, and custom. All of these complex opportunities and problems posed by globalization include the movement of refugees and migrants, terrorism, and climate disruption. A variety of interrelated ways, through economic exchange, warfare, and mass humanely negotiating the increased diversity of the world as it changes in historic and contemporary contexts, as expressed in global humanities inquiry into the ideas of the human and of the human condition, in the knowledge of past events and developments provides insight for the present and future.

Students pursue the degree through coursework that combines interdisciplinary thematic seminars and elective graduate courses, culminating with either a master's thesis, an anthology, or an internship option.

Admission Requirements

- A baccalaureate degree from a regionally accredited college or university
- GPA of 3.00, or 2.75 for conditional admission
- A statement of intent (500 words)
- A research paper in any liberal arts discipline
- Two letters of recommendation

The Global Humanities program accepts admission materials on a rolling basis, but priority deadlines are April 1 for Fall admission or November 1 for Spring admission.

Submit admission materials to Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply)

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

Students who received their bachelor or master's degree outside of the United States are to submit TOEFL, PTE, or IELTS scores that meet the following requirements: a TOEFL score of 100 on the iBT, a PTE score of 5.7, or an IELTS score of 7.

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)**

Degree Requirements

The Master of Arts in Global Humanities requires completion of a 36-unit program of study, combining 21 units of required curriculum with 15 credit hours of elective courses, thesis and/or internship work. Students must have the approval of the program director before registering for any elective course to count for the humanities degree. Students will select one of the following courses of study: the Thesis Option; Anthology Option; or the Internship Option.

**Thesis Option**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMA 600</td>
<td>INTRODUCTION TO GRADUATE STUDIES IN GLOBAL HUMANITIES</td>
<td>3</td>
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</table>

**Interdisciplinary Thematic Seminars (select 6 courses from the following)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>HUMA 610</td>
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<tr>
<td>HUMA 612</td>
<td>ENVIROHUMANITIES</td>
</tr>
<tr>
<td>HUMA 613</td>
<td>DISEASE, LIFE, AND DEATH</td>
</tr>
<tr>
<td>HUMA 614</td>
<td>TRANSLATION</td>
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<tr>
<td>HUMA 615</td>
<td>POWER</td>
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</table>

Global Humanities M.A.

Degree: Master of Arts
https://www.towson.edu/cla/departments/interdisciplinary/grad/humanities/

Program Director: Dr. Jennifer Ballengee
Liberal Arts Building 5351
Phone: 410-704-5213
Email: jballengee@towson.edu (mportolano@towson.edu)

The Master's Program in Global Humanities fosters interdisciplinary inquiry into the ideas of the human and of the human condition, in historic and contemporary contexts, as expressed in global humanities, culture through literature, language, history, human and cultural geography, philosophy, religion, film, and art, and including economics, politics, and the sciences when utilized in a humanistic context. Fostering multicultural awareness and understanding, the Global Humanities M.A. provides students with the tools needed for successfully and humanely negotiating the increased diversity of our world as it changes in a variety of interconnected ways, through economic exchange, warfare, mass movement of refugees and migrants, terrorism and climate disruption. All of these complex opportunities and problems posed by globalization involve encounters of difference in culture, language, religion, and custom. A graduate degree in Global Humanities provides students with the cultural and historical awareness necessary to think through complex issues of global interactions not only in the contemporary moment but with an awareness of change over time: the knowledge of past events and developments provides insight for the present and future.
Elective Courses
Elective credits may include topics seminars in the program, graduate seminars in related fields (approved by the director), or internships (no more than 6 units).

Thesis Course

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<tr>
<th>Code</th>
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<tr>
<td>HUMA 897</td>
<td>HUMANITIES THESIS</td>
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<tr>
<td>or HUMA 898HUMANITIES THESIS</td>
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Total Units: 9

Elective Courses

Elective credits may include topics seminars in the program, graduate seminars in related fields (approved by the director), or internships (no more than 6 units).

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<tr>
<td>HUMA 616</td>
<td>THE HUMAN</td>
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<tr>
<td>PRWR 611</td>
<td>RHETORIC: THE PURSUIT OF ELOQUENCE</td>
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ElectiveCredits

Elective credits may include topics seminars in the program, graduate seminars in related fields (approved by the director), or internships (no more than 6 units).

Anthology required

Total Units: 15

Anthology Option

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<tbody>
<tr>
<td>HUMA 600</td>
<td>INTRODUCTION TO GRADUATE STUDIES IN GLOBAL HUMANITIES</td>
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Interdisciplinary Thematic Seminars (select 6 courses from the following)

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<tr>
<td>HUMA 616</td>
<td>THE HUMAN</td>
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<tr>
<td>PRWR 611</td>
<td>RHETORIC: THE PURSUIT OF ELOQUENCE</td>
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Total Units: 18

Internship Option

Required Courses

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<tbody>
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<td>INTRODUCTION TO GRADUATE STUDIES IN GLOBAL HUMANITIES</td>
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Interdisciplinary Thematic Seminars (select 6 courses from the following)

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<tr>
<td>PRWR 611</td>
<td>RHETORIC: THE PURSUIT OF ELOQUENCE</td>
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Total Units: 18

Elective Courses

Elective credits may include topics seminars in the program, graduate seminars in related fields (approved by the director), or internships (no more than 6 units).

ElectiveCredits

Elective credits may include topics seminars in the program, graduate seminars in related fields (approved by the director), or internships (no more than 6 units).

Anthology required

Total Units: 12

Internship

<table>
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Anthology required

Total Units: 36

The thesis or anthology must be submitted to the director by the seventh week of the term in which the student plans to graduate.

Transfer Credit

With the approval of the program director, students may apply 6 transfer units with the grade of “B” or better to the elective requirements of the program.

1. Understanding and appreciating major issues and themes relevant to humanistic inquiry, across disciplines and historic periods.
2. Understanding the development of humanistic inquiry across a historical trajectory, including the relevance of and potential practical applications of the humanities in contemporary global culture.
3. Producing substantive insight about humanistic texts and cultural products by means of historical, literary, philosophical, and/or rhetorical modes of analysis, across national boundaries or applying humanistic inquiry in work or community outreach.

Human Resource Development M.S.

Degree: Master of Science
https://www.towson.edu/cla/departments/interdisciplinary/grad/hr/

Program Director: Dr. Abby Mello
Phone: 410-704-3364
Email: amello@towson.edu

The Master of Science in Human Resource Development (HRD) is a broad-based program designed to provide students with specific knowledge and practical skills within a variety of human resource fields. The curriculum is designed to meet the needs of individuals with varied academic backgrounds and professional experience. The program emphasizes the application of theory and research to practical human resource issues within business, government, nonprofit organizations and education.

The HRD plan of study is designed for individuals seeking to enter the human resource field, mid-career professionals seeking opportunities for professional development and career advancement, working adults seeking a career change, and recent undergraduates who wish to pursue graduate study. Applicants do not need prior work experience in human resources to be eligible for conditional admission.

Please note that only one degree can be awarded in Human Resource Development; students who have completed a concentration in HRD/Educational Leadership will not receive a second degree in HRD.

Admission Requirements

This program admits fall and spring terms only.

- No specific undergraduate major is required.
- The minimum GPA required for admission is 3.00. Students who have a minimum GPA of 2.80 may be considered for conditional admission.

Submit online application at http://www.towson.edu/academics/graduate/admissions/apply/index.html, including the following:

- A resume
- Two letters of recommendation are required from individuals who can attest to the applicant’s academic background, professional experience and/or personal qualities.
- A three- to four-page essay (double-spaced) that includes:
a. your reason for pursuing the degree and desired emphasis of study;
b. your past work and/or volunteer experiences;
c. yourself as a learner, including what learning activities you undertake outside of or since your undergraduate study;
d. your expectations for graduate study; and
e. your projected career goals.

The essay must be an original sample of the applicant’s writing proficiency.

Degree Requirements

Students must complete a minimum of 36 units as prescribed by the curriculum and approved by an adviser. In addition, students must provide evidence of completing a minimum required level of professional-level work experience in the HR field. This requirement can be met by providing a portfolio of one’s work in a suitable HR position or by completing the Internship (HRD 696) or Practicum (HRD 697) course. Students with a minimum of 3 years experience as an HR manager or director may request to waive HRD 601 and replace it with an approved elective. Students who complete a thesis project in compliance with Towson University’s Graduate Thesis Guidelines can substitute HRD 699 (3) and three units of electives with PSYC 897 (6) or PSYC 898 (6).

**Code** | **Title** | **Units**
---|---|---
HRD 601 | INTRODUCTION TO HUMAN RESOURCES | 3
HRD 605 | APPLIED RESEARCH IN HRD | 3
HRD 606 | ORGANIZATIONAL BEHAVIOR | 3
HRD 607 | MANAGING ORGANIZATIONAL CHANGE | 3
HRD 627 | TRAINING AND DEVELOPMENT | 3
HRD 699 | CAPSTONE IN HUMAN RESOURCE DEVELOPMENT | 3

**Electives**

Select a minimum of 12 units (4 courses) from the following list; the additional 6 units can be from this list or from another department with prior approval.

- HRD 629 | STAFFING, RECRUITMENT AND SELECTION | 3
- HRD 630 | COMPENSATION AND BENEFITS MANAGEMENT FOR THE HRD PROFESSIONAL | 3
- HRD 635 | MANAGING EMPLOYEE RELATIONS | 3
- HRD 639 | HUMAN RESOURCE INFORMATION SYSTEMS | 3
- HRD 640 | LEADERSHIP THEORY AND PRACTICE | 3
- HRD 643 | BUSINESS MANAGEMENT FUNDAMENTALS FOR THE HRD PROFESSIONAL | 3
- HRD 644 | GROUP DYNAMICS AND TEAM BUILDING | 3
- HRD 646 | ADVANCED TOPICS IN ORGANIZATION DEVELOPMENT: CONFLICT MANAGEMENT AND RESOLUTION | 3
- HRD 650 | EMPLOYEE WELLNESS AND HEALTHY WORKFORCE MANAGEMENT | 3
- HRD 655 | TALENT MANAGEMENT AND HUMAN CAPITAL | 3
- HRD 658 | MANAGING WORKPLACE DIVERSITY | 3
- HRD 660 | HUMAN RESOURCES RISK MANAGEMENT AND REVENUE GENERATION | 3
- HRD 665 | INTERNATIONAL HUMAN RESOURCES: ISSUES AND APPLICATIONS | 3

**Required Courses**

- HRD 679 | SPECIAL TOPICS IN HUMAN RESOURCE DEVELOPMENT | 3
- HRD 695 | INDEPENDENT STUDY | 1
- HRD 696 | INTERNSHIP IN HUMAN RESOURCE DEVELOPMENT | 1
- HRD 697 | PRACTICUM IN HRD | 1
- ISTC 541 | FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY | 1
- ISTC 605 | WEB-BASED INSTRUCTION IN EDUCATION | 1
- ISTC 655 | MULTIMEDIA DESIGN | 1
- ISTC 667 | INSTRUCTIONAL DEVELOPMENT | 1
- ISTC 702 | EDUCATIONAL LEADERSHIP AND TECHNOLOGY | 1
- PSYC 606 | CAREER DEVELOPMENT | 1
- PSYC 623 | PSYCHOLOGICAL ISSUES IN THE WORKPLACE | 1
- PSYC 687 | ADVANCED EXPERIMENTAL DESIGN | 1
- PSYC 688 | ADVANCED EXPERIMENTAL DESIGN II | 1
- PSYC 897 | PSYCHOLOGY THESIS | 1
- PSYC 898 | PSYCHOLOGY THESIS | 1

**Total Units** | **36**

**NOTE:** Students may earn no more than 6 units in total from HRD 695, HRD 696 and/ or HRD 697.

Students can complete the 36-unit requirement of the program by selecting from courses provided in other programs and departments. Prior written approval from the director of the Professional Track program is required.

1. Demonstrate knowledge of the human resources management and development, and the organizational behavior and change fields;
2. Demonstrate presentation skills in order to communicate ideas and information effectively and clearly in a variety of written, public-speaking, and technology-mediated venues and formats;
3. Demonstrate interaction skills in working effectively with others in such a way as to be influential in a leadership capacity, to work well with others in team formats, and to respect and constructively support others in a diverse operating workplace;
4. Access and apply information relevant to the HR field using appropriate technology.

**Jewish Communal Service Certificate**

Post-Baccalaureate Certificate
https://www.towson.edu/cla/departments/familystudies/grad/jewishcommunalpbc/

Program Director: Dr. Hana Bor
Phone: 410-704-5026
Email: hbor@towson.edu

The Post-Baccalaureate Certificate in Jewish Communal Service is a 20-unit graduate program that prepares professional leaders for careers in the Jewish community. Students train for positions in a variety of settings, including Jewish Federations, Jewish Family Services, Jewish Community Centers, Jewish camps, Hillel, Jewish organizational life and synagogues. Core components include three graduate Jewish studies courses, three professional courses, a practicum seminar and a final project. All courses are selected with the approval of the Program Director.
Admission Requirements

- Bachelor’s degree from a regionally accredited college or university**
- Official transcript from all post-secondary institutions
- Minimum of a B average: overall GPA of 3.00/4.00
- Statement of Intent: a one-page essay describing your academic and professional goals and how this degree program can help you achieve these goals
- Sample of Work: a written sample of an academic research paper, thesis chapter, lesson plan or another type of field-related writing sample, no more than 20 pages
- Two letters of recommendation, at least one from an academic source.
- Applicants must be available for an interview with the director, in person or by phone.
- Current résumé
- Applicants from other countries are subject to the same requirements for admission as are applicants from the U.S. Applicants from countries where English is not the language of university-level instruction will be required to submit the results of the Test of English as a Foreign Language (TOEFL). JCS prefers a minimum score of 223 (computer-based) and 84-85 (internet-based). For information about test center locations, please visit the TOEFL website.
- Applicants from other countries will be required to demonstrate proof of funding in order to obtain a visa to attend school in the U.S. This information is not required for admissions consideration.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

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<tr>
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<td>LEADERSHIP IN JEWISH EDUCATION AND COMMUNITIES</td>
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<tr>
<td>JSTD 600</td>
<td>BIBLICAL LITERATURE AND CIVILIZATION</td>
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<td>JSTD 585</td>
<td>JEWISH LAW AND ETHICS</td>
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<tr>
<td>JSTD 680</td>
<td>INTRODUCTION TO RABBINIC LITERATURE AND HISTORY</td>
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<td>JSTD 630</td>
<td>MEDIEVAL JEWISH HISTORY</td>
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<td>JSTD 631</td>
<td>JEWS IN THE MODERN WORLD</td>
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<td>INTRODUCTION TO JEWISH THOUGHT</td>
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<td>JSTD 610</td>
<td>DIASPORA JEWISH COMMUNITIES</td>
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<td>AMERICAN JEWISH HISTORY</td>
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<td>JSTD 663</td>
<td>CONTEMPORARY JEWISH ETHICS: RESHAPING THE JEWISH IDENTITY IN OUR GENERATION</td>
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Select one Jewish Studies elective

Professional Courses

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<td>LJEC 600</td>
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</table>

Select at least one of the following:

Jewish Education Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cia/departments/familystudies/grad/jewisheducationpbc/

Program Director: Dr. Hana Bor
Phone: 410-704-5026
Email: hbor@towson.edu

The Post-Baccalaureate Certificate in Jewish Education is a 20-unit graduate program that provides students with the knowledge and tools to become effective Jewish educators. By integrating classical and contemporary Jewish studies with pedagogy, the certificate in Jewish Education program will prepare its students to embark on careers as educators in a formal or informal Jewish educational setting. The core components include three graduate Jewish studies courses, three education courses and a final project. All courses are selected in consultation with the Program Director.

Admission Requirements

- Bachelor’s degree from a regionally accredited college or university**
- Official transcript from all post-secondary institutions
- Minimum of a B average: overall GPA of 3.00/4.00
- Statement of Intent: a one-page essay describing your academic and professional goals and how this degree program can help you achieve these goals
- Sample of Work: a written sample of an academic research paper, thesis chapter, lesson plan or another type of field-related writing sample, no more than 20 pages.
- Two letters of recommendation, at least one from an academic source.
• Applicants must be available for an interview with the director, in person or by phone.
• Current résumé
• Applicants from other countries are subject to the same requirements for admission as are applicants from the U.S. Applicants from countries where English is not the language of university-level instruction will be required to submit the results of the Test of English as a Foreign Language (TOEFL). JCS prefers a minimum score of 223 (computer-based) and 84-85 (internet-based). For information about testing center locations, please visit the TOEFL website.
• Applicants from other countries will be required to demonstrate proof of funding in order to obtain a visa to attend school in the U.S. This information is not required for admissions consideration.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

### Degree Requirements

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<td>LJEC 602</td>
<td>FOUNDATIONS JEWISH EDUCATION</td>
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<td>FROM VISION TO PRACTICE IN JEWISH EDUCATION</td>
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<td>LJEC 764</td>
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<td>LJEC 557</td>
<td>HEBREW LANGUAGE INSTRUCTIONS FOR EDUCATORS</td>
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<td>LJEC 647</td>
<td>TEACHING CLASSICAL JEWISH TEXTS ¹</td>
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<td>LJEC 648</td>
<td>TEACHING CLASSICAL JEWISH TEXTS: A DEVELOPMENT APPROACH ¹</td>
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<td>LJEC 649</td>
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<td>LJEC 655</td>
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<td>LJEC 620</td>
<td>MODELS AND METHODS OF TEACHING LAW, CUSTOMS AND PRACTICE</td>
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<td>LJEC 621</td>
<td>MODELS AND METHODS OF TEACHING JEWISH HOLIDAYS</td>
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<td>EDUC 613</td>
<td>MORAL QUESTIONS IN THE CLASSROOM</td>
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<td>ILPD 650</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
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<td>Administration Track</td>
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<td>LJEC 611</td>
<td>MANAGEMENT OF HUMAN SERVICES: LEADERSHIP AND SUPERVISION</td>
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<td>LJEC 612</td>
<td>STRATEGIC MANAGEMENT OF JEWISH ORGANIZATIONS: MATERIAL RESOURCES</td>
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<td>Select one course in Contemporary Jewish Studies. Examples of courses include:</td>
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<td>SPECIAL TOPICS IN JUDAIC STUDIES</td>
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<td>Complete 2 units of the following:</td>
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<td>LJEC 614</td>
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</table>

1 Students may select only one course from the following: LJEC 647, LJEC 648 or LJEC 649.

1. Demonstrate content knowledge in Jewish Studies
2. Engage in research
3. Display proficiency in classroom teaching skills including the planning and teaching of curricular units
4. Apply technology to address diverse learning needs

### Jewish Studies M.A.

Degree: Master of Arts
https://www.towson.edu/cla/departments/interdisciplinary/grad/jewishstudies/

Program Director: Dr. Benjamin Fisher
Phone: 410-704-2910
Email: bfisher@towson.edu

The JDST-M.A. is a liberal arts program that offers students immersion in the history, literature and culture of Judaism as well as comprehension of the scope of the Jewish experience. Graduates of this program typically go on for a Ph.D. or seek employment requiring a depth of Judaic knowledge. The program consists of a five-course core sequence and a concentration in one of five fields: Biblical and Ancient Near Eastern Civilization, Rabbinic Literature, Jewish Thought and Mysticism, Jewish History, or Contemporary Jewish Studies.

### Admission Requirements

- Bachelor’s degree from a regionally accredited college or university**
- Minimum of a “B” average: overall GPA of 3.00/4.00
Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) plus the following:

• Official transcript from all post-secondary institutions
• Statement of Intent: a one-page essay describing your academic and professional goals and how this degree program can help you achieve these goals.
• Writing sample: an academic research paper, thesis chapter or a published writing sample, no more than 20 pages
• Three letters of recommendation, at least one from an academic source.
• Interview with the director, in person or by phone
• Current résumé
• Applicants from other countries are subject to the same requirements for admission as applicants from the U.S. Applicants from countries where English is not the language of university-level instruction will be required to submit the results of the Test of English as a Foreign Language (TOEFL). JDST prefers a minimum score of 223 (computer-based) and 84-85 (internet-based). For information about testing center locations, visit the TOEFL website at www.ets.org/toefl (http://www.ets.org/toefl).
• Applicants from other countries will be required to demonstrate proof of funding in order to obtain a visa to attend school in the U.S. This information is not required for admissions consideration.
• Applicants may be required to take the Graduate Record Examination (GRE) or Miller Analogies Test (MAT).

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

### Degree Requirements

The M.A. in Jewish Studies requires successful completion of 35 units with an average GPA of 3.00 or higher. Core Courses: 15 units; Concentration Courses: 12 units; Jewish Studies Seminar: minimum 2 units; Culminating Experience (either Master’s Thesis or Comprehensive exams): 6 units.

<table>
<thead>
<tr>
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<th>Units</th>
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<tbody>
<tr>
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<td>JDST 680</td>
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<td>JDST 611</td>
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**Jewish Studies Core Courses**

**Biblical and Ancient Near Eastern Civilization**

<table>
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**Rabbinic Literature**

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**History**

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<tbody>
<tr>
<td>JDST 630</td>
<td>MEDIEVAL JEWISH HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>JDST 666</td>
<td>INTRODUCTION TO JEWISH THOUGHT</td>
<td>3</td>
</tr>
</tbody>
</table>

**History**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDST 630</td>
<td>MEDIEVAL JEWISH HISTORY</td>
<td>3</td>
</tr>
<tr>
<td>JDST 666</td>
<td>INTRODUCTION TO JEWISH THOUGHT</td>
<td>3</td>
</tr>
</tbody>
</table>

**Jewish Thought and Mysticism**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDST 666</td>
<td>INTRODUCTION TO JEWISH THOUGHT</td>
<td>3</td>
</tr>
</tbody>
</table>

**Contemporary Jewish Studies**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDST 666</td>
<td>INTRODUCTION TO JEWISH THOUGHT</td>
<td>3</td>
</tr>
</tbody>
</table>

Examples of courses that fulfill this requirement include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDST 610</td>
<td>DIASPORA JEWISH COMMUNITIES</td>
<td>3</td>
</tr>
<tr>
<td>JDST 611</td>
<td>AMERICAN JEWISH HISTORY</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration**

Select 4 courses in a concentration: Biblical and Ancient Near Eastern Civilization; Rabbinic Literature and History; Jewish Thought and Mysticism; Jewish History; or Contemporary Jewish Studies

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDST 663</td>
<td>CONTEMPORARY JEWISH ETHICS:RESHAPING THE JEWISH IDENTITY IN OUR GENERATION</td>
<td>6</td>
</tr>
</tbody>
</table>

**Degree Completion**

Select one of the following options:

- **Option 1** - Take additional Jewish studies electives and sit for a Comprehensive Exam in their major field of study
  - JDST 897 | JDST THESIS (6 units–one term) | 6     |
  - JDST 898 | JDST THESIS (3 units–two consecutive terms) | 6     |
  - JDST 899 | THESIS CONTINUUM (1 unit–thesis continuum) | 6     |

**Jewish Studies Practicum Seminar**

The following is required every term until student graduates (2-unit minimum):

- JDST 719 | JEWISH STUDIES SEMINAR | 2     |

Total Units: 35

### Hebrew Requirement

Knowledge of Hebrew is the foundation of Judaic learning. All entering students must take the Hebrew placement examination. In order to receive the degree, students must demonstrate proficiency in the Hebrew equivalent to the level of two years of college Hebrew (through Biblical or Modern Hebrew IV). Beginning with their first term of matriculation, students must study Hebrew every term until this proficiency is attained. Students taking Hebrew course work at TU must attain a grade of “B” or better each term in order to be considered proficient. Courses through Biblical Hebrew IV or Modern Hebrew IV do not count toward the 35 units required for the degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEBR 101</td>
<td>ELEMENTS OF HEBREW I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 102</td>
<td>ELEMENTS OF HEBREW II</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 201</td>
<td>HEBREW INTERMEDIATE I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 202</td>
<td>HEBREW INTERMEDIATE II</td>
<td>3</td>
</tr>
<tr>
<td>JDST 544</td>
<td>BIBLICAL HEBREW I</td>
<td>3</td>
</tr>
<tr>
<td>JDST 545</td>
<td>BIBLICAL HEBREW II</td>
<td>3</td>
</tr>
<tr>
<td>JDST 546</td>
<td>BIBLICAL HEBREW III</td>
<td>3</td>
</tr>
<tr>
<td>JDST 547</td>
<td>BIBLICAL HEBREW IV</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Students will demonstrate content knowledge in Jewish Studies ranging from the world of the Bible and ancient Near East to modernity in the West and Middle East.
2. Students will acquire a mastery of the Hebrew language that will be sufficient to facilitate serious academic work in Jewish Studies.
3. Students will demonstrate knowledge of research techniques in order to:
   - access information effectively and efficiently
   - evaluate critically the sources and content of information
   - use information effectively to accomplish a specific purpose, be it ones thesis or a research paper for a particular course
Leadership in Jewish Education and Communal Service M.A.

Degree: Master of Arts
https://www.towson.edu/cla/departments/familystudies/grad/jewisheducation/

Program Director: Dr. Hana Bor
Phone: 410-704-5026
Email: hbor@towson.edu

The Master of Arts in Leadership in Jewish Education and Communal Service program prepares students for careers as professional leaders for the Jewish community with a combination of leadership training, communal service and practical field experience. Through a choice of two concentrations, Education and Communal Professional, the program offers an interdisciplinary curriculum that combines courses in leadership, education, non-profit management, communal service, Judaic studies and an internship experience tailored to each student.

This program emphasizes the development of students’ capacities for effective communication, critical analysis, and flexible thought. Students train for careers as educators or communal professionals in local, national and global nonprofits, service or educational organizations within the Jewish community. Examples include: the Jewish Federation, Hillel, Jewish Community Centers, social service agencies, Jewish schools, synagogues and others. Core components include five graduate Jewish studies courses, six professional courses, a supervised internship, and practicum seminar.

Combined Bachelor's Degree in Family Science and Master's Degree in Leadership in Jewish Education and Communal Service

Students may also earn the M.A. in Leadership in Jewish Education and Communal Service through the combined bachelor’s to master’s program (https://catalog.towson.edu/undergraduate/liberal-arts/family-studies-community-development/combined-bachelors-family-science-masters-jewish-communal-service). This program is designed to allow students to complete both the undergraduate and graduate degrees in five years, including 9 units taken during the summer terms. Students are required to complete the Hebrew Language requirement necessary for both the B.A. and acceptance into the M.A. program.

Admission Requirements

- Bachelor's degree from a regionally accredited college or university**
- Minimum of a B average: overall GPA of 3.0/4.0
- Towson University graduate school application with required fee
- Official transcripts from all post-secondary institutions attended
- Statement of Intent: a one page essay describing your academic and professional goals and how this degree program can help you achieve these goals.
- Sample of Work: a written sample of an academic research paper, thesis chapter, lesson plans or another type of field-related writing sample, no more than 20 pages long.
- Two letters of recommendation, at least one from an academic source
- Current resume
- Interview with the director, in person or by phone

• Applicants from other countries are subject to the same requirements for admission as are applicants from the U.S. Applicants from countries where English is not the language of university-level instruction will be required to submit the results of the Test of English as a Foreign Language (TOEFL). JCS prefers a minimum score of 223 (computer-based) and 84-85 (internet-based). For information about testing center locations, please visit the TOEFL website.
• Applicants from other countries will be required to demonstrate proof of funding in order to obtain a visa to attend school in the United States. This information is not required for admissions consideration.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

The M.A. in Leadership in Jewish Education and Communal Service requires successful completion of 38 units with an average GPA of 3.00 or higher. Core Courses: 15 units; Professional Courses: 18 units; Seminar: 2 units; Internship 3 units; Culminating Project; and Hebrew requirement.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>JDST</td>
<td>BIBLICAL LITERATURE AND CIVILIZATION</td>
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<tr>
<td>JDST</td>
<td>JEWISH LAW AND ETHICS</td>
<td></td>
</tr>
<tr>
<td>JDST</td>
<td>INTRODUCTION TO RABBINIC LITERATURE AND HISTORY</td>
<td></td>
</tr>
<tr>
<td>JDST</td>
<td>MEDIEVAL JEWISH HISTORY</td>
<td></td>
</tr>
<tr>
<td>JDST</td>
<td>JEWS IN THE MODERN WORLD</td>
<td></td>
</tr>
<tr>
<td>JDST</td>
<td>INTRODUCTION TO JEWISH THOUGHT</td>
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</tr>
<tr>
<td>ILPD</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
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</table>

Leadership Core

<table>
<thead>
<tr>
<th>Leadership Core</th>
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</thead>
<tbody>
<tr>
<td>LJEC 600</td>
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</table>

Practicum Seminar

<table>
<thead>
<tr>
<th>Practicum Seminar</th>
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</thead>
<tbody>
<tr>
<td>LJEC 614</td>
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</tbody>
</table>

The following course is required every term for two years, one unit per year:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILPD</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
<td>2</td>
</tr>
</tbody>
</table>
Supervised Jewish Communal Service Internship  
LJEC 618  SUPERVISED JEWISH COMMUNAL SERVICE INTERNSHIP

Elective - Students may select from courses in Jewish Studies, Jewish Education, Jewish Communal Service, Family Studies or related topic with approval from the advisor/program director

Concentration

See below

Total Units 38

1 Students complete a required field placement of a minimum of 400 hours.

Concentration I: Jewish Education

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Jewish Education</td>
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<tr>
<td></td>
<td>Select one of each of the following two groups:</td>
<td>6</td>
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<tr>
<td></td>
<td>Group 1</td>
<td></td>
</tr>
<tr>
<td>LJEC 602</td>
<td>FOUNDATIONS JEWISH EDUCATION</td>
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</tr>
<tr>
<td>LJEC 604</td>
<td>CURRICULUM PLANNING AND DECISION MAKING FOR THE JEWISH SCHOOL</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group 2</td>
<td></td>
</tr>
<tr>
<td>FMST 620</td>
<td>PROJECT IN FAMILY FOCUSED PROGRAM DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>LJEC 606</td>
<td>FROM VISION TO PRACTICE IN JEWISH EDUCATION</td>
<td></td>
</tr>
<tr>
<td>LJEC 764</td>
<td>QUALITATIVE RESEARCH IN JEWISH EDUCATION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teaching Jewish Subject</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following:</td>
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</tr>
<tr>
<td>LJEC 557</td>
<td>HEBREW LANGUAGE INSTRUCTIONS FOR EDUCATORS</td>
<td></td>
</tr>
<tr>
<td>LJEC 621</td>
<td>MODELS AND METHODS OF TEACHING JEWISH HOLIDAYS</td>
<td></td>
</tr>
<tr>
<td>LJEC 647</td>
<td>TEACHING CLASSICAL JEWISH TEXTS</td>
<td></td>
</tr>
<tr>
<td>LJEC 655</td>
<td>TEACHING THE HISTORY, POLITICS AND CULTURE OF ISRAEL</td>
<td></td>
</tr>
<tr>
<td>ILPD 650</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
<td></td>
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<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Select one of the following - courses are approved by the Graduate Program Director. Examples include:</td>
<td></td>
</tr>
<tr>
<td>ILPD 650</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
<td></td>
</tr>
<tr>
<td>EDUC 613</td>
<td>MORAL QUESTIONS IN THE CLASSROOM</td>
<td></td>
</tr>
<tr>
<td>LJEC 557</td>
<td>HEBREW LANGUAGE INSTRUCTIONS FOR EDUCATORS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Special Topic Courses from JDST, FMST, JCS, or other related discipline, Independent Study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>12</td>
</tr>
</tbody>
</table>

Concentration II: Communal Professional

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Professional Core</td>
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<tr>
<td></td>
<td>Select two of the following:</td>
<td>6</td>
</tr>
<tr>
<td>LJEC 610</td>
<td>PRINCIPLES OF JEWISH COMMUNAL SERVICE</td>
<td></td>
</tr>
<tr>
<td>LJEC 611</td>
<td>MANAGEMENT OF HUMAN SERVICES: LEADERSHIP AND SUPERVISION</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LJEC 612  STRATEGIC MANAGEMENT OF JEWISH ORGANIZATIONS: MATERIAL RESOURCES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Elective</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Select two of the following - courses are approved by the Graduate Program Director. Examples include:</td>
<td></td>
</tr>
<tr>
<td>LJEC 611</td>
<td>MANAGEMENT OF HUMAN SERVICES: LEADERSHIP AND SUPERVISION</td>
<td></td>
</tr>
<tr>
<td>ILPD 650</td>
<td>EXPLORATION OF HOLOCAUST EDUCATION</td>
<td></td>
</tr>
<tr>
<td>FMST 550</td>
<td>FUNDAMENTALS OF LEADERSHIP IN THE NON-PROFIT SECTOR</td>
<td></td>
</tr>
<tr>
<td>FMST 555</td>
<td>FUNDRAISING, FRIENDRAISING AND VOLUNTEER MANAGEMENT</td>
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</tr>
<tr>
<td></td>
<td>Special Topic Courses from JDST, FMST, JCS, or other related discipline, Independent Study</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Units</td>
<td>12</td>
</tr>
</tbody>
</table>

Other Requirement for Graduation

All students are required to submit a master's project or professional portfolio in order to graduate.

Hebrew Requirement

Knowledge of Hebrew is the foundation of Judaic learning. All entering students must take the Hebrew placement examination. In order to receive the degree, students must demonstrate proficiency in Hebrew equivalent to the level of two years of college Hebrew (through Biblical or Modern Hebrew IV). Beginning with their first term of matriculation, students must study Hebrew every term until this proficiency is attained. Students taking Hebrew course work must attain a grade of B or better each term in order to be considered proficient. Courses through Biblical Hebrew IV or Modern Hebrew IV do not count toward the 38 units required for the degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HEBR 101  ELEMENTS OF HEBREW I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 102</td>
<td>ELEMENTS OF HEBREW II</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 201</td>
<td>HEBREW INTERMEDIATE I</td>
<td>3</td>
</tr>
<tr>
<td>HEBR 202</td>
<td>HEBREW INTERMEDIATE II</td>
<td>3</td>
</tr>
<tr>
<td>JDST 544</td>
<td>BIBLICAL HEBREW I</td>
<td>3</td>
</tr>
<tr>
<td>JDST 545</td>
<td>BIBLICAL HEBREW II</td>
<td>3</td>
</tr>
<tr>
<td>JDST 546</td>
<td>BIBLICAL HEBREW III</td>
<td>3</td>
</tr>
<tr>
<td>JDST 547</td>
<td>BIBLICAL HEBREW IV</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Students will demonstrate content knowledge in Jewish studies.
2. Students will display Hebrew language and cultural literacy and proficiency in Hebrew reading, writing and speaking.
3. Students will be able to apply best practices in leadership of organizational management, community development, or education.
4. Students will demonstrate knowledge of research techniques relevant to organizational management, community development, or education.

Professional Writing M.S.

Degree: Master of Science
https://www.towson.edu/cla/departments/english/gradwriting/

Program Director: Geoffrey Becker
Phone: 410-704-5196
The program provides advanced study in the theory of writing, writing techniques and style, principles/techniques of editing, and the functions of written communication within the professional/occupational setting. Courses aim to develop the communication skills of people seeking to enter or to advance in occupations requiring extensive writing and/or the analysis and reporting of data. Students choose from tracks in writing for the public and private sectors, technical writing and information design, teaching writing, journalistic writing, scientific writing and creative writing.

Admission Requirements

- A 3.00 is required for full admission and 2.75 for conditional admission. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Based upon the applicant’s undergraduate transcript and the writing sample, the department reserves the right to require two specified preparatory undergraduate writing courses, passed with the grade of “B” or higher in each course, for admission.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Two letters of recommendation, preferably letters that speak to writing experience and capability.
- Personal essay of 750-1000 words in which you tell us about yourself and about your reasons for wishing to pursue this degree. You may include an additional example of your writing if you wish (10 pages or fewer), but this is not required.

NOTE: Upon admission to the program, the student must meet with the assigned adviser to plan a program of study.

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PRWR 611</td>
<td>RHETORIC: THE PURSUIT OF ELOQUENCE ¹</td>
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</tr>
<tr>
<td>PRWR 612</td>
<td>RHETORICAL GRAMMAR</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 613</td>
<td>THEORY EXPOSITION</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 615</td>
<td>HISTORY AND DEVELOPMENT OF PROSE STYLE</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 617</td>
<td>EDITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 797</td>
<td>INTERNSHIP PROF WRITING</td>
<td>3</td>
</tr>
</tbody>
</table>

Select 9 units of PRWR 600/700 courses, chosen with advisor, appropriate to track (electives may include 6 units of Thesis)

Select one of the six tracks listed below.

Total Units 36

Tracks

Writing for the Public and Private Sectors

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRWR 619</td>
<td>COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS</td>
<td></td>
</tr>
<tr>
<td>PRWR 621</td>
<td>BUSINESS WRITING</td>
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</table>

Technical Writing and Information Design

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PRWR 623</td>
<td>TECHNICAL WRITING AND INFORMATION DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 628</td>
<td>DESIGNING CONTENT FOR THE WEB</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 625</td>
<td>DESIGN LAYOUT &amp; PRODUCTION</td>
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Total Units 9

Teaching Writing

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>SCED 603</td>
<td>TEACHING WRITING ACROSS THE CURRICULUM</td>
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<tr>
<td>PRWR 621</td>
<td>BUSINESS WRITING</td>
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<tr>
<td>PRWR 627</td>
<td>MODERN RHETORIC</td>
<td></td>
</tr>
<tr>
<td>PRWR 633</td>
<td>TEACHING COLLEGE COMPOSITION</td>
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</table>

Total Units 9

Journalistic Writing

<table>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MCOM 502</td>
<td>LITERARY JOURNALISM</td>
<td>9</td>
</tr>
<tr>
<td>MCOM 603</td>
<td>CRITICISM IN MASS MEDIA</td>
<td></td>
</tr>
<tr>
<td>MCOM 621</td>
<td>MASS MEDIA LAW AND REGULATIONS</td>
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<tr>
<td>MCOM 651</td>
<td>MEDIA AND POLITICS</td>
<td></td>
</tr>
<tr>
<td>PRWR 705</td>
<td>WRITING CREATIVE NON-FICTION</td>
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</tr>
<tr>
<td>PRWR 713</td>
<td>FREELANCE WRITING</td>
<td></td>
</tr>
<tr>
<td>PRWR 730</td>
<td>WRITING REVIEWS</td>
<td></td>
</tr>
<tr>
<td>PRWR 731</td>
<td>SCIENCE AND ITS PUBLIC AUDIENCE</td>
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</table>

Total Units 9

Scientific Writing

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PRWR 623</td>
<td>TECHNICAL WRITING AND INFORMATION DESIGN</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 691</td>
<td>RESEARCH TECHNIQUES IN PROFESSIONAL WRITING</td>
<td>3</td>
</tr>
<tr>
<td>PRWR 731</td>
<td>SCIENCE AND ITS PUBLIC AUDIENCE</td>
<td>3</td>
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</tbody>
</table>

Total Units 9

Creative Writing

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PRWR 647</td>
<td>WRITING POETRY (3-6 units)</td>
<td>9</td>
</tr>
<tr>
<td>PRWR 651</td>
<td>WRITING SHORT FICTION (3-6 units)</td>
<td></td>
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<tr>
<td>PRWR 653</td>
<td>WRITING THE NOVEL (3-6 units)</td>
<td></td>
</tr>
<tr>
<td>PRWR 705</td>
<td>WRITING CREATIVE NON-FICTION (3-6 units)</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 9

Portfolio

All students in Professional Writing are required to complete a written master’s degree portfolio as a qualifying exam. The portfolio must be submitted between completion of 12 to 18 units of degree work. If
deemed unsatisfactory, the portfolio may be resubmitted once. A second failure results in dismissal from the program.

**Combined Bachelor's Degree in English and M.S. in Professional Writing**

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 a shorter time frame, including 6 units taken during summer terms. This program is open only to undergraduates pursuing the Writing track in English. 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 Gen Ed. 1D requirement with a class from the English Department, ENGL 313, ENGL 315 or ENGL 316)
- Achievement of an overall GPA of 3.3 or better and a GPA in English of 3.3 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 admissions materials

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 BS and the 36 units required for the M.S. See Undergraduate Catalog for stipulations pertaining to the completion of the bachelor's degree.

1. Demonstrate ability to focus on a topic, deliver sound, reasonable evidence to support or develop that topic; clearly and logically organize the work and show evidence of craft
2. Demonstrate flexibility in a range of writing styles as well as sentence and paragraph-level command of language
3. Demonstrate line-level competence with grammar, punctuation, and vocabulary

**Psychology M.A. - Clinical Psychology**

Degree: Master of Arts
https://www.towson.edu/cla/departments/psychology/grad/psychology/clinical/

Program Director: Dr. Jonathan Mattanah
Phone: 410-704-3208
Email: jmattanah@towson.edu (ekatz@towson.edu)

The clinical psychology concentration of the Master of Arts in Psychology is ideally suited to meet the needs of individuals who want to provide clinical services at the masters’ level as a licensed clinical professional counselor (LCPC), want to work as master’s-level psychometricians or behavioral specialists, want to work as research or clinical staff on applied research studies, or are considering pursuing doctoral training in clinical psychology.

The program curriculum provides comprehensive and hands-on training in assessment, diagnosis, state-of-the-art and evidence-based treatments, as well as research methods and statistics. Courses in psychotherapy and behavior change prepare students to do intake interviews and case conceptualizations and to provide evidence-based individual therapy. Advanced seminars in legal, ethical and professional issues in psychology, personality and intellectual assessment are offered regularly and prepare students for the required nine-month field placement.

Opportunities are available for students to work on research projects under the direct supervision of a faculty member. In addition to completing a research thesis, students may also have the opportunity, depending on the faculty member, to assist in developing research conference presentations and manuscripts for publication.

A unique feature of the clinical psychology concentration is a required halftime, nine-month internship. Students may elect to complete a clinical or research internship depending upon their personal and professional goals. Students on clinical internships provide supervised psychological services to clients in an off-campus mental health setting. Students on
research internships will assist an experienced scientist in conducting clinical trials research.

Clinical psychology students are encouraged to attend full time so as to complete all program requirements within four terms. Students may, however, attend part time for some or all of their degree work.

**Admission Requirements**

Courses in the following areas:

- General Psychology (3)
- Abnormal Psychology (3)
- Behavioral Statistics (3)
- Personality, social, cognitive or developmental psychology (3)

*Students must have earned a grade of "B" or better in all prerequisites except general psychology. These courses cannot be used to meet the formal elective requirements for the degree as defined below.*

- A minimum undergraduate GPA of 3.00.

*All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.*

- Acceptable performance on the General Test of the Graduate Record Examination.
- Two letters of recommendation

*Academic letters, preferred.*

- A personal statement, not to exceed four double-spaced pages, addressing the applicant's reasons for pursuing a master's degree in Clinical Psychology, their area of clinical and/or research interest and their professional goals.

Applicants must complete the online application (http://www.towson.edu/academics/graduate/admissions/apply) and include the required materials.

**Admissions Interview**

Applicants who meet our minimum academic requirements and are considered a good fit for the program will be invited to interview with the clinical psychology program admissions committee. The interview is a required part of the admissions process.

**Admissions Timeline**

Students are admitted to the Clinical Psychology program for the fall term only. Those wishing to begin graduate work in the fall must have their completed application and all admission credentials submitted to University Admissions by January 15. Application materials will be reviewed between January 15 and February 15. Interviews will be scheduled during the last week in February and first two weeks in March. Offers of admission will be sent beginning the last week of March with an expected acceptance date of April 15. *(Please note that this timeline is tentative and subject to change).* Admission is granted on a competitive, space-available basis.

Prospective applicants are encouraged to visit the clinical psychology website at www.towson.edu/clinicalpsych.

**Non-immigrant international students**: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Degree Requirements**

Students may choose between the Researcher and Practitioner options. Students pursuing either option must complete 48 units of required and elective coursework including a research project (see below for details) and a two-term, 500-hour field placement. Students may need to take summer courses to meet the program requirements.

**Researcher vs. Practitioner Options**

Students in both options must complete the 36 units of required coursework. Additional requirements for each of the options are noted below.

**Researcher Option**

Students electing to pursue the Researcher option will work with a faculty member to complete an empirical thesis. Students must take a total of 6 units of thesis credits; students may either take PSYC 897 for 6 units in one term or PSYC 898 for 3 units over two terms. Students must also take 6 units of elective credit.

*NOTE: Students must remain continuously enrolled in a Thesis course until all thesis requirements have been completed and must be enrolled in thesis credits during the term in which they plan to graduate. Students who have taken all 6 units of thesis credit and who have not completed the thesis requirements must take PSYC 899 (Thesis Continuum) for 1-unit during each subsequent term until the thesis requirements are complete.*

**Practitioner Option**

Students electing to pursue the Practitioner option will work with the program director or other faculty member to complete a comprehensive literature review and critique (the topic will be chosen collaboratively between the student and the faculty advisor). Students must take 3 units of PSYC 691 (Independent Investigation in Psychology) and 9 units of elective credit.

**Electives**

Elective course work is chosen by the student from within or outside the field of psychology. These courses are expected to complement the program of study and require prior written consent of the program director.

**Field Placement Requirement**

The practicum and internship carry with them a residency requirement of two terms. The student must be available for a 16-hour per week placement in a clinical or research setting. All students must obtain the grade of "B" or better in Practicum in Clinical Psychology (PSYC 697) and Internship in Clinical Psychology (PSYC 797). Students earning a grade lower than "B" in either course may repeat the entire sequence no more than one time. Failure to earn a "B" or higher in both courses will result in dismissal from the program.

**Course List**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC 720</td>
<td>ASSESSMENT OF INTELLIGENCE</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 631</td>
<td>ADVANCED ABNORMAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 632</td>
<td>ADVANCED CHILD PSYPATHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 687</td>
<td>ADVANCED EXPERIMENTAL DESIGN I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 688</td>
<td>ADVANCED EXPERIMENTAL DESIGN II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 665</td>
<td>PSYCHOTHERAPY AND BEHAVIOR CHANGE I</td>
<td>3</td>
</tr>
</tbody>
</table>
Students are encouraged to attend full time to meet the program requirements in two years. Students may, however, attend part time for some of their degree work. Some courses are offered during the summer session.

**Admission Requirements**

- Students must have taken the following prerequisites (all of which must be completed with a “C” or better):
  - General Psychology (3)
  - Behavioral Statistics (3)
  - Research Methods (3)
  - Abnormal Psychology (3)
- A minimum undergraduate GPA of 3.00. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- An undergraduate transcript from all colleges attended must be sent to University Admissions.
- Acceptable performance on the Graduate Record Examination (GRE).
- The highest-ranking applicants will be required to interview with the faculty of the Counseling Psychology program.

Completed applications and admission credentials must meet the deadline of January 15 for fall term admission. Applications are not accepted for spring term admission.

**Non-immigrant international students:** See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Degree Requirements**

Students must complete prerequisite courses. Students should be prepared to take at least two years to complete the program.

The Master of Arts in Counseling Psychology offers a practitioner option and a thesis/research option from which degree candidates can choose.

The research option provides students with the experience, knowledge and skills required for successful admission to a doctoral program. Students in this option receive intensive training and mentorship in research and complete a thesis.

Students in the practitioner option are trained to work as counselors and therapists at the master’s level. Graduates of the practitioner option may choose to continue their education or pursue licensure at the master’s level.

Both the practitioner and research options require a minimum of 48 units for the degree. However, students are permitted to take up to 60 course units in their degree program for the purposes of meeting state licensing requirements to practice as a professional counselor.

**Required Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 605</td>
<td>COUNSELING TECHNIQUES</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 606</td>
<td>CAREER DEVELOPMENT</td>
<td>3</td>
</tr>
</tbody>
</table>
over one term or on a part-time basis (20 hours a week) over two
and complete 600 clinical hours on a full-time basis (40 hours a week)
Practitioner option students may elect to enroll in 6 units of internship
complete a supervised 300-hour internship in a clinical setting.
Internship: Following successful completion of the practicum, students
professional training.
students engage in clinical experiences appropriate for their level of
the student and available licensed supervisors. During the practicum,
arranged by the coordinator of clinical training in consultation with
in a required weekly class on campus. The practicum placements are
professional. Practicum also involves attendance and participation
provide counseling under the supervision of a licensed mental health
involves 240 clock hours (16 hours a week) in a setting where students
in a term-long practicum course. The course involves 240 clock hours (16 hours a week) in a setting where students provide counseling under the supervision of a licensed mental health professional. Practicum also involves attendance and participation in a required weekly class on campus. The practicum placements are arranged by the coordinator of clinical training in consultation with the student and available licensed supervisors. During the practicum, students engage in clinical experiences appropriate for their level of professional training.
Internship: Following successful completion of the practicum, students complete a supervised 300-hour internship in a clinical setting. Practitioner option students may elect to enroll in 6 units of internship and complete 600 clinical hours on a full-time basis (40 hours a week) over one term or on a part-time basis (20 hours a week) over two

Field Experiences
This program includes field experiences in the form of practicum and internship. These clinical experiences are part of the requirements necessary for certification or licensure in the state of Maryland.

Practicum: During the second year of the program, concurrent with other course work, students enroll in a term-long practicum course. The course involves 240 clock hours (16 hours a week) in a setting where students provide counseling under the supervision of a licensed mental health professional. Practicum also involves attendance and participation in a required weekly class on campus. The practicum placements are arranged by the coordinator of clinical training in consultation with the student and available licensed supervisors. During the practicum, students engage in clinical experiences appropriate for their level of professional training.

Internship: Following successful completion of the practicum, students complete a supervised 300-hour internship in a clinical setting. Practitioner option students may elect to enroll in 6 units of internship and complete 600 clinical hours on a full-time basis (40 hours a week) over one term or on a part-time basis (20 hours a week) over two
terms. Internships are supervised on site by a licensed mental health professional and include a weekly class meeting with a faculty member.

Examinations
At the end of the first year of full-time study and in the last term of enrollment, students participate in a formal evaluation process to assess their cumulative knowledge of completed course work and skills in counseling psychology.

• The advancement examination contains assessment of research methods, community mental health counseling, advanced abnormal psychology, individual appraisal, counseling theories, and ethics. The completion of this evaluation is a prerequisite for the following courses:
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 718</td>
<td>TECHNIQUES OF FAMILY COUNSELING</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 721</td>
<td>GROUP COUNSELING</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 722</td>
<td>ADVANCED MULTICULTURAL COUNSELING</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 745</td>
<td>PRACTICUM IN COUNSELING PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 793</td>
<td>INTERNSHIP IN COUNSELING PSYCHOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

• The comprehensive examination contains assessment of career counseling, developmental psychology, multicultural counseling and group counseling.

Students will be given two attempts to complete these examinations. Students who do not pass either of these examinations after two attempts will be dismissed from the program.

All degree candidates must meet with their academic advisor to file intended programs of study. This should be done prior to or during the first term of course work. The program can be amended in consultation with the advisor.

1. Employ research methods appropriate to the discipline;
2. Demonstrate basic discipline-specific skills and competencies;
3. Demonstrate competency in acquiring and processing information in the search for understanding.

Psychology M.A. - Experimental Psychology

Degree: Master of Arts
https://www.towson.edu/cla/departments/psychology/grad/psychology/experimental/

Program Director: Dr. Justin Buckingham
Phone: 410-704-3214
Email: j buckingham@towson.edu

The Experimental Psychology Concentration of the Master of Arts program in Psychology at Towson University is intended for students with interests in any area of psychological research (e.g., clinical, cognitive, developmental, neuroscience, social). The program prepares students for enrollment in doctoral programs or for research jobs in the public and private sectors.

The concentration is intended either for students who have completed an undergraduate degree in psychology or for those students who have undergraduate degrees in other majors who are interested in pursuing psychological research. Graduates will be prepared to pursue doctoral degrees in psychology in a variety of specialty areas or prepare for
such positions as research analyst, research coordinator or statistical analyst. Students in the concentration receive extensive training in research design and analysis and have access to a large and diverse faculty. Students receive considerable personal attention. All students are mentored by faculty in their area of interest and most classes have fewer than 16 students. As a result, students have been very successful in either gaining admission to doctoral programs or finding employment in the field of research design and analysis.

A thesis is required of all students.

Students may work toward the degree either full time or part time. Courses are offered only in the late afternoons and evenings.

**Admission Requirements**

- Prerequisite courses with grades of “B” or higher in the following areas:
  - Statistics
  - Experimental Psychology or Research Methods in Psychology
  - Learning or Cognitive Psychology
- A minimum undergraduate GPA of 3.00 is required for full admission to the program. Conditional admission is occasionally offered to students with GPAs of less than 3.00 who show exceptional research promise.
- Acceptable performance on the Graduate Record Exam (GRE).

Submit the online application (http://www.towson.edu/academics/graduate/admissions/apply) plus the following:

- A 600- to 900-word personal statement describing your research interests, research experience and professional goals. You are strongly encouraged to mention in this letter the faculty member(s) with whom you most want to work.
- Two letters of recommendation. Letters commenting on research experience are particularly useful.

Completed application and admission credentials must meet the deadline of February 15 for fall term admission. Applications are not accepted for spring term admission. Students who miss the application deadline may contact the program director to inquire if space is still available in the incoming class. Admission is granted on a competitive, space-available basis.

**Non-immigrant international students:** See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Degree Requirements**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>PSYC 672</td>
<td>PROSEMINAR</td>
<td>3</td>
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<tr>
<td>PSYC 674</td>
<td>ADVANCED BIOLOGICAL PSYCHOLOGY</td>
<td>4</td>
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<tr>
<td>PSYC 675</td>
<td>RESEARCH SEMINAR IN EXPERIMENTAL PSYCHOLOGY</td>
<td>1</td>
</tr>
<tr>
<td>PSYC 679</td>
<td>SPECIAL TOPICS SEMINAR</td>
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</tr>
<tr>
<td>PSYC 680</td>
<td>ADVANCED COGNITIVE PSYCHOLOGY</td>
<td>4</td>
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<tr>
<td>PSYC 682</td>
<td>ADVANCED SOCIAL PSYCHOLOGY</td>
<td>3</td>
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<tr>
<td>PSYC 687</td>
<td>ADVANCED EXPERIMENTAL DESIGN I</td>
<td>3</td>
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<tr>
<td>PSYC 688</td>
<td>ADVANCED EXPERIMENTAL DESIGN II</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 689</td>
<td>MULTIVARIATE METHODS</td>
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**Electives**

Select at least 6 units of graduate electives at the 500-700 level with permission from the program director. The following are recommended electives:

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PSYC 611</td>
<td>DEVELOPMENTAL PSYCHOLOGY</td>
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<tr>
<td>PSYC 685</td>
<td>COLLEGE TEACHING PRACTICUM</td>
<td></td>
</tr>
<tr>
<td>PSYC 679</td>
<td>SPECIAL TOPICS SEMINAR (on a different topic from the one taken as a required course)</td>
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</tr>
<tr>
<td>PSYC 691</td>
<td>INDEPENDENT INVESTIGATION IN PSYCHOLOGY</td>
<td></td>
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</tbody>
</table>

**Total Units** 39

1. Employ research methods appropriate to the discipline;
2. Demonstrate basic discipline-specific skills and competencies;
3. Demonstrate competency in acquiring and processing information in the search for understanding.

**School Psychology M.A. and Certificate**

Degree: Certificate of Advanced Study and Master of Arts

https://www.towson.edu/cla/departments/psychology/grad/psychology/school/

Program Director: Dr. Bruce Mortenson
Phone: 410-704-3204
Email: bmortenson@towson.edu

The 66-unit program, in which students earn a master’s (M.A.) degree in Psychology and Certificate of Advanced Study in School Psychology, is fully approved by NASP. Students who earn both the M.A. and the C.A.S. are eligible for individual certification as Nationally Certified School Psychologists, pending successful completion of the national certification examination. Graduates of the program are also qualified for a variety of positions within the field of psychology and for entrance into doctoral programs.

The mission of the School Psychology program is to produce school psychologists who are well prepared to function independently in a growing and evolving profession. Graduate students in school psychology are trained to view themselves as part of the larger school system, and to make their contributions relevant to the goals of the institutions in which they are employed. The School Psychology master’s and C.A.S program emphasize early intervention and the use of data-driven, systematic problem solving to address the needs of children and adolescents in the school setting. Students are trained to provide consultation to teachers, parents and administrators; to provide direct counseling and intervention to children and adolescents; to complete ecological assessments of classroom environments; and to administer and interpret a variety of psychological tests to assess intellectual functioning, academic achievement, adaptive behavior, and social/ emotional characteristics of students. Students are trained to complete multidimensional evaluations that address the specific reason for referral and that are directly linked to recommendations for intervention.

The program promotes the use of intervention and assessment techniques that are empirically sound and sensitive to the diverse population of students that school psychologists serve. Students
are expected to display professional work characteristics that are critical to their ability to work effectively with peers, faculty and school-based personnel. These include respect for human diversity, effective communication skills, effective interpersonal skills, ethical behavior, adaptability, flexibility and independence.

Admission Requirements

- At least 21 undergraduate units in psychology, which include course work in each of the following areas (all of which must be completed with a grade of "C" or better)\(^1\):
  - Behavioral Statistics
  - Abnormal Psychology or Psychopathology
  - Social Psychology
  - Course work selected from the following: Experimental Psychology, Experimental Design or Research Design
  - Course work selected from the following: Child Development, Adolescent Development, Human Development
  - Course work selected from the following: Educational Psychology, Behavioral Principles, Behavior Modification, Applied Behavior Management
  - A minimum undergraduate GPA of 3.00 is required for admission to the program. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
  - Acceptable performance on the General Test of the Graduate Record Examination (GRE) taken within the past five years. Competency for graduate study can also be evidenced by an earned master’s degree in psychology in lieu of the GRE.
  - The highest-ranking applicants will be required to interview with the faculty of the School Psychology program.

\(^1\) NOTE: These undergraduate prerequisites cannot be used to satisfy any part of the requirements of the master’s degree and C.A.S. They must be completed prior to initiation of course work for the degree.

Submit the online application (https://www.towson.edu/academics/graduate/admissions/apply) including the following:

- Three letters of recommendation
- A letter of intent indicating why the applicant is interested in pursuing graduate study in school psychology

Completed application and admission credentials must meet the deadline of January 15 for fall admission. Students who miss this deadline may contact the program director to inquire if space is still available. Admission is granted on a competitive, space-available basis. Applications are not accepted for spring admission.

NOTE: For candidates already possessing a master’s degree in School Psychology, courses from a previous degree in School Psychology must be required courses in the current C.A.S. program in order to be accepted toward fulfilling requirements for the C.A.S. Courses that have been taken for the previous master’s degree will be reviewed for content and currency by the program director. Additionally, students must earn a minimum of 30 units in the School Psychology program to graduate, as well as complete the culminating internship. Other requirements will be determined on an individual basis. Candidates holding a master’s degree in Psychology from Towson University in another concentration cannot earn a duplicate degree in Psychology but can complete the full School Psychology program as a C.A.S. student.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

### Degree and Certificate Requirements

#### Required Courses for the Master’s Degree

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYC 605</td>
<td>COUNSELING TECHNIQUES</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 625</td>
<td>FUNCTIONAL BEHAVIORAL ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 651</td>
<td>INTERVENTIONS IN SCHOOL SETTINGS</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 687</td>
<td>ADVANCED EXPERIMENTAL DESIGN I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 713</td>
<td>ROLE OF THE SCHOOL PSYCHOLOGIST</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 720</td>
<td>ASSESSMENT OF INTELLIGENCE</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 733</td>
<td>EXCEPTIONAL CHILD: ADVANCED ISSUES</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 761</td>
<td>SOCIAL-EMOTIONAL AND BEHAVIORAL ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 790</td>
<td>ETHICAL, LEGAL AND PROFESSIONAL ISSUES IN PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 611</td>
<td>DEVELOPMENTAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>30</strong></td>
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#### Required Courses for the Certificate of Advanced Study

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<th>Title</th>
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<tbody>
<tr>
<td>PSYC 622</td>
<td>ADVANCED MULTICULTURAL PSYCHOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 703</td>
<td>PRESCHOOL ASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 730</td>
<td>ADVANCED CHILD AND ADOLESCENT PSYCHOTHERAPY</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 731</td>
<td>SCHOOL BASED CONSULTATION</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 735</td>
<td>DIRECT ASSESSMENT OF ACADEMIC SKILLS</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 771</td>
<td>SCHOOL PSYCHOLOGY PRACTICUM I</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 773</td>
<td>SCHOOL PSYCHOLOGY PRACTICUM II</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 794</td>
<td>INTERNSHIP IN SCHOOL PSYCHOLOGY II (Spring term)</td>
<td>4.5</td>
</tr>
<tr>
<td>PSYC 794</td>
<td>INTERNSHIP IN SCHOOL PSYCHOLOGY I</td>
<td>4.5</td>
</tr>
<tr>
<td>PSYC 679</td>
<td>SPECIAL TOPICS SEMINAR</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 791</td>
<td>INTERNSHIP SEMINAR IN SCHOOL PSYCHOLOGY II</td>
<td>1.5</td>
</tr>
<tr>
<td>PSYC 792</td>
<td>INTERNSHIP SEMINAR IN SCHOOL PSYCHOLOGY II</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>Total Units</strong></td>
<td></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

NOTE: Students may elect to earn a Graduate Certificate in Family-Professional Collaboration by completing additional courses. See the Family-Professional Collaboration heading in the College of Liberal Arts section of this catalog for more information.

### Field Experiences

#### Practicum

During the second year of the program, concurrent with other course work, students enroll in a full-year practicum course (fall and spring terms). The course includes a two-day per week placement in a local school system under the supervision of a certified school psychologist (arranged by the program faculty) and a weekly seminar on campus. During practicum, students engage in a carefully sequenced series of experiences suited to their level of professional training.
Internship
Following successful completion of the practicum and comprehensive examination, students are eligible to apply for internships. The 1,200-hour internship is considered a capstone experience and occurs after the completion of all course work. Internships are completed on a full-time basis over one year or on a part-time basis over two years. Students in local placements (approximately 75 percent of our students) attend a biweekly seminar on campus taught by the internship coordinator, who is a full-time school psychology faculty member.

Examinations
Comprehensive Examination
The written comprehensive exam must be completed successfully before a student begins the internship. Students have one opportunity to retake the comprehensive exam if it is not passed the first time. For candidates already possessing a master’s degree in School Psychology from another university, the requirement for the Comprehensive Exam will be determined by faculty.

Portfolio Evaluation
All C.A.S. candidates are required to submit a professional portfolio during the last term of their internship. Specific contents and standards for portfolios are provided to students by their advisers.

Praxis II Examination
Praxis II Examination in School Psychology must be taken prior to the conclusion of the internship year.

Skills and Competencies of Graduates:
It is our expectation that, upon graduation, students will demonstrate the following skills and competencies:

1. Understand basic principles of psychology and human development contributing to normal and atypical development of children;
2. Understand and assess the culture and norms of schools in order to optimize entry into schools and make important contributions to the school system;
3. Conduct ecological evaluations of classroom and school environments as well as psychological evaluations of children and adolescents who present with academic, behavioral, social and/or emotional difficulties to assist in placement decisions and to provide recommendations that address the reason for referral;
4. Plan and implement empirically sound interventions, and use data to evaluate the effectiveness of those interventions;
5. Address the mental health needs of students through individual, group, and crisis counseling; use data to provide evidence of the effectiveness of such counseling;
6. Provide individual and systemic consultation to families, teachers and administrators with a focus on improving professional/family relationships;
7. Serve as members of multidisciplinary problem-solving, special education, and crisis intervention teams and take leadership roles on those teams;
8. Develop awareness of and sensitivity to cultural differences among all clients, including parents, teachers and students; provide services that demonstrate this awareness and sensitivity;
9. Plan and conduct action research to answer specific questions within the school environment;
10. Provide in-service programs to assist school staff in understanding and applying psychological principles and techniques to improve the academic and behavioral functioning of students;
11. Serve as change agents to improve the quality of education for all students with whom they work;
12. Adhere to legal and ethical guidelines for our profession throughout training and practice.

Social Science M.S.
Degree: Master of Science
https://www.towson.edu/cla/departments/interdisciplinary/grad/socialscience/

Program Director: Dr. Paul McCartney
Phone: 410-704-5218
Email: pmccartney@towson.edu

The Master of Science degree program in Social Science offers the opportunity for professional enhancement especially in content areas of the social sciences. Experienced teachers wishing to return to TU to study the latest advancements in theoretical, methodological and substantive issues in the social sciences will be especially served. The Global Analysis track of study will be of particular interest to students wishing to pursue or continue careers in a number of different settings, including human rights, homeland security and intelligence, international non-governmental organizations (NGOs) and policy analysis. The program is also open to all post-baccalaureate students and may be of particular interest to professionals active in government and applied fields attracted to the latest developments in the social sciences.

Students will follow a program of study coordinated by the departments of Economics; Geography and Environmental Planning; History; Political Science; Psychology; and Sociology, Anthropology and Criminal Justice. The program aims to familiarize students with research, theoretical advances, applications and methodological approaches to current topics important to the field of social sciences and the world. The program exposes students to interdisciplinary approaches to related subjects and also allows them to specialize in a discipline of particular interest.

There are two possible tracks of study: the General track and the Global Analysis track. Each track has different degree requirements.

Admission Requirements

- A bachelor’s degree from a regionally accredited college or university** with a GPA of 3.00 during last 60 undergraduate units

Submit the online application (https://www.towson.edu/academics/graduate/admissions/apply) plus the following:

- Three letters of recommendation each accompanied by a graduate recommendation form
- A two-page statement of intent

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)
General Track

Degree Requirements
• Completion of the 36-unit program of study, including 18 units of core requirements.
• Completion of 18 units beyond the required core with 12 units required within a selected discipline and 6 units required within any of the other five program disciplines. For the Thesis Option, 6 of the 12 units within the selected discipline will be thesis units.
• Students choose their departmental disciplinary emphasis.
• Within each disciplinary emphasis students choose between the Thesis and Professional Presentation options.

The offerings within the core program of study for this track will include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOSC 600</td>
<td>INTERDISCIPLINARY APPROACHES TO GLOBAL PROBLEMS</td>
<td>3</td>
</tr>
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</table>

Select five of the following: 15

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SOSC 601</td>
<td>GEOGRAPHER’S VIEW</td>
<td></td>
</tr>
<tr>
<td>SOSC 602</td>
<td>COMPARATIVE HISTORY AND HISTORIOGRAPHY</td>
<td></td>
</tr>
<tr>
<td>SOSC 603</td>
<td>THE ECONOMIST’S PERSPECTIVE</td>
<td></td>
</tr>
<tr>
<td>SOSC 605</td>
<td>AMERICAN POLITICS IN THE 21ST CENTURY</td>
<td></td>
</tr>
<tr>
<td>SOSC 606</td>
<td>SOCIOLOGICAL INSIGHT</td>
<td></td>
</tr>
<tr>
<td>SOSC 609</td>
<td>DEVELOPMENTAL HUMAN LEARNING: A LIFESPAN APPROACH</td>
<td></td>
</tr>
<tr>
<td>WMST 607</td>
<td>ADVANCED FEMINIST THEORY</td>
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</table>

Total Units 18

Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-700-level courses (two from selected discipline)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>600-700-level courses (any other discipline)</td>
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<td></td>
</tr>
<tr>
<td>Thesis (within track department)</td>
<td>6</td>
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</tbody>
</table>

Total Units 18

Professional Presentation Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-700-level courses (in selected discipline)</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>600-700-level courses (any other discipline or disciplines)</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Professional Presentation Students must deliver a peer-reviewed presentation for a university or local or national conference organized by their chosen discipline, or give a presentation to an assembly of Towson University faculty and program peers.

Total Units 18

Transfer Credit

Students may apply 6 transfer units with the grade of “B” or better to the elective requirements only within the selected disciplinary emphasis. The program director must approve transfer credit. Approval may be conditional upon the submission of previous written work. All transfers are subject to the seven-year statute of limitations.

Final Portfolio

The program requires that all students prepare a final portfolio of their work under the direction of their track adviser. For portfolio submission requirements, visit www.towson.edu/msosci.

Exit Interview

Each graduating student must schedule an exit interview with the program director to be held no later than two weeks prior to the end of the term in which the student has applied for graduation.

Global Analysis Track

Degree Requirements
• Completion of the 36-unit program of study, including 15 units of core requirements.
• Completion of 15 elective units beyond the core courses.
• Completion of 6 thesis units.
• Demonstration of language proficiency at the intermediate level. Four terms of college-level foreign language training are required to complete this requirement. Students may complete this by taking Elements I and II and Intermediate I and II at Towson University or by passing an Equivalence Examination at the intermediate level, administered by the Department of Foreign Languages each November. Students who have taken several years of a language in high school will need to consult the chair of Foreign Languages to determine the necessary steps needed to fulfill this language requirement. Students whose native language is one other than English should consult the program director.

The offerings within the core program of study for this track will include:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOSC 600</td>
<td>INTERDISCIPLINARY APPROACHES TO GLOBAL PROBLEMS</td>
<td>3</td>
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</table>

Select four of the following: 12

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>SOSC 601</td>
<td>GEOGRAPHER’S VIEW</td>
<td></td>
</tr>
<tr>
<td>SOSC 602</td>
<td>COMPARATIVE HISTORY AND HISTORIOGRAPHY</td>
<td></td>
</tr>
<tr>
<td>SOSC 603</td>
<td>THE ECONOMIST’S PERSPECTIVE</td>
<td></td>
</tr>
<tr>
<td>SOSC 604</td>
<td>EAST ASIAN SECURITY ISSUES, 1945-PRESENT</td>
<td></td>
</tr>
<tr>
<td>WMST 605</td>
<td>WOMEN IN AN INTERNATIONAL CONTEXT</td>
<td></td>
</tr>
</tbody>
</table>

Total Units 15

Electives: Regional or Topical Selections

Students may follow one of two directions when choosing electives in the Global Analysis track. They may choose to focus their studies on a particular region of the world (e.g., the Middle East or Latin America), or they may take a broader, more topical approach, focusing for instance on inequality and power from a comparative perspective. For the regional focus, at least three of the five electives must be related to the geographical area of emphasis. For the topical focus, students should strive to connect all five electives with a thematic emphasis. For either choice, students must consult with the program adviser in selecting appropriate courses. The following list provides possible course options for the electives within the Global Analysis track. Students may select other electives not listed below, subject to the approval of the program adviser.

NOTE: Students should keep in mind the Graduate Studies policy that only three courses at the 500 level can be applied to the graduate degree.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 530</td>
<td>TOPICS IN ANTHROPOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 567</td>
<td>PEOPLES OF THE MIDDLE EAST</td>
<td>3</td>
</tr>
</tbody>
</table>
Each graduating student must schedule an exit interview with the program director to be held no later than two weeks prior to the end of the term in which the student has applied for graduation.

1. Students will be able to understand, and communicate effectively about, contemporary social issues from a broad, multi-disciplinary perspective.
2. Students will demonstrate currency, depth, and analysis of content knowledge related to their particular social science discipline (or across several social science disciplines).

Women’s and Gender Studies M.S.

Degree: Master of Science
https://www.towson.edu/clia/departments/womensgender/grad/womensgender/

Program Director: Dr. Kate Wilkinson
Phone: 410-704-5744
Email: kwilkinson@towson.edu

The interdisciplinary and multidisciplinary graduate program in Women’s and Gender Studies provides students with a solid academic foundation to pursue their unique goals. As the only applied master’s program in Women’s and Gender Studies in Maryland and the only Women’s and Gender Studies master’s program in Baltimore, the program emphasizes applied research methods and skills, preparing students for careers in a variety of public and private organizations both national and international, for-profit and nonprofit. It also prepares students to enter doctoral programs in a variety of fields.

The master’s degree in Women’s and Gender Studies is set in the liberal arts tradition and explores feminist paradigms and scholarship. Intended as either a capstone interdisciplinary experience or one which bridges undergraduate learning and a doctoral program, the M.S. in Women’s and Gender Studies captures a multi-faceted intellectual experience, including both theoretical and experiential content. Requiring 36 earned graduate units, the program requires a core component and offers three concentration options: 1) Women, Health and Sexuality, 2) Women in an International Context, and 3) Women, Leadership and Public Policy. The program includes a Culminating Experience with three options: a) a thesis, b) an internship or c) a two-course option with portfolio. The thesis option is recommended for students who intend to pursue a doctoral degree.

Please note that only one degree in Women’s and Gender Studies can be awarded; students who complete more than one concentration in Women’s and Gender Studies will not receive two different degrees.

Combined Bachelor and Master of Science in Women’s and Gender Studies

Students may also earn the M.S. in Women’s and Gender Studies through the combined bachelor’s and master’s program in Women’s Studies (http://catalog.towson.edu/undergraduate/liberal-arts/womensgender-studies/combined-bachelor-master-womens-studies), which is designed to allow students to complete combined undergraduate and graduate degrees. This program is designed for the three existing tracts in Women’s Studies: Women, Leadership and Social Change; Women in International Context; and Women, Health and Sexuality. This combined degree program allows qualified undergraduate Women’s Studies majors to pursue a combined bachelor’s and master’s in Women’s Studies.

Students enrolled in the combined bachelor’s and master’s program in Women’s Studies may elect to follow one of three Culminating Experiences already in place: Thesis, Internship or Two-Course Option. The degree requirements are the same as those for the M.S. program in Women’s Studies with the following exception: the combined bachelor’s and master’s requires 3 fewer units of planned electives. All M.S.
students in this program, regardless of their plan, are expected to demonstrate a proficiency in research and meet the requirements of all learning outcomes listed for both undergraduate and graduate programs.

Advising

During the student's first term, the graduate program director acts as the student's adviser. During that time, the student's academic program is discussed, developed and drafted. At the end of the first term, the student is transferred to a permanent adviser.

Admission Requirements

- A bachelor's degree from a regionally accredited college or university** (as certified by an official transcript) with a minimum undergraduate grade point average of 3.00, and 2.75 for conditional admission. GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Nine units earned at the baccalaureate level in Women's and Gender Studies and/or the Social Sciences (Anthropology, Sociology, Geography, Political Science, Psychology, Economics or a social science-based interdisciplinary course). Three (3) of these nine (9) units must include one course in Women's and Gender Studies.
- Students with no prior course work in Women's and Gender Studies must enroll in either WMST 231, which is an introduction to Women's and Gender Studies, or WMST 337, a course on feminist theory. Given these two courses (WMST 231 and WMST 337) are graduate-level courses, students will not receive graduate credit for completion of this requirement. An applicant who has not taken an undergraduate course in Women's and Gender Studies but who has relevant applied experience including, but not limited to, work in a women's center, work for a women's organization, or work on a project focusing specifically on women's and gender issues, may be exempted from the requirement.
- A detailed essay of four to five, double-spaced pages emphasizing the applicant's specific plans for focused graduate study within the selected concentration, including discussions of 1) projected career goals, 2) prior academic and/or work experiences (volunteer or paid), and 3) how these relate to anticipated success in the intended program of study and projected career goals.
- Two letters of recommendation, including at least one from a college/university instructor from whom the applicant has learned from in a course setting, accompanied by a completed Graduate Program Recommendation Form.

Apply online (http://www.towson.edu/academics/graduate/admissions/apply) through Graduate Admissions.

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

The M.S. in Women's and Gender Studies requires successful completion of 36 units with an average GPA of 3.00 or higher. Core Courses: 9 units; Concentration Course: 3 units; Concentration Elective: 3 units; Electives (WMST or Affiliated): 15 units; Culminating Experience: 6 units.

Required Courses

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 603</td>
<td>THE DIVERSITY OF WOMEN</td>
<td>3</td>
</tr>
<tr>
<td>WMST 607</td>
<td>ADVANCED FEMINIST THEORY</td>
<td>3</td>
</tr>
<tr>
<td>WMST 609</td>
<td>APPLIED RESEARCH METHODS AND SKILLS I</td>
<td>3</td>
</tr>
</tbody>
</table>

Women in an International Context Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 605</td>
<td>WOMEN IN AN INTERNATIONAL CONTEXT</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration Elective

Select one of the following:

- WMST 607 TOPICS IN WOMEN'S STUDIES
- WMST 606 WOMEN AND GENDER IN THE WORKPLACE
- WMST 604 Women and NFP Leadership; Governance and Advocacy
- WMST 670 SPECIAL TOPICS IN WOMENS STUDIES

General Electives for Women in an International Context Concentration

All graduate WMST courses count toward this concentration. In addition to WMST graduate courses, any of the affiliated courses below can be chosen to meet the required 15 units of electives for the Women in an International Context concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH 521</td>
<td>ANTHROPOLOGY OF GENDER</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 553</td>
<td>LATINAS IN THE AMERICAS</td>
<td></td>
</tr>
<tr>
<td>ANTH 567</td>
<td>PEOPLES OF THE MIDDLE EAST</td>
<td></td>
</tr>
<tr>
<td>ANTH 568</td>
<td>GLOBALIZATION IN CROSS-CULTURE PERSPECTIVE</td>
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</tr>
<tr>
<td>ANTH 569</td>
<td>TRADITION AND REVOLUTION IN LATIN AMERICA</td>
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<tr>
<td>HIST 506</td>
<td>WOMEN IN 20TH-CENTURY U.S. HISTORY</td>
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<tr>
<td>HIST 511</td>
<td>HISTORY OF MODERN SOUTHEAST ASIA</td>
<td></td>
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<tr>
<td>HIST 516</td>
<td>WOMEN IN ANTIQUITY</td>
<td></td>
</tr>
<tr>
<td>HIST 599</td>
<td>MAKING OF THE MODERN MIDDLE EAST</td>
<td></td>
</tr>
<tr>
<td>HIST 607</td>
<td>LATIN AMERICA &amp; THE UNITED STATES</td>
<td></td>
</tr>
<tr>
<td>POSC 503</td>
<td>THEORY OF INTERNATIONAL POLITICS</td>
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<tr>
<td>POSC 507</td>
<td>CONTEMPORARY INTERNATIONAL POLITICS</td>
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<tr>
<td>PRWR 619</td>
<td>COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS</td>
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</tr>
</tbody>
</table>

Total Units

21

Women, Leadership and Public Policy Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 611</td>
<td>WOMEN, PUBLIC POLICY AND SOCIAL CHANGE</td>
<td>3</td>
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</tbody>
</table>

Concentration Elective

Select one of the following:

- WMST 570 TOPICS IN WOMEN'S STUDIES
- WMST 601 WOMEN AND GENDER IN THE WORKPLACE
- WMST 604 Women and NFP Leadership; Governance and Advocacy
- WMST 670 SPECIAL TOPICS IN WOMENS STUDIES
WMST 673  SPECIAL TOPICS IN WOMENS STUDIES

General Electives for Women, Leadership and Public Policy Concentration

All graduate WMST courses count toward this concentration. In addition to WMST graduate courses, any of the affiliated courses below can be chosen to meet the required 15 units of electives for the Women, Leadership and Public Policy concentration:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 506</td>
<td>WOMEN IN 20TH-CENTURY U.S. HISTORY</td>
</tr>
<tr>
<td>HIST 558</td>
<td>WORKERS AND WORK IN THE UNITED STATES</td>
</tr>
<tr>
<td>HLTH 645</td>
<td>HEALTH CARE POLICY</td>
</tr>
<tr>
<td>HRD 606</td>
<td>ORGANIZATIONAL BEHAVIOR</td>
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<tr>
<td>HRD 640</td>
<td>LEADERSHIP THEORY AND PRACTICE</td>
</tr>
<tr>
<td>HRD 644</td>
<td>GROUP DYNAMICS AND TEAM BUILDING</td>
</tr>
<tr>
<td>POSC 505</td>
<td>URBAN GOVERNMENT AND POLITICS</td>
</tr>
<tr>
<td>POSC 550</td>
<td>INTEREST GROUPS AND PUBLIC POLICY</td>
</tr>
<tr>
<td>POSC 581</td>
<td>SEMINAR: AMERICAN GOVERNMENT AND PUBLIC POLICY</td>
</tr>
<tr>
<td>PRWR 619</td>
<td>COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS</td>
</tr>
<tr>
<td>PRWR 619</td>
<td>COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS</td>
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<tr>
<td>SOCI 531</td>
<td>DEVIANCE AND ORGANIZATIONS</td>
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<tr>
<td>SOCI 551</td>
<td>DEVIAN'T BEHAVIOR</td>
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<td>SOCI 557</td>
<td>SOCIAL WELFARE</td>
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Total Units 21

Women, Health and Sexuality Concentration

<table>
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<tbody>
<tr>
<td>WMST 613</td>
<td>WOMEN AND HEALTH</td>
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Concentration Elective

Select one of the following: 3

<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>WMST 538</td>
<td>WOMEN AND SEXUALITY</td>
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<tr>
<td>WMST 536</td>
<td>WOMEN AND MEDICINE</td>
</tr>
<tr>
<td>WMST 545</td>
<td>WOMEN, ENVIRONMENT AND HEALTH</td>
</tr>
<tr>
<td>WMST 581</td>
<td>THE EROTIC IMAGINATION IN CHRISTIANITY AND HINDUISM</td>
</tr>
<tr>
<td>WMST 670</td>
<td>SPECIAL TOPICS IN WOMENS STUDIES</td>
</tr>
<tr>
<td>HLTH 633</td>
<td>HEALTH CARE SYSTEMS</td>
</tr>
<tr>
<td>HLTH 645</td>
<td>HEALTH CARE POLICY</td>
</tr>
<tr>
<td>HCMN 541</td>
<td>LEGAL AND ETHICAL ISSUES IN HEALTH ADMINISTRATION</td>
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<tr>
<td>HIST 526</td>
<td>GAYS AND LESBIANS IN U.S. HISTORY</td>
</tr>
<tr>
<td>HLTH 615</td>
<td>QUALITATIVE AND QUANTITATIVE PRINCIPLES</td>
</tr>
<tr>
<td>HLTH 633</td>
<td>HEALTH CARE SYSTEMS</td>
</tr>
<tr>
<td>HLTH 645</td>
<td>HEALTH CARE POLICY</td>
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<tr>
<td>IDHP 705</td>
<td>CULTURE AND HEALTH</td>
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<td>PHIL 561</td>
<td>BIOMEDICAL ETHICS</td>
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</table>

Elective Course Information

Elective courses, whether carrying a WMST or other department designation, must form a coherent program, meet the student’s learning needs and be selected in consultation with the student’s adviser. An elective course selected but not included on the Elective Course lists for any concentration (either WMST or affiliated designation) shall be approved by the program director.

- Students should meet with their advisers to select a coherent set of concentration electives.
- Limit of three (3) 500-level courses may be applied to the master’s degree.

Under special circumstances and in accordance with the Directed Readings/Independent Study Policies of the WMST Department, the student may select with appropriate approvals WMST 591 or WMST 695 as an elective.

- Field Experience WMST 620 may be selected as a general elective for any concentration.

Culminating Experience Courses (6)

Additional information regarding the WMST Culminating Experience is detailed in the Women’s and Gender Studies Graduate Student Handbook.

Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 897</td>
<td>WOMEN’S STUDIES THESIS (one-term)</td>
<td>6</td>
</tr>
<tr>
<td>WMST 898</td>
<td>WOMEN’S STUDIES THESIS (two consecutive terms (3) each enrollment)</td>
<td>3</td>
</tr>
<tr>
<td>WMST 899</td>
<td>THESIS CONTINUUM</td>
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</table>

Internship Option (6)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 796</td>
<td>INTERNSHIP ((3) each enrollment)</td>
<td>3</td>
</tr>
</tbody>
</table>

Two-Course Portfolio Option (6)

Two courses, both carrying a WMST designation, one of which must be at the 600-level, shall be selected in advance of course enrollment with the adviser’s approval. Requirements include a portfolio and reflective essay.

1. Students can understand and can evaluate/critique feminist arguments and theories as demonstrated in a term paper that is clearly and knowledgeably written.

2. Students can demonstrate ability to execute a research proposal that is clearly and knowledgeably written, incorporating a thesis statement, a literature review, operationalization of key concepts/variables, defense of selected method, and heuristic and potential research implication of the proposed research. Part of (these skills) includes the effective use of online research portals to search through academic journals databases for relevant articles.
3. Students can demonstrate ability to identify and evaluate prevailing normative assumptions that underlie social practices and policies that hinder women's agency.

Women's and Gender Studies Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/cla/departments/womengender/grad/womengenderpbc/

Program Director: Dr. Kate Wilkinson
Phone: 410-704-5744
Email: kwilkinson@towson.edu

Students already enrolled in a master's degree program, other than Women's and Gender Studies, or those who wish to enhance their skills and understanding of specialized area in Women's and Gender Studies may elect to pursue the Certificate in Women's and Gender Studies.

Advising

The graduate program director acts as the certificate student's adviser during the first term of matriculation when a program of study is planned and drafted. The student is transferred to a different adviser after the first term of enrollment.

Application of Units Earned in the WMST Certificate Program

Units earned for the Graduate Certificate Program with a grade of "B" or better may be applied to the master's degree in Women's and Gender Studies. The certificate student must complete formal application to the WMST M.S. degree for admission.

Admission Requirements

- A bachelor's degree from a regionally accredited college or university** (as certified by an official transcript) with a minimum GPA of 3.00, and 2.75 for conditional admission. GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Nine units earned at the baccalaureate level in Women's and Gender Studies and/or the Social Sciences (Anthropology, Sociology, Geography, Political Science, Psychology, Economics or a social science-based interdisciplinary course). Three (3) of these nine (9) units must include one course in Women's and Gender Studies. Students with no prior course work in Women's and Gender Studies must enroll in either WMST 231, which is an introduction to Women's and Gender Studies, or WMST 337, a course on feminist theory. Given these two courses (WMST 231 and WMST 337) are undergraduate-level courses, students will not receive graduate credit for completion of this requirement. An applicant who has not taken an undergraduate course in Women's and Gender Studies but who has relevant applied experience including, but not limited to, work in a women's center, work for a women's organization, or work on a project focusing specifically on women's and gender issues, may be exempted from the requirement.
- A detailed essay of four-five, double-spaced pages emphasizing the applicant's specific plans for focused graduate study.
- Two letters of recommendation, at least one from a college/university instructor from whom applicant has learned from in a course setting, accompanied by a completed Graduate Program Recommendation Form.
- In addition, certificate applicants who are currently enrolled in a master's degree program at Towson University or elsewhere shall submit a transcript of their progress in that master's program as evidence of good standing.

Apply online (http://www.towson.edu/academics/graduate/admissions/apply) through Graduate Admissions.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>WMST 603</td>
<td>THE DIVERSITY OF WOMEN</td>
<td>3</td>
</tr>
<tr>
<td>WMST 607</td>
<td>ADVANCED FEMINIST THEORY</td>
<td>3</td>
</tr>
</tbody>
</table>

Electives

Select nine units in graduate-level, WMST-designated courses selected with the approval of the student's adviser

Total Units

15

1 Limit of one 500-level WMST course to be included in the certificate program.
WMST 620 nor any WMST 700 or 800 course may be included in the certificate program.

1. Students can understand and can evaluate/critique feminist arguments and theories as demonstrated in a term paper that is clearly and knowledgeably written.
2. Students can demonstrate ability to identify and evaluate prevailing normative assumptions that underlie social practices and policies that hinder women's agency.

The Jess and Mildred Fisher College of Science and Mathematics

Smith Hall 312
Phone: 410-704-2121
Fax: 410-704-2604
Email: fsrm@towson.edu

The Jess and Mildred Fisher College of Science and Mathematics is committed to developing dynamic and confident graduates who are well prepared to respond creatively to the demands and challenges of our times. The college's growing reputation for excellence in graduate education is built upon the philosophy of learning by doing. Students work closely with faculty, receiving quality instruction in small classes as well as opportunities for one-on-one interaction between students and faculty in classrooms and laboratories.

The Fisher College serves both full-time and part-time students with diverse backgrounds pursuing career and educational goals. The college is also committed to the preparation of middle and secondary school teachers of science and mathematics.
Faculty members are active in pure and applied research; many are widely published and receive external funding in support of their research. Faculty research programs include nanotechnology, astrophysics, molecular biology, chemistry, biochemistry, ecology, biodiversity, geology, statistics, pure and applied mathematics, robotics and computer science. Several faculty members work in collaboration with industry and government labs, and their work is supported by grants from major funding agencies. Faculty members are often involved in a range of outreach activities, in providing professional development programs for teachers and in service to the community that draws on their professional experience.

Vonnie Shields, Acting Dean

**Doctoral Degree Program**
- Information Technology (p. 125)

**Master's Degree Programs**
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- Applied Information Technology (p. 113)
- Applied Physics (p. 114)
- Biology (p. 116)
- Computer Science (p. 117)
  - Computer Security
  - E-Commerce
  - Software Engineering
- Environmental Science (p. 120)
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**Post-Baccalaureate and Certificate Programs**
- Computer Forensics (p. 117)
- Database Management Systems (p. 119)
- Environmental Science (p. 122)
- Health Information Technology (p. 124)
- Information Security and Assurance (p. 124)
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- Integrated STEM Instructional Leadership Certificate (p. 127)
- Internet Application Development (p. 127)
- Networking Technologies (p. 130)
- Security Assessment and Management (p. 130)
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**Applied and Industrial Mathematics M.S.**
Degree: Master of Science
https://www.towson.edu/fcsm/departments/mathematics/grad/applied/

Program Director: Dr. Tatyana Sorokina
Phone: 410-704-3308
Email: tsorokina@towson.edu

The Master of Science program provides students with a broad knowledge in applied mathematics with an emphasis on areas with the highest demand in business and industry. Among the areas stressed in the program are mathematical modeling, numerical computations, operations research, financial mathematics and statistical analysis. Numerical, computational and algorithmic approaches to problem solving are stressed throughout the program. Graduates of the program will be qualified to work in such fields as operations research, stochastic modeling, financial data analysis and statistics, among many others. Graduates of the program will also be prepared for further work at the doctoral level.

The main objectives of the program are:

1. to prepare individuals to apply advanced mathematical skills to problems in areas of science, business and industry;
2. to develop the students’ abilities to integrate, in a meaningful way, the use of technology in their everyday professional practice;
3. to give educators an opportunity to satisfy their in-service requirements and simultaneously enhance their knowledge of technology and enrich their mathematical backgrounds;
4. to supply students with the mathematical competency necessary for advancement to a more professional role;
5. to educate students to solve problems, to work in teams and to communicate in an interdisciplinary setting;
6. to familiarize students with the recent advances in applied mathematics;
7. to prepare students for further graduate work at the doctoral level in applied mathematics; and
8. to enrich the academic culture by providing opportunities for interaction of mathematical and industrial research.

Both full-time and part-time students are encouraged to enroll in the program. Core courses are usually offered in the evening, for the convenience of part-time students.

**Admission Requirements**
- A baccalaureate degree in mathematics or a related field. The applicant’s undergraduate training must have included at least three terms of calculus, a course in linear algebra and one of the following: a course in differential equations or a course in probability. Students with any deficiency in their mathematical background may be admitted conditionally if they are willing to correct such deficiency.
- An undergraduate GPA of at least 3.00 for full admission, 2.75 for conditional admission, is required. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.
- Students who received their degree outside the United States must provide official verification of their English competency by submitting an English assessment report of their IELTS, TOEFL or other Towson University-approved testing system. Students must meet the standards set by Towson University to be admitted into the program.

**Degree Requirements**
There are two concentrations from which to choose: Differential Equations/Optimization or Applied Statistics/Mathematical Finance.

A student may transfer up to two graduate-level mathematics courses taken at another institution, provided that the transfer is consistent with the graduate policy.
The program requires the completion of an applied full-year research project at a graduate level. There are three options listed below in order of priority to complete this requirement. The project can be:

1. An external applied project through a local industry or a government agency. Students choosing this option take MATH 791 and MATH 792, under the supervision of a faculty member from the Department of Mathematics.
2. With a faculty member in the Department of Mathematics on an applied graduate-level project. Students choosing this option take MATH 880 and MATH 881.
3. In the department's Applied Mathematics Laboratory (AML). Typically, corporations and government agencies sponsor these projects. Students choosing this option take MATH 880 and MATH 881. Not all AML projects can be used for the internship purpose.

Students need to submit a project proposal to the graduate committee for approval. In particular, students working on AML projects must describe their roles and responsibilities as part of the team. Students on AML projects must take a primary role in a significant portion of the project. The project proposal must be approved by the graduate committee before students can register for the course. All students must produce a final written project report and make an oral presentation to the graduate committee. For students who participate in AML projects, this is in addition to any project-required reports and presentations. Satisfactory completion of the technical report and the oral presentation, as judged by the Graduate Program Committee, is a requirement for graduation.

If the Graduate Program Committee believes that all attempts, based on the above options, to find an internship project for the student were not successful, the student can take two additional 600-level mathematics courses from the declared concentration and must pass both courses with a letter grade B+ or higher.

All graduate students are required to meet with the APIM graduate program director two and a half terms prior to their graduation (late April or late October, whichever applies) to discuss their choices for completing the internship requirement. Students will commit themselves to their choice by signing a form available from the director.

Students whose careers are in education may, with the approval of the department's Graduate Program Committee, replace the industrial setting with an educational setting. This will typically entail the development of original course material stressing applied mathematics and using innovative teaching techniques.

The student is required to successfully complete at least 10 courses (a minimum of 30 units) as indicated below: At most, two 500-level classes will count towards the degree.

1. at least four 600-level courses from a declared concentration
2. at least two 600-level courses from the other concentration
3. at least two elective courses at the 500 or 600 level
4. an internship project (MATH 791 & MATH 792) or applied graduate research project (MATH 880 & MATH 881) or alternative coursework approved by the Graduate Committee.

## Differential Equations/Optimization Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 635</td>
<td>APPLIED NUMERICAL ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 636</td>
<td>LINEAR AND NONLINEAR PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 637</td>
<td>ADVANCED TOPICS IN APPLIED OPERATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 673</td>
<td>INTEGRAL TRANSFORMS AND APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 674</td>
<td>APPLIED PARTIAL DIFFERENTIAL EQUATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 675</td>
<td>ASYMPTOTIC AND PERTURBATION ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 686</td>
<td>SPECIAL TOPICS IN DIFFERENTIAL EQUATIONS OR OPTIMIZATION</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: All courses above have strictly enforced prerequisites.

## Applied Statistics/Mathematical Finance Concentration

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 632</td>
<td>COMPUTATIONAL STOCH-ASTIC MODELING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 634</td>
<td>TIME SERIES ANALYSIS AND FORECASTING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 638</td>
<td>APPLIED MULTIVARIATE STATISTICAL ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 639</td>
<td>LOSS MODELS</td>
<td>4</td>
</tr>
<tr>
<td>MATH 643</td>
<td>COMPUTATIONAL METHODS OF MATHEMATICAL FINANCE</td>
<td>3</td>
</tr>
<tr>
<td>MATH 644</td>
<td>MATHEMATICS OF FINANCIAL DERIVATIVES</td>
<td>3</td>
</tr>
<tr>
<td>MATH 687</td>
<td>SPECIAL TOPICS IN APPLIED STATISTICS OR MATHEMATICAL FINANCE</td>
<td>3</td>
</tr>
</tbody>
</table>

NOTE: All courses above have strictly enforced prerequisites.

## Electives

<table>
<thead>
<tr>
<th>Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>MATH 531</td>
<td>PROBABILITY</td>
<td>4</td>
</tr>
<tr>
<td>MATH 532</td>
<td>MATHEMATICAL STATISTICS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 533</td>
<td>APPLIED REGRESSION AND TIME SERIES</td>
<td>4</td>
</tr>
<tr>
<td>MATH 535</td>
<td>NUMERICAL ANALYSIS I</td>
<td>3</td>
</tr>
</tbody>
</table>
Applied Information Technology M.S.

Degree: Master of Science
https://www.towson.edu/fcsm/departments/emergingtech/academics/applied/

Program Director: Dr. Suranj Chakraborty
Phone: 410-704-4909
Email: schakraborty@towson.edu

Applied Information Technology is the study, design, development, implementation and support of computer-based information systems to address real-world problems. This program provides graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who need to update and enhance their skills. We offer courses in areas such as systems development, IT project management, Internet application development, IT and business analysis. Post-baccalaureate certificates in Internet application development, information security and assurance, information systems management, networking technologies, software engineering and database management systems are integrated with the M.S. degree program.

Admission Requirements

- A baccalaureate degree from a regionally accredited college or university**
- A minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission
- Minimum TOEFL score of 550 (where applicable)

These programs are intended for students who have a bachelor’s degree in information technology, computer science, computer information systems or a related field who will enter the program for advanced studies; students who have a bachelor's degree in disciplines other than IT who are already employed in the IT field and are seeking additional academic studies for professional growth or career advancement; and students who have a bachelor's degree in disciplines other than IT who are seeking preparation for careers in this field.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

- Completion of any assigned preparatory courses. (Credit from preparatory courses do not count toward the M.S. degree.)
- Completion of 33 graduate units as follows:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 537</td>
<td>OPERATIONS RESEARCH</td>
<td>3</td>
</tr>
<tr>
<td>MATH 538</td>
<td>LONG-TERM ACTUARIAL MODELS I</td>
<td>3</td>
</tr>
<tr>
<td>MATH 563</td>
<td>LINEAR ALGEBRA</td>
<td>3</td>
</tr>
<tr>
<td>MATH 575</td>
<td>MATHEMATICAL MODELS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 576</td>
<td>INTRODUCTORY REAL ANALYSIS</td>
<td>4</td>
</tr>
<tr>
<td>MATH 577</td>
<td>COMPLEX ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 579</td>
<td>FOURIER ANALYSIS WITH APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 585</td>
<td>RISK MANAGEMENT AND FINANCIAL ENGINEERING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 633</td>
<td>QUEUING SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 651</td>
<td>MATHEMATICS OF FUZZY LOGIC</td>
<td>3</td>
</tr>
<tr>
<td>MATH 671</td>
<td>CHAOTIC DYNAMICS AND FRACTAL GEOMETRY</td>
<td>3</td>
</tr>
<tr>
<td>MATH 676</td>
<td>INTRODUCTION TO MATHEMATICAL CONTROL THEORY</td>
<td>3</td>
</tr>
<tr>
<td>MATH 685</td>
<td>SPECIAL TOPICS IN APPLIED MATHEMATICS</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Use applied mathematics techniques to model, analyze and solve real-world problems.
2. Apply advanced mathematical skills to solve and model problems in areas of science, business, and industry.
3. Integrate the use of technology in their professional practices.
4. Apply and demonstrate research skills, writing skills, thinking skills, and problem solving skills.

**Minimum TOEFL score of 550 (where applicable)**

Exceptions to Policy

Students must complete the requirements for a graduate certificate in applied information technology. Currently, the following graduate certificates in information technology are available. Additional graduate certificates may be added to this list in the future.

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 650</td>
<td>COMPUTER &amp; NETWORK FORENSICS AND INCIDENT RESPONSE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 660</td>
<td>MOBILE DEVICE FORENSICS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 745</td>
<td>CASE STUDIES IN COMPUTER FORENSICS</td>
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</table>

Database Management Systems

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>AIT 600</td>
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<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
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<tr>
<td>AIT 632</td>
<td>DATABASE MANAGEMENT SYSTEMS</td>
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<tr>
<td>AIT 732</td>
<td>ADVANCED DATABASE MANAGEMENT SYSTEMS</td>
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<tr>
<td>AIT 735</td>
<td>CASE STUDIES IN DATABASE MANAGEMENT SYSTEMS</td>
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Health Information Technology

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
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</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 644</td>
<td>HEALTH INFORMATION TECHNOLOGY</td>
<td>3</td>
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<tr>
<td>AIT 645</td>
<td>HEALTHCARE DATA ANALYTICS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 740</td>
<td>CASE STUDIES ON HEALTHCARE INFORMATION TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>HCMN 535</td>
<td>HEALTH INFORMATION AND QUALITY MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>or HLMN 633</td>
<td>HEALTH CARE SYSTEMS</td>
<td>3</td>
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</table>

Information Security and Assurance

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 612</td>
<td>INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 614</td>
<td>NETWORK SECURITY</td>
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</tr>
<tr>
<td>AIT 710</td>
<td>CASE STUDIES IN INFORMATION SECURITY</td>
<td>3</td>
</tr>
</tbody>
</table>

Information Systems Management

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
</tbody>
</table>
1. Understand the information technology infrastructure and its place/value in today’s business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency in at least one of the following IT-related concentrations to solve a variety of problems:
   - Database Management Systems
   - Information Security and Assurance
   - Information Systems Management
   - Internet Application Development
   - Networking Technologies
   - Software Engineering
4. Prepare, present and develop proposals and solutions for today’s governmental and industrial needs.

Applied Physics M.S.

Degree: Master of Science
https://www.towson.edu/fcsm/departments/physics/grad/applied/

Program Director: Dr. Rajeswari Kolagani
Phone: 410-704-3134
Email: rkolagani@towson.edu

Towson University’s Master of Science in Applied Physics is designed to prepare its graduates for leadership positions in a wide range of science and technology careers in industry and academics. The program has components designed for students who intend to embark on a career immediately upon graduation, as well as for those who are seeking to enhance their prospects for admission to doctoral programs. The program is certified by the Council of Graduate Schools as a Professional Science Master’s program (PSM), a graduate degree that represents an innovation in response to the workforce needs in science and technology sectors. The program delivers a strong graduate education in applied physics, together with skills related to project management, teamwork, advanced communication and interdisciplinary problem solving. Additionally, thesis and non-thesis research courses are available for students who plan to pursue a doctoral program.

The physics content of the program aims to impart specialized knowledge in select areas of applied physics, while also emphasizing a broad set of skills which include laboratory techniques involving fabrication and characterization of materials and devices, physical measurements employing advanced instrumentation, computational modeling and simulations, data analysis and laboratory automation. The
program imparts knowledge and skills associated with teamwork, project management, communication and leadership through courses in project management and technical writing. In addition, there are internship and research components that allow students to acquire real-life problem-solving experience by working on site at technology enterprises or by participating in faculty-led research projects in applied physics.

Admission Requirements
This program admits fall and spring terms only.

- A baccalaureate degree in physics or a related field such as chemistry, mathematics or engineering from a regionally accredited college or university.* Students who have not majored in physics will qualify for admission if their undergraduate education included two calculus-based courses in physics and at least two upper-level physics courses. Students without a degree in physics and/or adequate preparation may be required to take remedial courses and/or additional 500-level electives from the curriculum, based on a case-by-case analysis.
- An undergraduate GPA of at least 3.00 is required for full admission and at least 2.75 for provisional admission.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Application Requirements
Required documents for application:

- A résumé including names and contact information for three references;
- official transcripts;
- one recommendation on the Official Recommendation Form;
- and a brief statement of purpose indicating academic and professional objectives.

Degree Requirements
The degree will require completion of a minimum of 37 total units of course work. Students with inadequate undergraduate preparation in physics may be required to take more than 37 units due to additional courses that may be needed to remedy deficiencies in undergraduate course work. 19 of the 37 units of course work will consist of the physics content courses, split between 10 units of core courses from Group A and 9 units of electives from Group B. Another 9 units are assigned for courses in Group C which belong to the ‘plus’ category. The remaining 9 units are distributed among the Group D courses that comprise 3 units of research with faculty and 6 units for thesis and/or internship.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYS 555</td>
<td>INTRODUCTORY QUANTUM MECHANICS</td>
<td>10</td>
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<tr>
<td>PHYS 557</td>
<td>SOLID STATE PHYSICS</td>
<td></td>
</tr>
<tr>
<td>PHYS 641</td>
<td>LABORATORY TECHNIQUES AND INSTRUMENTATION</td>
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<tr>
<td>PHYS 670</td>
<td>COMPUTATIONAL PHYSICS</td>
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<th>Code</th>
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<th>Units</th>
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</thead>
<tbody>
<tr>
<td>PHYS 554</td>
<td>ELECTRICITY AND MAGNETISM</td>
<td>9</td>
</tr>
<tr>
<td>PHYS 658</td>
<td>MAGNETISM AND MAGNETIC MATERIALS</td>
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</tr>
<tr>
<td>PHYS 662</td>
<td>SPECTROSCOPIC AND MICROSCOPIC TECHNIQUES</td>
<td></td>
</tr>
<tr>
<td>PHYS 663</td>
<td>FUNCTIONAL ELECTRONIC MATERIALS</td>
<td></td>
</tr>
<tr>
<td>PHYS 664</td>
<td>NANOTECHNOLOGY</td>
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Group B: Electives
A minimum of 9 units are required, of which at least 6 units must be from 600-level courses.

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<tbody>
<tr>
<td>PHYS 512</td>
<td>MODERN PHYSICS II</td>
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<tr>
<td>PHYS 533</td>
<td>BASIC ELECTRONICS</td>
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<td>PHYS 534</td>
<td>DIGITAL ELECTRONICS</td>
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<tr>
<td>PHYS 552</td>
<td>THERMODYNAMICS AND KINETIC THEORY</td>
<td></td>
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<td>PHYS 553</td>
<td>PHYSICAL OPTICS</td>
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<td>ELECTRICITY AND MAGNETISM</td>
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Group C: ‘Plus’ Courses
A minimum of 9 units are required.

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<th>Title</th>
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<tbody>
<tr>
<td>EBTM 604</td>
<td>INTRODUCTION TO PROJECT MANAGEMENT</td>
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<tr>
<td>EBTM 625</td>
<td>PROJECT LEADERSHIP AND COMMUNICATION</td>
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<tr>
<td>EBTM 750</td>
<td>PROGRAM AND PORTFOLIO MANAGEMENT</td>
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<tr>
<td>ENCE 662</td>
<td>Introduction to Project Management</td>
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<tr>
<td>ENCE 688</td>
<td>Global Project Management</td>
<td></td>
</tr>
<tr>
<td>ENCE 665</td>
<td>Management of Project Teams</td>
<td></td>
</tr>
<tr>
<td>PRWR 621</td>
<td>BUSINESS WRITING</td>
<td></td>
</tr>
<tr>
<td>PRWR 623</td>
<td>TECHNICAL WRITING AND INFORMATION DESIGN</td>
<td></td>
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</table>

Group D: Thesis/Internship
A minimum of 9 units are required.

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<tr>
<td>PHYS 799</td>
<td>PHYSICS MASTERS INTERNSHIP</td>
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<tr>
<td>PHYS 795</td>
<td>APPLIED PHYSICS RESEARCH</td>
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<tr>
<td>PHYS 897</td>
<td>PHYSICS THESIS</td>
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Total Units 37

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<tr>
<td>PHYS 685</td>
<td>PROFESSIONAL SCIENCE MASTERS SEMINAR</td>
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</table>

Description of thesis and/or non-thesis option for graduate programs
Students will undertake a 3-unit research course with a faculty mentor, followed by 6 units of internship at an employer facility. The internship component will require the students to work on site at a potential work place for a total minimum duration of 300 hours. The program faculty will make all attempts to help student placement in paid internships whenever possible, although this cannot always be guaranteed. Alternatively, students will have the option to take 6 units of continued thesis research with the faculty mentor in lieu of the internship. Thesis research will be structured so that students will need to collaborate actively and function as a team. Whenever possible, research topics will be chosen to allow the student to be involved in faculty collaborations with industry or other technology workplaces.

Description of thesis and/or non-thesis options
Thesis
Subsequent to successful completion of a 3 unit research course, students will successfully complete 6 units of thesis under the
supervision of a faculty member who will serve as the chair of the master's thesis committee.

Research Practicum

Subsequent to successful completion of a 3 units research course, students will enroll in 6 units of research practicum which involves successful completion of a research project under the supervision of a faculty member.

Internship

Students will successfully complete 6 units of internship at an employer facility. The internship component will require the students to work on site at a potential work place for a total minimum duration of 300 hours. Students are expected to take the initiative in proactively seeking internship opportunities, utilizing available resources. The program faculty will assist students in finding internships whenever possible.

1. Demonstrate content knowledge in areas of applied physics that are relevant to the current scientific and technology enterprises.
2. Demonstrate knowledge and skills for the measurement and control of physical variables as well as transduction of changes in these variables through physical phenomena.
3. Demonstrate knowledge of using and/or developing computer models and simulations of physical phenomena and processes; acquire and analyze data from experiments.
4. Acquire advanced skills related to scientific and technical communication and presentation in a variety of formats including seminars, project proposals, instruction documents etc. Design and deliver oral and written presentations employing scientific and professional formats such as technical seminars, project proposals and instructional documents using appropriate advanced technology and communication modes.

Biology M.S.

Degree: Master of Science
https://www.towson.edu/biology

Program Director: Dr. Peko Tsuji
Phone: 410-704-4117
Email: ptsuji@towson.edu

Greater Baltimore is a center of biotechnology and biomedical research. In addition, the region's rapid growth and development have stimulated environmental concerns and placed strains on the education system. As a consequence, graduates with master's-level training are sought by research facilities and private laboratories, environmental consulting firms, zoos, aquaria, and public and private secondary schools. The Master of Science degree in Biology is intended to provide students with advanced training in sub-disciplines of biology. Students may earn a degree through a thesis or non-thesis option.

The thesis option provides the necessary background and experience for those who plan further study for their Ph.D., for those whose employment requires research training, and for those who wish to teach in community colleges. This option includes a combination of course work and the completion of a major research project. The results of this project will be prepared for publication in the form of a thesis. Students will select their course work and research efforts in one of two areas: Molecular, Cellular and Microbiology, or Organismal Biology and Ecology. Graduate teaching and research assistantships are awarded on a competitive basis to full-time thesis students.

The non-thesis option is designed for those who want a broader background in biology, including secondary school teachers or students planning to apply to professional schools. This option allows students to obtain a degree entirely through course work. Research opportunities are available but not required for the degree. A diverse course offering is available in the evening to accommodate working students.

Admission Requirements

- A minimum of 24 undergraduate units in biology
- Course work in general chemistry, organic chemistry and physics.
- A GPA of 3.00 in previous biology course work. An overall GPA (i.e., in biology and all other courses) of 3.00 is required for full admission. Overall GPA calculations for admission are based upon the last 60 units of undergraduate course work. Students lacking key prerequisites and/or having a GPA of 2.75-2.99 may rarely be given conditional admission. Any student admitted conditionally will be required to make up deficiencies in prerequisites and/or achieve a GPA of 3.00 in their first three graduate courses taken at Towson University.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

Application to the Program

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply/international.html), including the following:

- General application form, application fee, official transcripts and three letters of recommendation from instructors or supervisors familiar with the student’s record, aptitude and potential for graduate work. Email addresses of references to be included on application form.
- A one-page personal statement explaining why you plan to pursue a graduate degree in biology, your curricular and/or research interests and your future career and/or educational plans.
- Students who are applying to the thesis option must have the written support of a faculty member who is willing to serve as their thesis adviser prior to the application deadline.

Application Deadlines

- March 15 for the fall term
- October 31 for the spring term

Degree Requirements

Thesis and non-thesis students are required to complete 30 units of course work. Students may take a maximum of three courses at the 500 level and no more than two courses in disciplines outside of Biology (with the exception of ENVS 604), and only with the prior approval of the student’s advisory committee or assigned adviser.

Thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>BIOL 796</td>
<td>PROFESSIONAL ASPECTS OF BIOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>BIOL 797</td>
<td>GRADUATE SEMINAR</td>
<td>1</td>
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</tbody>
</table>

<table>
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<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>

BIOL 796 | PROFESSIONAL ASPECTS OF BIOLOGY | 2     |
| BIOL 797 | GRADUATE SEMINAR                   | 1     |
Biology Thesis

Research Area:
- Molecular, Cellular and Microbiology
- OR Organismal Biology and Ecology

Additional Biology Courses (includes ENVS 604)
- 3-12 units

Non-Biology Courses
- 0-6 units

Non-Thesis Research
- 0-3 units

BIOL 701
- NON-THESIS RESEARCH
- 1-3 units

BIOL 703
- INDEPENDENT STUDY
- 1-3 units

- All course work must be approved by the student's thesis advisory committee. Appropriate course work will be based on the student's undergraduate background, area of research and career objectives. Students must select courses and focus their research efforts in one of two areas: Molecular, Cellular and Microbiology, or Organismal Biology and Ecology.
- All students must complete and successfully defend a thesis before the degree is awarded.

Non-thesis Option

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 797</td>
<td>GRADUATE SEMINAR</td>
<td>1</td>
</tr>
<tr>
<td>Biology Courses (includes ENVS 604)</td>
<td>17-29</td>
<td></td>
</tr>
<tr>
<td>Non-Biology Courses</td>
<td>0-6</td>
<td></td>
</tr>
<tr>
<td>Non-Thesis Research</td>
<td>0-6</td>
<td></td>
</tr>
</tbody>
</table>

- Students will select course work with assistance and approval of an adviser from the Biology graduate faculty. Course selections will be based on the student's undergraduate background, purpose for pursuing the M.S. degree, and current or planned career.

1. Students will demonstrate an understanding of biological principles and communicates those principles in oral and written form.
2. Students will be able to read, understand and critically review scientific literature within a selected area of biology, including evaluation of experimental design.
3. Students will be able to design, conduct and defend original research projects (for Thesis students).
4. Students will be able to conduct advanced instruction in undergraduate laboratories and classroom lecture settings (for Teaching Assistants).

Computer Forensics

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/comforensics.html

Program Director: Dr. Suranjan Chakraborty
Phone: 410-704-4769
Email: ait@towson.edu

The computer forensics graduate certificate prepares students for high demand IT roles such as computer/digital forensics analysts. As a specially trained cybersecurity professional, you will gain the expertise you need for this exciting, evolving career.

Modern organizations increasingly depend on network and wireless-based communication, making them more vulnerable to cyberattacks. Consequently, organizations need IT roles that specialize in "incident response" in case of such attacks and subsequent "forensic analysis" of digital evidence.

The Computer Forensics post-baccalaureate certificate (PBC) is designed to offer students a curriculum that provides knowledge and skills in performing forensics analysis on both traditional and mobile computing devices. This program offers students specialized instruction that covers the fundamentals of general forensics analysis and the specifics of forensic analysis of computing devices.

The program is intended for students who have a bachelor’s degree in a computing-related field and are seeking advanced study. It may also interest you if:

- You work in the information technology field and need additional academic background for professional growth.
- You have a bachelor’s degree in a discipline other than information technology and want to prepare for careers in this field.

Admission Requirements

Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 650</td>
<td>COMPUTER &amp; NETWORK FORENSICS AND INCIDENT RESPONSE</td>
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</tr>
<tr>
<td>AIT 660</td>
<td>MOBILE DEVICE FORENSICS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 745</td>
<td>CASE STUDIES IN COMPUTER FORENSICS</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units

1. Articulate the current state and evaluate the current limits in the knowledge, theory and application of computer forensics.
2. Work effectively in teams to assess, prioritize and professionally communicate computer forensic issues and solutions.
3. Compare and contrast various computer forensic techniques and assess their application to context specific problems.
4. Synthesize knowledge of computer forensics from multiple sources to design and present solutions to emerging government and industry computer forensics problems

Computer Science M.S.

Degree: Master of Science
https://www.towson.edu/fcsm/departments/computerinfosci/grad/computersci/

Program Director: Dr. Michael McGuire
Phone: 410-704-2337
Email: mmguire@towson.edu

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Email: mmguire@towson.edu
This program provides a comprehensive approach to advanced study in computer science. It also prepares professionally responsible individuals to be capable of holding a variety of scientific and technical positions in the area of computing applications.

Such jobs are found in research and development departments; in federal, state and local government agencies; in computer software development companies; in computer security companies; in Internet, e-commerce and Web development companies; and in companies involved in the development of hardware and software products for applications in aerospace, biological, chemical, medical and genetic research. Graduates will also be prepared for further work at the doctoral level.

The main objectives of the program are:

1. to give students the opportunity to study and attain knowledge in current computer science specialties;
2. to develop student ability to apply computer science problem-solving methods and tools to realistic research and industry-related problems;
3. to equip students with the tools and knowledge necessary for contributing to the needs of a high technology society through preparation for continued learning; and
4. to prepare students for advanced graduate work in computer science.

**Admission Requirements**

- A baccalaureate degree in computer science from a regionally accredited college or university**, or a baccalaureate degree from a regionally accredited college or university** in any other field and completion of one to three prerequisite courses from among MATH 263, COSC 501 and COSC 502, as determined by the graduate program director.
- An undergraduate GPA of 3.00 for full admission, or 2.75 for conditional admission, is required. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

**Non-immigrant international students:** See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

**Core Requirements for All Tracks**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 519</td>
<td>OPERATING SYSTEMS PRINCIPLES</td>
<td>3</td>
</tr>
<tr>
<td>COSC 578</td>
<td>DATABASE MANAGEMENT SYSTEMS I</td>
<td>3</td>
</tr>
<tr>
<td>COSC 600</td>
<td>ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>COSC 650</td>
<td>COMPUTER NETWORKS</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- COSC 880 | COSC PROJECT/INTERNSHIP | 3-6 |
- AIT 880 | GRADUATE PROJECT | |
- COSC 997 | COMPUTER SCIENCE THESIS | |

**Total Units**: 15-18

**M.S. in Computer Science (33 units)**

**Core Requirements for All Tracks**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 519</td>
<td>OPERATING SYSTEMS PRINCIPLES</td>
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</tr>
<tr>
<td>COSC 578</td>
<td>DATABASE MANAGEMENT SYSTEMS I</td>
<td>3</td>
</tr>
<tr>
<td>COSC 600</td>
<td>ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS</td>
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</tr>
<tr>
<td>COSC 650</td>
<td>COMPUTER NETWORKS</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following:

- COSC 880 | COSC PROJECT/INTERNSHIP | 3-6 |
- AIT 880 | GRADUATE PROJECT | |
- COSC 997 | COMPUTER SCIENCE THESIS | |

**Total Units**: 15-18

**Software Engineering Track (33 units)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSC 519</td>
<td>SOFTWARE REQUIREMENTS ENGINEERING</td>
<td>9</td>
</tr>
<tr>
<td>COSC 603</td>
<td>SOFTWARE TESTING AND MAINTENANCE</td>
<td></td>
</tr>
</tbody>
</table>

Both COSC 501 and COSC 502 can be taken together in the same term. These prerequisites are not required for students who have a baccalaureate degree in Computer Science. MATH 263 is not required for students who have an engineering, mathematics or computer science baccalaureate degree. Students with no engineering, mathematics or computer science degree background must take all three prerequisites.

A grade of “B” or better (or pass) is required for the successful completion of any prerequisite course.

Students may repeat prerequisite courses no more than two times to be eligible to take graduate-level courses.

**Degree Requirements**

- Satisfactory completion of any assigned preparatory courses. (This only applies to students who do not have an undergraduate degree in computer science.)
- All M.S. students must complete the core courses in Group A.
- Satisfactory completion of the requirements for the M.S. in Computer Science or M.S. in Computer Science with the Software Engineering/Computer Security/E-Commerce Track. At least 24 units of degree work must be at the 600- to 800-level.
- Earn a grade of “B” or better in all required courses listed in Group A. Courses may be repeated once to satisfy this requirement.

**Non-immigrant international students:** See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy** in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)
program director's approval before enrolling in the course.

Course Security Track (33 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| Group A - Core Courses
| See core requirements above. If thesis option is chosen, thesis must be in computer security area. |
| Group B - Required Courses
| Select at least three courses from the following: |
| COSC 647 | APPLICATION SOFTWARE SECURITY              | 9     |
| COSC 683 | SECURITY AND INTERNET ALGORITHMS           |       |
| COSC 734 | NETWORK SECURITY                           |       |
| COSC 745 | ADVANCED TOPICS IN COMPUTER SECURITY       |       |
| Group C - Electives
| Any 600/700-level COSC courses that are not taken in Group A or Group B will be counted as electives. Those who want to take elective courses from a discipline other than COSC must get the COSC program director's approval before enrolling in the course. |

Students choosing the thesis option will complete 18 units of core courses, 9 units of required courses, and 6 units of electives. Students choosing the non-thesis option will complete 15 units of core courses, 9 units of required courses, and 9 units of electives.

E-Commerce Track (33 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| Group A - Core Courses
| See core requirements above. If thesis option is chosen, thesis must be in E-Commerce area. |
| Group B - Required Courses
| Select at least two courses from the following: |
| COSC 617 | ADVANCED WEB DEVELOPMENT                   | 6     |
| COSC 641 | INTRO TO E-COMMERCE                        |       |
| COSC 643 | INTERNET SUPPLY CHAIN MNG                  |       |
| COSC 741 | E-COMMERCE CASE STUDIES                    |       |
| Group C - Electives
| Any 600/700-level COSC courses that are not taken in Group A or Group B will be counted as electives. Those who want to take elective courses from a discipline other than COSC must get the COSC program director's approval before enrolling in the course. |

Students choosing the thesis option will complete 18 units of core courses, 9 units of required courses, and 6 units of electives. Students choosing the non-thesis option will complete 15 units of core courses, 9 units of required courses, and 9 units of electives.

Data Science Track (33 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
</table>
| Group A - Core Courses
| See core requirements above. If thesis option is chosen, thesis must be in Data Science area. |
| Group B - Required Courses
| COSC 757 | DATA MINING                                | 3     |
| Select at least two courses from the following: |
| COSC 657 | DATABASE MANAGEMENT SYSTEMS II             | 6     |
| COSC 683 | SECURITY AND INTERNET ALGORITHMS           |       |
| COSC 710 | SOCIAL NETWORK ANALYSIS                    |       |
| COSC 760 | BIG DATA ANALYTICS                        |       |
| Group C - Electives
| Any 600/700-level COSC courses that are not taken in Group A or Group B will be counted as electives. Those who want to take elective courses from a discipline other than COSC must get the COSC program director's approval before enrolling in the course. |

Students choosing the thesis option will complete 18 units of core courses, 9 units of required courses, and 6 units of electives. Students choosing the non-thesis option will complete 15 units of core courses, 9 units of required courses, and 9 units of electives.

Transfer Courses

A student can transfer up to two graduate-level courses from a recognized institution with the approval of the graduate program director.

1. Apply advanced skills in theoretical and applied computing principles and practices to solve a variety of problems.
2. Work effectively in teams and communicate effectively.
3. Design, develop, analyze, and evaluate software, software systems and algorithmic approaches.
4. Participate in, and be well prepared, for research and development in Computer Science in industry or academia.

Database Management Systems Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/databasemgmt.html

Program Director: Dr. Suranjan Chakraborty
Phone: 410-704-4909
Email: ait@towson.edu

The Post-Baccalaureate Certificate in Database Management Systems covers the study, design and development of database systems, and discusses the major issues in managing a large database system. This program provides graduate-level education in IT for students wanting to make progress in the high-tech work environment or preparing to enter the high-tech work force. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for
students who have a bachelor’s degree in a computing-related field and are working as programmers, software engineers, system analysts, etc., who will enter the program for advanced study. The program may also be of interest to persons who:

- Do not have a bachelor’s degree in the field, but are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their career.
- Have a bachelor’s degree in a discipline other than IT who are seeking preparation for careers in this field.

**Admission Requirements**

Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 632</td>
<td>DATABASE MANAGEMENT SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 732</td>
<td>ADVANCED DATABASE MANAGEMENT SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 735</td>
<td>CASE STUDIES IN DATABASE MANAGEMENT SYSTEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

**Environmental Science M.S.**

Degree: Master of Science  
https://www.towson.edu/lcsm/departments/zoology/

Program Director: Dr. David R. Ownby  
Phone: 410-704-2946  
Email: downby@towson.edu  

The graduate program in environmental science (ENVS) is an interdisciplinary program with core courses taught by biologists, geologists and chemists. The program seeks to provide students with the ability to collect and evaluate geological, chemical and ecological data associated with creating and resolving solutions to the most pressing environmental issues and problems currently faced by metropolitan areas. The program has a thesis and a non-thesis capstone option, both designed to develop a student’s ability to communicate the scientific basis for environmental decisions that impact human health and the environment to a wide audience of potential stakeholders including policy makers and disciplinary scientists.

Students pursuing a thesis will work with a research adviser to develop a scientifically sound project with the ultimate goal being the successful defense of their thesis. The non-thesis capstone students will complete their degree in the Research Practicum course (ENVS 798) where they will conduct a comprehensive scientific review of the policy and/or regulations governing a current or emerging environmental issue. As part of the requirements for ENVS 798 these students will draft a policy analysis document to be reviewed by a content expert and make a presentation of their findings to a panel of invited experts and guests.

The students currently enrolled in the program come from a range of backgrounds and disciplines that include those already working in the environmental field, those who are looking to enter the environmental work force or go on for an advanced graduate degree in a related field, and educators seeking to expand their knowledge of environmental sciences in metropolitan areas so they can teach the specialty.

Four concentrations were developed within the program, based on workforce needs identified by regional environmental professionals: Biological Resources Management, Water Resources Management and Assessment, Wetlands Assessment and Management, and Environmental Spatial Analysis.

The graduate handbook describes the policies and procedures pertaining to the M.S. degree and graduate certificate in Environmental Science. All required courses in the program and all ENVS-sponsored electives are taught in the late afternoon or evening.

**Admission Requirements**

- Admission to Towson University.
- A minimum undergraduate GPA of 3.0 for full admission and 2.75 for conditional admission.
- Students without an undergraduate degree in a related area (i.e. biology, chemistry, geology, or environmental science) are required to complete the following courses with a minimum GPA of 2.75 in order to be considered for admission. This should be done in consultation with the Graduate Program Director:
  - two terms of introductory biology with laboratory
  - two terms of introductory chemistry with laboratory and
  - one term of statistics or
  - one term of calculus

Students are accepted for the fall and spring terms only. The deadline for receipt and verification of applications for both non-thesis and thesis track applicants is October 1 for spring admission and March 1 for fall admission. Admission is granted on a competitive, space-available basis. Thesis track students are strongly encouraged to have contacted prospective thesis advisers prior to applying.

Submit the following additional admission materials by October 1 for Spring and March 1 for Fall admission on-line at http://www.towson.edu/academics/grad/grad/index.html

- Narrative letters of recommendation from three individuals in a position to evaluate your academic potential in this field (Email addresses must be entered in the on-line application).
- Personal Statement: A one page statement in which you discuss career goals and how this graduate program will help you to achieve these goals.

**Degree Requirements**

All M.S. students complete 30 units of graduate work. No more than three courses may be at the 500 level. In addition to completing the core courses listed below, all students choose a concentration and select their elective courses from among those courses appropriate for that concentration (see below).
**Thesis Option (30 units)**

Four core courses, electives appropriate to the concentration (no more than three 500-level courses) and 6 units of ENVS 896.

**Non-Thesis Option (30 units)**

Four core courses, electives appropriate to the concentration (no more than three 500-level courses) and ENVS 798 (which must be completed successfully in the first attempt).

### Required Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 601</td>
<td>TOPICS IN ENVIRONMENTAL GEOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 602</td>
<td>ENVIRONMENTAL CHEMISTRY</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 603</td>
<td>ENVIRONMENTAL LAW AND REGULATIONS</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 604</td>
<td>ECOSYSTEM ECOLOGY</td>
<td>4</td>
</tr>
</tbody>
</table>

### M.S. Culmination Courses

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVS 798</td>
<td>RESEARCH PRACTICUM (and 3 additional credits of elective(s))</td>
<td>6</td>
</tr>
<tr>
<td>ENVS 896</td>
<td>THESIS</td>
<td></td>
</tr>
</tbody>
</table>

**Total Units** 21

### Concentrations

In addition to completing the required core, students choose a concentration listed below and select electives from within it. The lists below contain pre-approved courses; students may request approval of a course to be included in their concentration prior to registration for that course (see ENVS graduate handbook for details and approval form).

### Water Resource Management and Assessment

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 506</td>
<td>LIMNOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 555</td>
<td>FISH BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 601</td>
<td>CURRENT TOPICS IN BIOLOGY ¹</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 609</td>
<td>COMMUNITY ANALYSIS AND BIOASSESSMENT</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 610</td>
<td>POPULATION AND COMMUNITY BIOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 653</td>
<td>BIOLOGY OF FRESHWATER INVERTEBRATES</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 630</td>
<td>CONCEPTS OF ENVIRONMENTAL ENGINEERING</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 635</td>
<td>WETLANDS IDENTIFICATION, CONSERVATION AND DELINEATION</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 640</td>
<td>ECOTOXICOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>ENVS 645</td>
<td>FLUVIAL GEOMORPHOLOGY AND HYDROLOGY</td>
<td>4</td>
</tr>
<tr>
<td>ENVS 650</td>
<td>AQUEOUS GEOCHEMISTRY</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 523</td>
<td>GIS APPLICATIONS</td>
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<tr>
<td>GEOG 587</td>
<td>ENVIRONMENTAL IMPACT ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 631</td>
<td>REMOTE SENSING</td>
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<tr>
<td>GEOG 672</td>
<td>SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING ¹</td>
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<td>GEOG 673</td>
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<tr>
<td>GEOG 674</td>
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<tr>
<td>GEOG 675</td>
<td>SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING ¹</td>
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### Biological Resources Management

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>BIOL 506</td>
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</tr>
<tr>
<td>BIOL 510</td>
<td>CONSERVATION BIOLOGY</td>
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</tr>
<tr>
<td>BIOL 532</td>
<td>VASCULAR PLANT TAXONOMY</td>
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<tr>
<td>BIOL 535</td>
<td>PLANT ECOLOGY</td>
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</tr>
<tr>
<td>BIOL 555</td>
<td>FISH BIOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 556</td>
<td>ORNITHOLOGY</td>
<td>4</td>
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<tr>
<td>BIOL 561</td>
<td>ENTOMOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 567</td>
<td>HERPETOLOGY</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 601</td>
<td>CURRENT TOPICS IN BIOLOGY ¹</td>
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</tr>
<tr>
<td>BIOL 610</td>
<td>POPULATION AND COMMUNITY BIOLOGY</td>
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<td>BIOL 635</td>
<td>PHYSIOLOGICAL PLANT BIOLOGY</td>
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<tr>
<td>BIOL 731</td>
<td>PLANT COMMUNITY BIOLOGY</td>
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</tr>
<tr>
<td>ENVS 635</td>
<td>WETLANDS IDENTIFICATION, CONSERVATION AND DELINEATION</td>
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<td>ENVS 640</td>
<td>ECOTOXICOLOGY</td>
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<td>ENVS 645</td>
<td>FLUVIAL GEOMORPHOLOGY AND HYDROLOGY</td>
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<td>GEOG 503</td>
<td>SOILS AND VEGETATION</td>
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<td>ENVIRONMENTAL IMPACT ANALYSIS</td>
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<td>MATH 575</td>
<td>MATHEMATICAL MODELS</td>
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<td>MATH 630</td>
<td>STATISTICS-AN INTEGRATED APPROACH</td>
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<tr>
<td>MATH 632</td>
<td>COMPUTATIONAL STOCH-ASTIC MODELING</td>
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### Wetlands Assessment and Management

<table>
<thead>
<tr>
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<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BIOL 510</td>
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</tr>
<tr>
<td>BIOL 518</td>
<td>MICROBIOLOGY</td>
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</tr>
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<td>BIOL 535</td>
<td>PLANT ECOLOGY</td>
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<tr>
<td>BIOL 601</td>
<td>CURRENT TOPICS IN BIOLOGY ¹</td>
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<tr>
<td>ENVS 650</td>
<td>AQUEOUS GEOCHEMISTRY</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 523</td>
<td>GIS APPLICATIONS</td>
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</tr>
<tr>
<td>GEOG 587</td>
<td>ENVIRONMENTAL IMPACT ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 672</td>
<td>SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING ¹</td>
<td>3</td>
</tr>
</tbody>
</table>

¹ An approved 300-level course may be substituted for these courses.
Environmental Science Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/environsci/grad/sciencepbc/

Program Director: Dr. David Ownby
Phone: 410-704-2946
Email: downby@towson.edu

Certificate Requirements (18 units)
All students wishing to receive a certificate complete a minimum of 18 units of graduate work as follows: two core courses and additional electives, selected in consultation with an adviser, from one concentration. No more than three 500-level courses can be counted toward the certificate.

1. Collect and evaluate geological, chemical and ecological data associated with creating and resolving solutions to current (and local) environmental problems.
2. Interpret the legal framework that underlies environmental regulation as it applies to protecting human health and the environment.
3. Apply their knowledge of geological, chemical and ecological processes to environmental data collection, analysis and interpretation in order to propose viable solutions to complex multidisciplinary environmental issues.
4. Find, read and comprehend the primary scientific literature that relates to environmental issues and produce written documents using a scientific format.
5. Communicate clearly, both in writing and orally, to a wide audience (potential stakeholders) the scientific basis for environmental decisions that impact human health and the environment.

Forensic Science M.S.
Degree: Master of Science
https://www.towson.edu/fcsm/departments/chemistry/grad/forensic/

Program Director: Mark Profili
Phone: 410-704-2668
Email: mprofili@towson.edu

Mission Statement
The mission of the Master of Science in Forensic Science Program is to provide students with a comprehensive and in-depth study of major...
areas of forensic science that will allow them to compete for positions in forensic science beyond the entry level.

The program is based on an application-focused curriculum that provides the student an advanced educational background and the development of laboratory skills. The program's mission is further enhanced through active forensic research, internships and collaborative learning experiences with accredited forensic laboratories.

**Program Goals and Objectives**
The goals and objectives of the Towson University Master of Science in Forensic Science Program is to prepare students for positions as working forensic scientists in business, industry and government careers. To meet these goals, the program combines chemistry, biology and specialized forensic science course work to provide students with advanced scientific and laboratory training in major areas of forensic science including crime scene analysis, forensic DNA analysis and trace evidence/toxicology analysis.

**General Information**
The Master of Science in Forensic Science program is a FEPAC-accredited Professional Science Master’s Program that is primarily molecular biology/biochemistry-based, focusing on forensic DNA analysis, or chemistry-based, focusing on toxicology, drug and trace evidence analysis. This program has the support of and benefits from a wide variety of talented faculty members from the department of Chemistry as well as forensic professionals serving as adjunct faculty. The program is rich with laboratory experience, capped with a research project, internship in a forensic laboratory or a thesis.

The program provides advanced education in the scientific and laboratory problem-solving skills necessary for success in a modern forensic laboratory. The program combines this rigorous training with exposure to the breadth of forensic science disciplines, including forensic science practice, law and ethics. The program is intended for students who are interested in working as forensic scientists in the field. The flexible degree program is also designed to meet the professional development needs of forensic scientists now employed in Maryland and the mid-Atlantic region. It is currently one of a very few FEPAC-accredited, Professional Science Master’s Programs in forensic science in the United States.

The curriculum ensures that each student:

- Develops an understanding of the areas of knowledge that are essential to forensic science, including crime scene investigation, physical evidence concepts, law/science interface, ethics and professional responsibilities, quality assurance, analytical chemistry and instrumental methods of analysis, microscopy, molecular biology, toxicology, forensic biology, DNA technologies and biostatistics.
- Acquires skills and experiences in the application of basic forensic science concepts, analytical chemistry and forensic DNA knowledge to problem solving.
- Is oriented in professional values, concepts and ethics.
- Demonstrates integration of knowledge and skills through a capstone experience, such as a seminar, a research project, an internship or thesis.

**Qualifications for a career and/or internship in forensic science**
Prospective students should be aware that background checks, driving records, drug tests, polygraph, and medical or physical examinations similar to those required of law enforcement officers are likely to be a condition of employment and/or internships. Please refer to: NIJ Report NCJ 203099, pp. 7-10 for additional information.

**Admission Requirements**
- A B.S./B.A. in biological sciences, chemistry or forensic chemistry from a regionally accredited college or university is required for full admission. Students with a B.S./B.A. in a natural science with two terms in general chemistry, organic chemistry and general physics, and at least one term in general biology, analytical chemistry, statistics, biochemistry, molecular biology and genetics can be considered for admission.
- A GPA of 3.00 in previous science course work and an overall GPA of 3.00 are required for full admission. All GPA calculations for admissions are based upon the last 60 units of undergraduate and post-baccalaureate study. Students having a GPA of 2.75-2.99 may be given conditional admission. Full admission will be granted after students achieve a GPA of 3.00 in their first 9 graduate units taken at Towson University.
- Graduate application, application fee and official transcripts

**Application Deadline**
This program admits students for the fall and spring terms only.

Priority will be given to students whose application and transcripts have been received by March 30 for fall admission and October 31 for spring admission.

Students who miss the priority deadline may contact the program director via email at mproffi@towson.edu to inquire if space is still available for the forthcoming term.

**Degree Requirements**
All students complete 37 units of graduate work. No more than three courses may be taken at the 500 level. In addition to the required courses listed below, all students must select 3 elective courses with at least two electives courses from an approved list. To fulfill the capstone requirement students must choose either the Thesis option (6 units) or an Internship (0-3 units) and/or a Research Project (0-6 units). Students wishing to pursue a forensic chemistry rich program that is centered in toxicology, drug and trace analysis may do so with the consent of the program director. This will require substitution of some of the required biology based courses with elective chemistry based courses. The number of courses and credit units will not be affected by these substitutions.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRSC 600</td>
<td>FORENSIC SCIENCE AND LAW</td>
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<td>FRSC 601</td>
<td>FORENSIC MOLECULAR BIOCHEMISTRY</td>
<td>3</td>
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<td>FRSC 602</td>
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<td>FORENSIC SEROLOGY</td>
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<td>FRSC 620</td>
<td>DNA TECHNOLOGIES</td>
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<td>FRSC 621</td>
<td>ADVANCED DNA TECHNOLOGIES</td>
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<tr>
<td>FRSC 797</td>
<td>GRADUATE SEMINAR FOR FORENSIC SCIENCE</td>
<td>1</td>
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</table>

**Elective Courses**
Students must consult with the program director prior to selecting their electives.

Select 12 units from the following:
Health Information Technology

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/healthit.html

Program Director: Dr. Suranjan Chakraborty
Phone: 410-704-4769
Email: ait@towson.edu

Information technology drives changes in the delivery of healthcare information that can improve patient care. Organizations need highly qualified and educated professionals to lead and direct health informatics initiatives.

The health information technology post-baccalaureate certificate (PBC) is designed to offer students an interdisciplinary curriculum that provides knowledge and skills in both health care and information technology. This program offers students specialized instruction to foster intellectual inquiry, critical thinking, creativity and adaptability to craft solutions that will address public and societal needs.

The program is intended for students who have a bachelor’s degree in a computing-related field and who wish to master information technology skills widely needed in the health care industry. The program may also interest you if:

- You are a working professional in health care or public health and want to broaden your career choices.

Admission Requirements
Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

<table>
<thead>
<tr>
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<tbody>
<tr>
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<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 644</td>
<td>HEALTH INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>or AIT 645</td>
<td>HEALTHCARE DATA ANALYTICS</td>
<td></td>
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<tr>
<td>or HLTH 633</td>
<td>HEALTH CARE SYSTEMS</td>
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<tr>
<td>AIT 740</td>
<td>CASE STUDIES ON HEALTHCARE INFORMATION TECHNOLOGIES</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units: 37

1. Articulate the current state and evaluate the current limits in the knowledge, theory and application of health information technology
2. Work effectively in teams to assess, prioritize and professionally communicate issues related to health care information technology
3. Compare and contrast various health information technology and assess their application to context specific problems
4. Synthesize knowledge from multiple sources to design proposals and present best practice health care information system solutions to address current government and industry needs.

Information Security and Assurance Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/infosecurity.html

Program Director: Dr. Suranjan Chakraborty
Phone: 410-704-4909
Email: ait@towson.edu

The Post-Baccalaureate Certificate in Information Security and Assurance covers the study, design, development, implementation and support of computer-based information systems with regard to securing information. This program provides graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. program in Applied Information Technology.

The program is intended for students who have a bachelor’s degree in information technology, computer science, computer information systems or a related field, who will enter the program for advanced studies. The program may also be of interest to persons who:

- Do not have a bachelor’s degree in the field, but are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their careers.
• Have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

Admission Requirements
Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

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<td>3</td>
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<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 612</td>
<td>INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 614</td>
<td>NETWORK SECURITY</td>
<td>3</td>
</tr>
<tr>
<td>AIT 710</td>
<td>CASE STUDIES IN INFORMATION SECURITY</td>
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<td><strong>Total Units</strong></td>
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</table>

1. Understand the information technology infrastructure and its place and value in today's business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency to solve a variety of problems.
4. Prepare, present and develop proposals and solutions for today's governmental and industrial needs.

Information Systems Management Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/infosystems.html

Program Director: Dr. Suranjan Chakraborty
Phone: 410-704-4909
Email: ait@towson.edu (ait@towson.edu)

The Post-Baccalaureate Certificate in Information Systems Management covers the study, design, development, implementation and support of computer-based information systems. This program provides graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. The course of study can be completed as a standalone graduate certificate or applied to the M.S. program in Applied Information Technology. This program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field, who will enter the program for advanced studies. The program may also be of interest to persons who:

• Do not have a bachelor's degree in the field, but are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their careers
• Have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field

Admission Requirements
Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

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<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 628</td>
<td>INFORMATION TECHNOLOGY AND BUSINESS STRATEGY</td>
<td>3</td>
</tr>
<tr>
<td>AIT 630</td>
<td>INFORMATION TECHNOLOGY PROJECT MANAGEMENT</td>
<td>3</td>
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<tr>
<td>AIT 730</td>
<td>CASE STUDIES IN INFORMATION SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Units</strong></td>
<td><strong>15</strong></td>
</tr>
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1. Understand the information technology infrastructure and its place and value in today's business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency to solve a variety of problems.
4. Prepare, present and develop proposals and solutions for today's governmental and industrial needs.

Information Technology D.Sc.
Degree: Doctor of Science (D.Sc.)
https://www.towson.edu/fcsm/departments/computerinfosci/grad/infotech/

Program Director: Dr. Chao Lu
Phone: 410-704-3701
Email: clu@towson.edu

Towson University's Doctor of Science program in information technology prepares students for academic, research, government and state of the art industry positions. About half of our alumni are currently working as tenure-track assistant professors or research scientists across the country and abroad. After graduation, some students continued with their current company and acquired promotion to higher level positions. Others have ventured to start their own company and seek to develop innovative products. The doctoral program provides a new avenue and exciting opportunity for students, who want to become professors, scientists, entrepreneurs or assume leadership roles in their current careers.

The doctoral program is offered by the Department of Computer and Information Sciences in collaboration with the Center of Applied Information Technology. The department has over 30 professors conducting research in a variety of areas and committed to excellence in research and teaching. Faculty research covers three areas of information technology: computer science, information systems, and information technology. Students conduct their research working with their faculty advisor in one of these three areas based on their career interests and goals. The faculty has published extensively and has received grants from NSF, ARL, NIST, NRL, DARPA, other government agencies, and from industry. Admitted doctoral students may have an opportunity to work with funded research projects, in addition to acquiring academic experience as a graduate assistant in the department. Many of our doctoral students are offered teaching
assistantships and serve as instructors for undergraduate courses. The doctoral student demographics include both domestic and international students.

The doctoral program requires 18 units of course work, a qualifying examination and a minimum of 24 units of dissertation beyond master’s program. Similar to other Ph.D. programs in the country, doctoral students have to demonstrate research capabilities and publish in reputed journals or conferences in order to graduate.

NOTE: Since this program is operated through the Center for Applied Information Technology (CAIT), it has a different structure of tuition and fees from other graduate programs. Contact the Bursar’s Office for more information.

ADMISSION REQUIREMENTS

Rolling admission for applicants based on program needs. Full consideration is given to domestic students with complete applications received by May 1 for fall and November 1 for spring admissions.

Deadline for international applicants is October 1 for spring term and April 15 for fall term admissions.

Applicants must hold a master’s degree in one of the fields of Computer Science, Information Systems, Information Technology, or a closely related area. Applicants who have a bachelor’s degree and excellent academic background in the above mentioned fields are eligible to apply for the combined M.S./D.Sc. program. In the combined program, students must finish all of the master’s program requirements before starting the doctoral program.

The following materials must be sent to University Admissions:

• Official undergraduate and graduate transcripts
• A minimum of two letters of recommendation, preferably from academic institutions
• Statement letter that reflects 1. area of research interest (CS, IS, or IT); 2. motivation for applying to the program; 3. faculty in the program with research interests close to your own interests (via communication with faculty); 4. planned utilization of your degree (academic, industry or research career); and 5. strengths of your academic background and career experience.
• Resume
• TOEFL scores (For International Students Only)
• Optional test scores (GRE - in analytic, quantitative, and verbal, NOT required)

DEGREE REQUIREMENTS (75 UNITS BEYOND B.S./B.A. DEGREE)

1. Completion of requirements for a master’s degree (33 units) in computer science or applied information technology. (Students admitted to the doctoral program already holding a master’s degree in computer science, information systems, or information technology or any other closely related areas are considered meeting this requirement.) Students may choose to meet this requirement by completing either the master’s degree in computer science or the master’s degree in applied information technology at Towson University.

2. Completion of a minimum of 18 additional graduate-level units as recommended by the doctoral program committee, selected from courses offered in the computer science and Applied Information Technology graduate programs. For those applicants whose master’s degree is not in CS, IS or IT, the program committee may require additional course work so that the above core background is achieved. Annual GPA in course work must be at least 3.50.

3. Students must pass the qualifying examination within two attempts; one or more sections of the examination can be taken during a given attempt. Four out of seven offered sections of the exam must be passed in order to qualify, and must be completed within four years of entering the program. Information about the sections of the qualifying exam is available from the Computer and Information Sciences department website. The qualifying exam is offered twice a year, typically in January and June.

4. Satisfactory completion of the Dissertation requirements (minimum of 24 units—may not be registered more than 6 units per regular term or 3 units in the summer)

5. Satisfactory completion of Dissertation defense.

Students are strongly recommended to have at least three research publications in peer-reviewed international conferences and/or journals before graduation.

Computer Science Track

In addition to the general degree requirements for the doctorate in IT, three specific COSC courses (9 units) must be taken for the track in Computer Science, with additional requirements for the qualifying examination (given below). An IT doctoral student taking these three courses, passing the qualifying exam in the specified areas, and successfully completing the research requirements for the degree in a CS-related area will be eligible to graduate with a Computer Science track.

Students who completed their master’s degree in Computer Science at Towson University may have already completed the following three courses and would need to substitute other courses with the D.Sc. in IT Program Director’s approval.

Required Courses

• COSC 519 (Operating Systems)
• COSC 600 (Advanced Data Structures and Algorithms)
• COSC 650 (Computer Networks)

Qualifying Exam Requirements

Students in the Computer Science track must pass the following areas of the qualifying exam:

• Operating Systems
• Advanced Data Structures and Algorithms
• Computer Networks
• Software Engineering

and ONE of the following areas:

• Database Management Systems
• Computer Security
• Security Engineering

Publications

Publications in this track are expected to be related to computer science.

NOTE: For additional details, contact the program director or check the Computer and Information Sciences department website.

1. Students will demonstrate a comprehensive knowledge of the fundamentals in four of the following seven areas: data structures and algorithms, operating systems, computer networks, database
systems, project management, software engineering, and human computer interaction.

2. Students will conduct and document scholarly research.
3. Students will present scholarly research.

Integrated STEM Instructional Leadership Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/physics/grad/stempbc/

Program Director: Dr. Pamela Lottero-Perdue
Phone: 410-704-4598
Email: plottero@towson.edu

This 18-unit, part-time post-baccalaureate certificate program prepares educational professionals in PreK-6 school settings to become instructional leaders in integrated science, technology, engineering and mathematics (STEM) education. Teachers who graduate from the program will develop an understanding of: STEM subject content and practices, integrated STEM (iSTEM) instructional approaches, and skills and habits of mind essential to effective engagement in iSTEM. Further, they will be able to:

- Critically analyze and evaluate existing STEM or iSTEM curricula and design or redesign high-quality iSTEM curricula
- Plan, teach, assess and reflect upon iSTEM lessons or units taught to students
- Plan, deliver, assess and reflect upon iSTEM professional learning experiences for other teachers or administrators

The program engages its participants in instruction that: supports state standards relevant to iSTEM and individual STEM subject areas; is inquiry-, problem-, and project-based; is highly collaborative and interactive; and is connected to the schools and districts in which the participants work. This program has been approved by the Maryland State Department of Education (MSDE) for those seeking the Instructional Leader: STEM (PreK– 6) endorsement.

Admission Requirements

- Completion of a bachelor’s degree from a regionally accredited college or university**.
- An overall minimum undergraduate GPA of 3.00 for full admission into the program, and a 2.80 GPA for conditional admission based on the last 60 units of total undergraduate and post-baccalaureate study.
- Minimum of two years of teaching experience (as indicated on your resume)
- Must be currently employed as a teacher or other educational professional working in a PreK-6 school or educational setting (or permission from program director).

To apply, complete an online application. The following additional information will be requested as part of that application:

- Two letters of recommendation from individuals who can attest to your academic background, professional experience and/or personal qualities. One letter must be from a school administrator or supervisor. (Email addresses of recommenders must be entered on the application.)
- A one-page personal statement indicating why you are interested in pursuing graduate study in this iSTEM Instructional Leadership program. The statement should include not only a commitment to iSTEM education for all PreK-6 students, but also a desire to be a leader in PreK-6 iSTEM education.
- A résumé detailing: your current employment and career history as an educational professional serving PreK-6 students; any teaching experience or educational outreach related to science, technology, engineering or mathematics; and (if applicable) any teaching or administrative certification(s) or endorsement(s) you hold.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Certificate Requirements

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<td>ENVIRONMENTAL AND BIOLOGICAL SCIENCE IN INTEGRATED STEM EDUCATION</td>
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<td>ILPD 742</td>
<td>TRANSFORMATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT</td>
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<tr>
<td>SCIE 650</td>
<td>ENGINEERING IN INTEGRATED STEM EDUCATION</td>
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<tr>
<td>SCIE 652</td>
<td>EARTH-SPACE &amp; PHYSICAL SCIENCE IN INTEGRATED STEM EDUCATION</td>
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<td>MTED 650</td>
<td>MATHEMATICS IN INTEGRATED STEM EDUCATION</td>
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<tr>
<td>SCIE 685</td>
<td>PRACTICUM IN INTEGRATED STEM EDUCATION</td>
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Total Units 18

Course Sequence

First Year

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Second Year

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Third Year

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</table>

Total Units 18

Internet Application Development Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/appdev.html
The Post-Baccalaureate Certificate in Internet Application Development covers the study, design, development, implementation and support of computer-based information systems for the Web. This program provides graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. This course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field, who will enter the program for advanced studies. The program may also be of interest to persons who:

- Do not have a bachelor’s degree in the field, but are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their careers.
- Have a bachelor’s degree in a discipline other than IT who are seeking preparation for careers in this field.

Admission Requirements
Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

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<td>AIT 610</td>
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<td>AIT 616</td>
<td>FUNDAMENTALS OF WEB TECHNOLOGIES AND DEVELOPMENT</td>
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<td>AIT 618</td>
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<td>Total Units</td>
<td>15</td>
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</table>

1. Understand the information technology infrastructure and its place and value in today's business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency to solve a variety of problems.
4. Prepare, present and develop proposals and solutions for today's governmental and industrial needs.

Mathematics Education M.S.

Degree: Master of Science
https://www.towson.edu/fcsm/departments/mathematics/grad/education/

Program Director: Dr. Sandy Spitzer
Phone: 410-704-2062
Email: ssptizer@towson.edu

The Master of Science in Mathematics Education program at Towson University provides mathematics teachers with advanced study in mathematics, mathematics education and general education. The program offers teachers additional experience in higher-level mathematics to enhance their teaching with additional depth and breadth of content. At the same time, it strengthens their backgrounds in the school mathematics curriculum, instructional practices, assessment and technology. It also provides them a relevant way of satisfying their in-service requirements for professional advancement.

The program offers two tracks: Secondary School and Middle School. Both tracks require students to take four courses in Mathematics Education (with a focus on pedagogy, integration of technology, and the context of school mathematics), three general education electives, and five mathematics content courses. The two tracks differ primarily in the content focus and level of the mathematics courses. The program was designed with on-the-job teachers in mind, with part-time studies in the evenings and summers available; however, full-time students are also welcome.

Secondary School Track
The Secondary School Track is aimed at current secondary mathematics teachers. Students in this track take mathematics courses to extend their knowledge beyond a bachelor's degree in secondary mathematics, giving them access to powerful mathematics ideas to take into the classroom.

It is expected that graduates of this program will become leaders in mathematics education as master teachers, curriculum developers, mathematics supervisors and other positions that improve the teaching of mathematics in secondary schools. The special strength of this program is the opportunity to study higher mathematics content without leaving the field of school mathematics.

Middle School Track
The Middle School Track is designed to target current and future middle school mathematics teachers who are elementary or middle school certified. Students in this program will broaden and deepen their mathematical content knowledge through courses that target the conceptual ideas of middle school mathematics and beyond.

It is expected that graduates of this program will become leaders in mathematics education in positions that improve the teaching of mathematics in middle schools. The particular benefit of this track is the opportunity to learn mathematics concepts and skills that are meaningful and applicable for classroom teachers in grades 3-8. Professors will model best practices in instructional techniques to enhance students’ learning of both mathematics and pedagogical skills.

Admission Requirements
Applicants must meet the general requirements for graduate study outlined in this catalog. The applicant must possess current certification for teaching secondary school mathematics (Secondary School Track) or teaching elementary school (Middle School Track). In some circumstances, as determined by the program director, two years of recent, documented, full-time teaching experience may replace the certification requirement. For the Secondary School Track, the applicant should have an undergraduate degree (or MAT) in mathematics with a secondary education concentration or the equivalent, from a regionally accredited college or university**, with a minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. For the Middle School Track, the applicant should have an undergraduate degree in elementary education or the equivalent from a regionally accredited college or university**, with a minimum undergraduate GPA of 3.00 for full admission and 2.75 for conditional admission. All GPA calculations for
admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)**

### Degree Requirements

The student is required to successfully complete a total of at least 36 units of course work (with no more than 9 units below the 600 level), as outlined below.

#### Secondary School Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 602</td>
<td>CULTURAL AND PHILOSOPHICAL BACKGROUND OF MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 626</td>
<td>TECHNOLOGY IN SCHOOL MATHEMATICS TEACHING AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 627</td>
<td>CURRICULUM ISSUES IN SECONDARY SCHOOL MATHEMATICS</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Middle School Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 602</td>
<td>CULTURAL AND PHILOSOPHICAL BACKGROUND OF MATHEMATICS</td>
<td>3</td>
</tr>
<tr>
<td>MATH 626</td>
<td>TECHNOLOGY IN SCHOOL MATHEMATICS TEACHING AND LEARNING</td>
<td>3</td>
</tr>
<tr>
<td>MATH 627</td>
<td>CURRICULUM ISSUES IN SECONDARY SCHOOL MATHEMATICS</td>
<td>3</td>
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</tbody>
</table>

#### Geometry

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 557</td>
<td>DIFFERENTIAL GEOMETRY</td>
</tr>
<tr>
<td>MATH 650</td>
<td>PATTERNS IN MATHEMATICAL DESIGNS</td>
</tr>
<tr>
<td>MATH 653</td>
<td>TOPICS IN GEOMETRY</td>
</tr>
<tr>
<td>MATH 671</td>
<td>CHAOTIC DYNAMICS AND FRACTAL GEOMETRY</td>
</tr>
</tbody>
</table>

#### Statistics/Probability

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 531</td>
<td>PROBABILITY</td>
</tr>
<tr>
<td>MATH 532</td>
<td>MATHEMATICAL STATISTICS</td>
</tr>
<tr>
<td>MATH 630</td>
<td>STATISTICS-AN INTEGRATED APPROACH</td>
</tr>
<tr>
<td>MATH 651</td>
<td>MATHEMATICS OF FUZZY LOGIC</td>
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</table>

#### Section D: Mathematics Methods

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>MATH 625</td>
<td>SEMINAR IN MATHEMATICS EDUCATION FOR SECONDARY SCHOOL TEACHERS</td>
</tr>
</tbody>
</table>

#### Total Units

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>36</td>
</tr>
</tbody>
</table>

#### Section C: Mathematics Foundation

Students complete five courses, one course from each of category and one additional course from any category:

**Algebra**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 563</td>
<td>LINEAR ALGEBRA</td>
</tr>
<tr>
<td>MATH 565</td>
<td>THEORY OF NUMBERS</td>
</tr>
<tr>
<td>MATH 568</td>
<td>ALGEBRAIC STRUCTURES</td>
</tr>
<tr>
<td>MATH 667</td>
<td>ALGEBRA OF SYMMETRIES</td>
</tr>
</tbody>
</table>

**Analysis**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 535</td>
<td>NUMERICAL ANALYSIS I</td>
</tr>
<tr>
<td>MATH 576</td>
<td>INTRODUCTORY REAL ANALYSIS</td>
</tr>
<tr>
<td>or MATH 621</td>
<td>REAL ANALYSIS FOR TEACHERS</td>
</tr>
<tr>
<td>MATH 577</td>
<td>COMPLEX ANALYSIS</td>
</tr>
<tr>
<td>MATH 578</td>
<td>TOPOLOGY</td>
</tr>
<tr>
<td>MATH 579</td>
<td>FOURIER ANALYSIS WITH APPLICATIONS</td>
</tr>
</tbody>
</table>

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Towson University
their skills. This course of study can be completed as a stand-alone and those already in the work force who wish to update and enhance education in IT for students preparing to enter the high-tech work force computer-based systems. This program provides graduate-level based information systems with regard to sharing information over the study, design, development, implementation and support of computer-based systems.

The Post-Baccalaureate Certificate in Networking Technologies covers

Email: ait@towson.edu
Phone: 410-704-4909
Program Director: Dr. Joseph R. Clark
Phone: 410-704-4490
Email: jrclark@towson.edu

The Post-Baccalaureate Certificate in Networking Technologies covers

1. Students exiting the graduate program should have an adequate knowledge of mathematics contents in Algebra.
2. Students exiting the graduate program should have an adequate knowledge of mathematics contents in Geometry.
3. Students exiting the graduate program should have an adequate knowledge of mathematics contents in Calculus and Analysis.
4. Students exiting the graduate program should have an adequate knowledge of mathematics contents in Probability and Statistics.
5. Students exiting the graduate program should have an adequate knowledge of mathematics education principles and standards and be able to communicate those principles in oral and written form. Student should be able to plan a lesson using these principals and standards.
6. Students exiting the graduate program should possess a broad knowledge of recent teaching methodologies and pedagogical issues in mathematics education and be able to communicate them in oral and written form.
7. Students should become familiar with the appropriate instructional technology in mathematics and mathematics education and be able to use it properly in their own classrooms or in their researches of mathematics teaching.

**Certificate Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 610</td>
<td>SYSTEMS DEVELOPMENT PROCESS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 620</td>
<td>BUSINESS DATA COMMUNICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 622</td>
<td>NETWORKS ARCHITECTURE AND PROTOCOLS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 720</td>
<td>CASE STUDIES IN NETWORKING TECHNOLOGY</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 15

1. Understand the information technology infrastructure and its place and value in today’s business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency to solve a variety of problems.
4. Prepare, present and develop proposals and solutions for today’s governmental and industrial needs.

**Security Assessment and Management Certificate**

Post-Baccalaureate Certificate
https://www.towson.edu/cla/departments/interdisciplinary/grad/securityassessmentpbc/

Program Director: Dr. Joseph R. Clark
Phone: 410-704-4490
Email: jrclark@towson.edu

The Post-Baccalaureate Certificate in Security Assessment and Management can be completed as a stand-alone program or embedded in the Master of Science degree (see description of the Integrated Homeland Security (p. 132) program).

**Online Instruction**

The entire post-baccalaureate program is delivered online. The goal of the online program is to provide students all of the necessary resources at their fingertips. Students participate in online classroom discussions and review class materials whenever they choose. Towson University utilizes Blackboard as the learning platform for all online courses, so there is a consistent format from course to course. The application process and
curriculum requirements for online learners are identical to those for students attending courses on TU’s campus.

Admission Requirements
Admission requirements for the post-baccalaureate certificate in Security Assessment and Management are the same as for the Master of Science degree in Integrated Homeland Security (p. 132).

Degree Requirements (15 units)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHSM 611</td>
<td>CRITICAL NATIONAL INFRASTRUCTURES</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 612</td>
<td>PLANNING, PREVENTION AND RISK MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 613</td>
<td>EMERGENCY COMMUNICATION AND MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 614</td>
<td>TEAM BUILDING AND LEADERSHIP SKILLS</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 615</td>
<td>STRATEGIC AND TACTICAL PLANNING</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 15

1. Analyze, evaluate and apply threat monitoring and risk mitigation, theories, models and resources to protect critical national infrastructures.
2. Compare homeland security leadership principles and apply them to solve various strategic and tactical disaster resilience, threat mitigation, and emergency management problems.
3. Apply disaster management precepts to coordinate scalable, interagency, and cross-jurisdictional efforts that minimize public harm and restore intersectoral integrity.

Software Engineering Certificate

Post-Baccalaureate Certificate
https://www.towson.edu/fcsm/departments/emergingtech/academics/softwareengineering.html

Program Director: Dr. Suranj Chakraborty
Phone: 410-704-4909
Email: ait@towson.edu

The Post-Baccalaureate Certificate in Software Engineering covers the study, design, development, implementation and support of computer-based information systems. This program provides graduate-level education in IT for students preparing to enter the high-tech work force and those already in the work force who wish to update and enhance their skills. The course of study can be completed as a stand-alone graduate certificate or applied to the M.S. degree program in Applied Information Technology. The program is intended for students who have a bachelor's degree in information technology, computer science, computer information systems or a related field, who will enter the program for advanced studies. The program may also be of interest to persons who:

- Do not have a bachelor's degree in the field, but are currently employed in the IT field and are seeking additional academic studies for professional growth or to advance their careers.
- Have a bachelor's degree in a discipline other than IT who are seeking preparation for careers in this field.

Admission Requirements

Admission requirements for the post-baccalaureate certificate program are the same as those listed for the M.S. in Applied Information Technology. (p. 113)

Certificate Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 600</td>
<td>INFORMATION TECHNOLOGY INFRASTRUCTURE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 624</td>
<td>SOFTWARE ENGINEERING FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>AIT 725</td>
<td>CASE STUDIES IN SOFTWARE ENGINEERING</td>
<td>3</td>
</tr>
</tbody>
</table>

Select at least two of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIT 641</td>
<td>SOFTWARE REQUIREMENTS ENGINEERING</td>
<td>3</td>
</tr>
<tr>
<td>AIT 642</td>
<td>SOFTWARE TESTING AND MAINTENANCE</td>
<td>3</td>
</tr>
<tr>
<td>AIT 643</td>
<td>ENTERPRISE ARCHITECTURE</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units 15

1. Understand the information technology infrastructure and its place and value in today’s business.
2. Work effectively in teams and communicate effectively, both orally and in writing.
3. Use their proficiency to solve a variety of problems.
4. Prepare, present and develop proposals and solutions for today's governmental and industrial needs.

Interdisciplinary Programs

Interdisciplinary programs have become an increasingly important part of Towson University’s role as a premier metropolitan university. The rise of new interdisciplinary fields and the revision of traditional curricula are reflected in the diverse group of interdisciplinary programs offered by TU. These programs enhance the strong liberal arts and sciences core while preparing students for professional and applied fields. They also provide opportunities for new forms of student learning and build on the strengths of the faculty.

As Towson University strives to provide all of its students with the knowledge and skills for entry into the professional world, interdisciplinary programs will continue to expand throughout the curriculum. These programs will also help to create an environment that stimulates commitment to lifelong learning and allows for continued personal growth.

Master’s Degree Programs

- Global Humanities (p. 90) (p. 90)
- Integrated Homeland Security Management (p. 132)
- Jewish Studies (p. 94)
- Professional Studies (p. 135) - Individualized Plan of Study (p. 136)
- Professional Studies - Art History Concentration (p. 135)
- Social Science (p. 105)
- Women’s and Gender Studies (p. 107)
Post-Baccalaureate Certificate Programs

- Family-Professional Collaboration (p. 88)
- Security Assessment and Management (p. 130)
- Women's and Gender Studies (p. 110)

Integrated Homeland Security Management M.S.

Degree: Master of Science
https://www.towson.edu/cla/departments/interdisciplinary/grad/homelandsecurity/

Program Director: Dr. Joseph R. Clark
Phone: 410-704-4490
Email: jrc Clark@towson.edu

The Master of Science degree in Integrated Homeland Security Management and the embedded graduate certificate in Security Assessment and Management (see below) form an interdisciplinary program to provide an applied graduate education for personnel working in various areas of homeland security, risk assessment and management, emergency response and crisis communications. The intent is to provide students with advanced studies and experience to extend their expertise in one area while reaching out to work with other areas in an integrated response.

The core courses provide a common base to familiarize students with the overall issues and concerns of homeland security. Students do additional work in their own areas of expertise in specialized courses, but reach across to other areas by taking introductory graduate-level courses in three other areas. The project is a key part of the program, providing hands-on experience in dealing with real-world problems of homeland security. Work on the project begins midway through the program and continues to provide a sense of reality as the student moves through the program. Ideally, students will work together in joint projects, sharing skills and gaining experience in collaborative problem-solving.

Online Instruction

The entire Integrated Homeland Security Management program is delivered online. The goal of the online program is to provide students all of the necessary resources at their fingertips. Students participate in online classroom discussions and review class materials whenever they choose. Towson University utilizes Blackboard as the learning platform for all online courses, so there is a consistent format from course to course. The application process and curriculum requirements for online learners are identical to those for students attending courses on TU's campus.

Admission Requirements

- A bachelor's degree from a regionally accredited college or university** in a relevant field (for example, political science, health science, information technology or others).
- A cumulative GPA of 3.00 on a scale of 4.00 (2.75 for conditional admission) for the most recent 60 units of graduate or undergraduate work.
- Three years post-bachelor's experience working in health, information technology, security or related areas.
- A minimum TOEFL score of 550 (where applicable).

- Submission of an online application. (https://www.towson.edu/academics/graduate/admissions/apply)
- Submission of a résumé and two-page statement describing past relevant experience.
- Submission of a three-page essay discussing a specific, current threat to homeland security and a potential policy response to it. (Applicants are encouraged to think broadly in regard to threats and consider the panoply of homeland security issues — including (but not limited to) terrorism, natural disasters, community policing, political extremism, community wellness, or the effects of environmental change.)
- Two reference letters attesting to their ability to withstand the rigors of a graduate education.

Non-immigrant international students: See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html)

Degree Requirements

Students must complete a total of at least 36 units:

- 15 units in five core courses taken by all students
- 9 units in three specialization courses
- 6 units in two collateral courses from other specialization areas
- 3 units of capstone project
- 3 units in one elective course

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHSM 611</td>
<td>CRITICAL NATIONAL INFRASTRUCTURES</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 612</td>
<td>PLANNING, PREVENTION AND RISK MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 613</td>
<td>EMERGENCY COMMUNICATION AND MANAGEMENT</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 614</td>
<td>TEAM BUILDING AND LEADERSHIP SKILLS</td>
<td>3</td>
</tr>
<tr>
<td>IHSM 615</td>
<td>STRATEGIC AND TACTICAL PLANNING</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The five core courses above constitute the Certificate in Security Assessment and Management.

Tracks

Select one of three tracks: 9

Information Assurance Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHSM 621</td>
<td>INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS</td>
</tr>
<tr>
<td>IHSM 622</td>
<td>INTRODUCTION TO SOFTWARE SECURITY</td>
</tr>
<tr>
<td>IHSM 623</td>
<td>NETWORK SECURITY</td>
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</table>

Health Preparedness Track

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>IHSM 631</td>
<td>MENTAL HEALTH EMERGENCY PREPAREDNESS AND RESPONSE</td>
</tr>
<tr>
<td>IHSM 632</td>
<td>BIOTERROR PUBLIC HEALTH PREPAREDNESS</td>
</tr>
<tr>
<td>IHSM 633</td>
<td>DISASTER RESPONSE AND COMMUNITY HEALTH</td>
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</table>

Security Policy Track

<table>
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<tr>
<th>Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>IHSM 641</td>
<td>TERRORISM AND POLITICAL VIOLENCE</td>
</tr>
<tr>
<td>IHSM 642</td>
<td>INTELLIGENCE AND HOMELAND SECURITY</td>
</tr>
</tbody>
</table>
Collateral Courses
Select one introductory course in each of the two areas outside of the selected track:

Information Assurance
IHSM 620 INTRODUCTION TO INFORMATION ASSURANCE

Health Preparedness
IHSM 630 HEALTH SYSTEM PREPAREDNESS

Security Policy
IHSM 640 U.S. HOMELAND SECURITY POLICY

Elective Courses
Each student must take one elective course from the following:

IHSM 660 GIS APPLICATIONS: HOMELAND SECURITY AND EMERGENCY MANAGEMENT
IHSM 670 SPECIAL TOPICS IN HOMELAND SECURITY
IHSM 695 INDEPENDENT STUDY IN HOMELAND SECURITY

Graduate Project
The extended project offers a practical, real-world problem-solving experience for the student. Ideally, students will form working groups to take on a project from an agency of federal, state or local government, or a private business. They will begin to work on the project after taking 15 units in the program and continue the project while completing other course work.

IHSM 881 CAPSTONE PROJECT I

Students may also select from two continuum options:

IHSM 882 CAPSTONE PROJECT II
IHSM 885 CAPSTONE PROJECT CONTINUUM

Organizational Change Certificate
Certificate of Advanced Study
https://www.towson.edu/coe/departments/leadership/grad/ orgchangecas/

Program Director: Dr. Carla Finkelstein
Phone: 410-704-2974
Email: cfinkelstein@towson.edu

The Certificate of Advanced Study (CAS) in Organizational Change is an interdisciplinary program designed for students wishing to continue their education at the post-master's level and complete a state-approved Administrator I program.

Admission Requirements
- Certification as a teacher or licensure as a school professional and currently working in a school or educational setting in the school of Maryland
- Minimum of three years of teaching or relevant professional experience in a public or private school
- Completion of master's degree in education, administration, or related field from a regionally accredited college or university**
- College transcript record of successful completion of a special education course (graduate or undergraduate)
- A minimum graduate GPA of 3.10 for full admission or 3.00 for conditional admission

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

- Two letters of recommendation (one must be from a current school administrator or educational leader who can attest to the applicant's professional experience and suitability for leadership)
- Copy of current teaching certificate or other professional licensure
- One-page personal statement indicating why the applicant is interested in pursuing graduate study in this track. The statement should describe why the applicant is pursuing graduate study in this track and what he/she hopes to learn to become an effective educational leader.
- An updated professional resume

Non-immigrant international students: See additional admission information in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/international.html)

**See Exceptions to Policy in Graduate Admissions (http://www.towson.edu/academics/graduate/admissions/apply/policies.html)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
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<tr>
<td>ILPD 603</td>
<td>LEGAL AND ETHICAL ISSUES IN EDUCATION</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 667</td>
<td>CURRICULUM &amp; ASSESSMENT FOR INSTRUCTIONAL DEVELOPMENT</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 716</td>
<td>LEADERSHIP OF THE SCHOOLS</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 740</td>
<td>EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 781</td>
<td>SEMINAR IN SUPERVISION</td>
<td>3</td>
</tr>
<tr>
<td>ILPD 797</td>
<td>INTERNSHIP IN INSTRUCTIONAL LEADERSHIP</td>
<td>3</td>
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<tr>
<td></td>
<td>Total Units</td>
<td>18</td>
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</table>

Electives ³
Select four from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILPD 668</td>
<td>LEADERSHIP &amp; GROUP DYNAMICS</td>
<td>12</td>
</tr>
<tr>
<td>ILPD 675</td>
<td>LEADERSHIP AND ACTION RESEARCH</td>
<td></td>
</tr>
<tr>
<td>ILPD 742</td>
<td>TRANSFORMATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>ILPD 743</td>
<td>LEARNING COMMUNITIES AND ORGANIZATIONAL CHANGE</td>
<td></td>
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<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td></td>
<td>Total Units</td>
<td>18</td>
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</tbody>
</table>
Courses that are approved for Administrator I Certification.

Candidates must take and pass the comprehensive examination in order to graduate from the program. Students are strongly advised to register for the comprehensive examination before registering for the internship. A student may not complete or earn a grade in the internship without successfully passing the comprehensive examination.

Other courses may be selected as suitable to particular organizational or professional needs through consultation with the adviser.

## Administrator I Certification

Please see requirements on Administrator I Certification page. (p. 25)

The Instructional Leadership and Professional Development Department offers two MSDE-approved programs for Administrator I preparation: a Master of Science (Human Resource Development/Educational Leadership) and a Certificate of Advanced Studies (Organizational Change). Both fulfill the Educational Leadership Constituent Council (ELCC) standards required for national and state recognition and accreditation.

**ELCC Standard 1.0:** A building-level education leader applies knowledge that promotes the success of every student by collaboratively facilitating the development, articulation, implementation, and stewardship of a shared school vision of learning through the collection and use of data to identify school goals, assess organizational effectiveness, and implement school plans to achieve school goals; promotion of continual and sustainable school improvement; and evaluation of school progress and revision of school plans supported by school-based stakeholders.

**ELCC 1.1:** Candidates understand and can collaboratively develop, articulate, implement, and steward a shared vision of learning for a school.

**ELCC 1.2:** Candidates understand and can collect and use data to identify school goals, assess organizational effectiveness, and implement plans to achieve school goals.

**ELCC 1.3:** Candidates understand and can promote continual and sustainable school improvement.

**ELCC 1.4:** Candidates understand and can evaluate school progress and revise school plans supported by school stakeholders.

**ELCC Standard 2.0:** A building-level education leader applies knowledge that promotes the success of every student by sustaining a school culture and instructional program conducive to student learning through collaboration, trust, and a personalized learning environment with high expectations for students; creating and evaluating a comprehensive, rigorous and coherent curricular and instructional school program; developing and supervising the instructional and leadership capacity of school staff; and promoting the most effective and appropriate technologies to support teaching and learning within a school environment.

**ELCC 2.1:** Candidates understand and can sustain a school culture and instructional program conducive to student learning through collaboration, trust, and a personalized learning environment with high expectations for students.

**ELCC 2.2:** Candidates understand and can create and evaluate a comprehensive, rigorous, and coherent curricular and instructional school program.

**ELCC 2.3:** Candidates understand and can develop and supervise the instructional and leadership capacity of school staff.

**ELCC 2.4:** Candidates understand and can promote the most effective and appropriate technologies to support teaching and learning in a school environment.

**ELCC Standard 3.0:** A building-level education leader applies knowledge that promotes the success of every student by ensuring the management of the school organization, operation, and resources through monitoring and evaluating the school management and operational systems; efficiently using human, fiscal, and technological resources in a school environment; promoting and protecting the welfare and safety of school students and staff; developing school capacity for distributed leadership; and ensuring that teacher and organizational time is focused to support high-quality instruction and student learning.

**ELCC 3.1:** Candidates understand and can monitor and evaluate school management and operational systems.

**ELCC 3.2:** Candidates understand and can efficiently use human, fiscal, and technological resources to manage school operations.

**ELCC 3.3:** Candidates understand and can promote school-based policies and procedures that protect the welfare and safety of students and staff within the school.

**ELCC 3.4:** Candidates understand and can develop school capacity for distributed leadership.

**ELCC 3.5:** Candidates understand and can ensure teacher and organizational time focuses on supporting high-quality school instruction and student learning.

**ELCC Standard 4.0:** A building-level education leader applies knowledge that promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources on behalf of the school by collecting and analyzing information pertinent to improvement of the school's educational environment; promoting an understanding, appreciation, and use of the diverse cultural, social, and intellectual resources within the school community; building and sustaining positive school relationships with families and caregivers; and cultivating productive school relationships with community partners.

**ELCC 4.1:** Candidates understand and can collaborate with faculty and community members by collecting and analyzing information pertinent to the improvement of the school's educational environment.

**ELCC 4.2:** Candidates understand and can mobilize community resources by promoting an understanding, appreciation, and use of diverse cultural, social, and intellectual resources within the school community.

**ELCC 4.3:** Candidates understand and can respond to community interests and needs by building and sustaining positive school relationships with families and caregivers.

**ELCC 4.4:** Candidates understand and can respond to community interests and needs by building and sustaining productive school relationships with community partners.

**ELCC Standard 5.0:** A building-level education leader applies knowledge that promotes the success of every student by acting with integrity, fairness, and in an ethical manner to ensure a school system of accountability for every student's academic and social success by modeling school principles of self-awareness, reflective practice, transparency, and ethical behavior as related to their roles within the school; safeguarding the values of democracy, equity, and diversity within the school; evaluating the potential moral and legal consequences of decision making in the school; and promoting social justice within the school to ensure that individual student needs inform all aspects of schooling.
tracks provides a foundation in research, writing and the liberal arts. A solid intellectual framework. The core curriculum common to both program that crosses traditional academic boundaries and provides professional/academic training by selected collaboratively by the intern and program faculty with training by demonstrated experience as an educational leader within a school and is qualified on-site mentor: An on-site school mentor who has 7.3: Qualified On-Site Mentor: An on-site school mentor who has 6.2: Candidates understand and can act to influence local, district, state, and national decisions affecting student learning in a school environment; anticipating and assessing emerging trends and initiatives in order to adapt school-based leadership strategies. ELCC 6.1: Candidates understand and can advocate for school students, families, and caregivers. ELCC 6.2: Candidates understand and can act to influence local, district, state, and national decisions affecting student learning in a school environment. ELCC 6.3: Candidates understand and can anticipate and assess emerging trends and initiatives in order to adapt school-based leadership strategies. ELCC 7.0: A building-level education leader applies knowledge that promotes the success of every student by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context through advocating for school students, families, and caregivers; acting to influence local, district, state, and national decisions affecting student learning in a school environment; and anticipating and assessing emerging trends and initiatives in order to adapt school-based leadership strategies. ELCC 7.1: Substantial Field and Clinical Internship Experience: The program provides significant field experiences and clinical internship practice for candidates within a school environment to synthesize and apply the content knowledge and develop professional skills identified in the other Educational Leadership Building-Level Program Standards through authentic, school-based leadership experiences. ELCC 7.2: Sustained Internship Experience: Candidates are provided a six-month, concentrated (912 hours per week) internship that includes field experiences within a school-based environment. ELCC 7.3: Qualified On-Site Mentor: An on-site school mentor who has demonstrated experience as an educational leader within a school and is selected collaboratively by the intern and program faculty with training by the supervising institution.

Professional Studies M.A.

Degree: Master of Arts
https://www.towson.edu/cla/departments/interdisciplinary/grad/professional/

Program Director: Dr. Karen Eskow
Phone: 410-704-3237
Email: akoch@towson.edu

Why Art History?

Towson University’s Master of Arts in Professional Studies, Art History Concentration, is designed to prepare graduates for careers in the profession by looking at the history of art, in addition to the philosophy, role, operation and multiple functions of museums and visual arts institutions in American society. Topics include museum management, care and handling of objects, museum education, development and grant writing, marketing and public relations for cultural institutions, history and theory of exhibition design, and curatorial vision. A wide range of specialized art history courses are available as well, including the art and architecture of the ancient Mediterranean world, the Medieval, Renaissance, and Baroque, US art and architecture, non-Western and modern and contemporary art and theory. Students with degrees from other related areas of study beyond art history are also encouraged to apply; related areas of study include history, philosophy, anthropology, English, studio art, and art education.

Flexible and Customized

Most courses are offered in the evenings on campus. Some courses are offered online or partially online. A recommended internship allows you to acquire real-world experience while working on site in area institutions and in the university’s three galleries. Students must plan their program of study in collaboration with the art history concentration director.
Internships must also be planned with and approved by the art history concentration director.

**Admission Requirements**

A minimum GPA of 3.00 (2.75 for conditional admission) is required. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

Please complete the online application (http://www.towson.edu/academics/graduate/admissions/apply), including the following:

An essay of no less than one full page of text that includes:

- The student's reasons for wishing to enter the program
- An explanation of the ways in which the M.A. in Professional Studies program will enable the applicant to achieve personal and/or professional goals

**Non-immigrant international students:** See additional admission information in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html)

**Degree Requirements**

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<thead>
<tr>
<th>Code</th>
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<tr>
<td>ARTH 610</td>
<td>DEVELOPMENT AND GRANT WRITING FOR CULTURAL INSTITUTIONS</td>
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<td>ARTH 681</td>
<td>SEMINAR IN ART HISTORY</td>
<td>3</td>
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<tr>
<td>LBPS 601</td>
<td>APPROACHES TO GRADUATE RESEARCH</td>
<td>3</td>
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<tr>
<td>LBPS 602</td>
<td>CULMINATING SEMINAR IN LIBERAL AND PROFESSIONAL STUDIES</td>
<td>3</td>
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**Art History Electives**

- SELECT THREE GRADUATE COURSES IN SUCH AREAS AS PROFESSIONAL WRITING AND HUMANITIES IN CONSULTATION WITH YOUR ADVISER.

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<th>Code</th>
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<tr>
<td>ART 610</td>
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<td>ART 622</td>
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<td>ARTH 500</td>
<td>STUDY ABROAD</td>
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<td>ARTH 501</td>
<td>INTRODUCTION TO MUSEUM STUDIES</td>
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<td>ARTH 502</td>
<td>MUSEUM AND COMMUNITY</td>
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<td>ARTH 570</td>
<td>SPECIAL TOPICS: ART HISTORY</td>
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<td>ARTH 585</td>
<td>SEMINAR IN ART HISTORY</td>
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<td>ARTH 591</td>
<td>RESEARCH METHODS IN ART HISTORY</td>
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<td>ARTH 595</td>
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<td>ARTH 596</td>
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<td>ARTH 600</td>
<td>STUDY ABROAD</td>
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<td>ARTH 603</td>
<td>CARE AND HANDLING OF OBJECTS</td>
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<td>ARTH 604</td>
<td>MUSEUM EDUCATION</td>
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<td>ARTH 605</td>
<td>EXHIBITION DESIGN HISTORY AND THEORY</td>
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<td>ARTH 606</td>
<td>MUSEUM MANAGEMENT</td>
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<td>ARTH 607</td>
<td>COLLECTIONS MANAGEMENT</td>
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<td>ARTH 608</td>
<td>CURATORIAL VISION AND PLANNING</td>
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<td>ARTH 609</td>
<td>ISSUES IN MARKETING AND PUBLIC RELATIONS FOR CULTURAL INSTITUTIONS</td>
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<td>INDEPENDENT STUDY IN ART HISTORY</td>
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<td>ARTH 790</td>
<td>CURATORIAL ISSUES IN CONTEMPORARY ART</td>
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<tr>
<td>ARTH 795</td>
<td>DIRECTED READINGS IN ART HISTORY</td>
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**Total Units:** 36

1. Explain and coherently apply ontological worldviews, epistemological strategies and methods to graduate level research design.
2. Demonstrate ability to write with clarity and efficiency.
3. Students will identify, interpret and draw conclusions from qualitative and/or quantitative data derived from web-based sources.
4. Students will demonstrate mastery of the individually developed program of study.
5. Students will successfully use MS Office System or equivalent to effectively present research.

**International Plan of Study**

This highly flexible concentration is ideal for the working professional, as each student designs a curriculum that best fits his or her present career needs and future aspirations. The concentration is particularly well suited for students who wish to integrate specialized study with a broader understanding of related fields. It also permits individuals primarily interested in personal growth to design a program that corresponds with their interests.

Although the plan of study may be built around traditional academic disciplines, many students combine courses from such practical areas of study as:

- digital media and communications
- information technology and applied systems theory
- management and administration
- public policy and regional planning
- health care
- education
- professional writing in specific areas
- theater management
- science journalism
- global studies

Others might emphasize courses from the humanities, fine arts and social sciences.

An individualized plan of study places special responsibilities on the student. In consultation with the program director, the entering student must design and submit a plan of study. The M.A. in Professional Studies graduate program is committed to offering working professionals flexible
and convenient ways to earn an advanced degree through collaborative learning and independent study.

**Admission Requirements**

A minimum GPA of 3.00 (2.75 for conditional admission) is required. All GPA calculations for admission are based upon the last 60 units of undergraduate and post-baccalaureate study.

Submit the online application ([https://www.towson.edu/academics/graduate/admissions](https://www.towson.edu/academics/graduate/admissions)) plus an essay.

The applicant must submit an essay of no less than one full page of text that includes:

- The student’s reasons for wishing to enter the program
- An explanation of the ways in which the M.A. in Professional Studies program will enable the applicant to achieve personal and/or professional goals
- A preliminary overview of the student’s proposed plan of study

**Non-immigrant international students:** See additional admission information in Graduate Admissions ([https://www.towson.edu/academics/graduate/admissions/apply/international.html](https://www.towson.edu/academics/graduate/admissions/apply/international.html))

**Degree Requirements**

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<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td><strong>Required Courses</strong></td>
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<tr>
<td>LBPS 601</td>
<td>APPROACHES TO GRADUATE RESEARCH ¹</td>
<td>3</td>
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<tr>
<td>A 600-700 level writing course, selected from courses offered in the Professional Writing (PRWR) program or approved by the program director</td>
<td>3</td>
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<tr>
<td>A 600-700 level course in the liberal arts, selected from courses offered in the following programs: Humanities (HUMA), Social Sciences (SOSC), History (HIST), Women's and Gender Studies (WMST), Geography (GEOG), or English (ENGL)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LBPS 602</td>
<td>CULMINATING SEMINAR IN LIBERAL AND PROFESSIONAL STUDIES ¹</td>
<td>3</td>
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</table>

**Electives within the Individualized Program of Study**

Each student’s individualized program of study comprises 24 units of elective courses. These electives must include courses from at least three disciplines, and a maximum of 15 units that may be taken in any one discipline. No more than three 500-level graduate courses can be counted toward the degree. A minimum of 12 units of electives must be earned at Towson University. Up to 12 units may be taken at another University System of Maryland institution or at Morgan State University with the permission of the program director. ²

| Total Units | 36 |

¹ The introductory seminar should be taken within the first 9 units of degree work. The culminating seminar should be taken during the student’s final term in the program. Students must earn a grade of “A” or “B” in each of these seminars. They may be repeated once for the purpose of grade change.

² Earn a Graduate Certificate in Family-Professional Collaboration and/ or Women's and Gender Studies with your elective units. See the appropriate sections in this catalog for more information.

1. Explain and coherently apply ontological worldviews, epistemological strategies and methods to graduate level research design.

2. Demonstrate ability to write with clarity and efficiency.

3. Students will identify, interpret and draw conclusions from qualitative and/or quantitative data derived from web-based sources.

4. Students will demonstrate mastery of the individually developed program of study.

5. Students will successfully use MS Office System or equivalent to effectively present research.
ACADEMIC POLICIES AND PROCEDURES

• Application and Graduate Admission (p. 138)
• International Graduate Application and Admission (p. 140)
• Enrollment and Registration (p. 141)
• Graduation Requirements (p. 142)
• Policies on Academic Progress (p. 143)
• Other Academic Policies (p. 146)
• Academic Terminology (p. 147)
• Thesis and Dissertation Information (p. 148)

Application and Graduate Admission

The application process is administered through University Admissions. In order to apply, please visit our web page (https://www.towson.edu/academics/graduate/admissions/index.html). For questions or to request information, contact University Admission at 410-704-2113 or grads@towson.edu.

University Admissions at Towson University admits graduate applicants whose academic and personal qualifications give promise of success in graduate study. Admission to all graduate programs is competitive. Admission is based on the most qualified applicants and available seats. The applicant must hold a baccalaureate degree from a regionally accredited college or university, or the equivalent of this degree from another country. In addition, some doctoral and certificate of advance study programs require the applicant to hold a master’s degree. These degrees also must be from a regionally accredited college or university, or the equivalent of this degree from another country. Any student taking classes on the Towson University campus or any off-site location administered by the University System of Maryland must meet the university’s immunization policies prior to registration.

If a specific application deadline is not noted on the program’s requirements, assume the program has rolling admissions, which means applications are reviewed on an ongoing basis. However, the Graduate Application will close on August 1 for fall admission, January 2 for spring admission, and May 1 for summer admission. In order to ensure that the application will be evaluated for a decision, students should submit all requirements in a timely manner. While application materials will continue to be accepted after these dates, TU cannot guarantee that the application will be reviewed in time for the start of classes. Applications will be withdrawn, if incomplete, after the intended entry term has begun, unless the applicant submits a request in writing to keep the application open for another term.

Full Admission

Students admitted to full status must meet the basic minimum requirements of TU, plus the additional requirements of the individual program. In order to meet the basic minimum requirements for full admission to TU an applicant must have:

1. earned a baccalaureate degree from a regionally accredited college or university, with a minimum GPA of 3.00 (on a 4-point scale) in either the cumulative units of the degree or the last 60 units of the degree, or
2. earned a master’s degree or doctorate from a regionally accredited college or university.

In cases where the above minimum standards are not met, the last 60 units may include courses taken beyond the baccalaureate degree that are 300-level or higher. Courses used for admission purposes may not be applied toward the graduate degree.

Since some individual programs may have additional requirements and enrollment restrictions, meeting the above minimum requirements may not ensure admission to a specific program. Please refer to the program listing for specific requirements.

Students admitted to a degree-seeking program have one academic year to enroll in graduate classes. If unable to do so, they may request a deferral. Please see Deferred Registration After Admission for instructions.

Conditional Admission

Admission with conditions may be granted to applicants whose academic achievement does not meet the standard required for regular admission or whose department requirements are incomplete. All students admitted with conditions must maintain a cumulative grade point average (CGPA) of 3.00 within their first 9 graded, graduate units. See individual program descriptions for specific requirements. Students admitted to a program with conditions must satisfy requirements and correct any deficiencies as determined by the program director. Requirements that must be completed to continue in the program, and the timetable for completing the requirements, are listed on a letter prepared by the program director and sent to the student.

Exceptions to Policy

Students who hold a baccalaureate, master’s or doctoral degree from a college or university in the United States that is not regionally accredited are to have their transcript reviewed and degree equivalency determined by a post-secondary institution regionally accredited to support such a review.

An applicant who is a professional with significant work experience in a field relevant to the program and whose undergraduate degree was obtained at least five years prior to applying to Towson University may petition the Director of University Admissions in writing for an exception to the policy regarding minimum GPA. The applicant is to submit:

1. a letter outlining the rationale for the request and performance indicators that reflect the potential for successfully engaging in graduate studies;
2. documentation of at least five years of successful work experience in the relevant field; and
3. at least two letters of recommendation supporting the request from relevant supervisors or from faculty members who taught graduate-level courses to the applicant.

The petition will be reviewed by the program director and the program admissions committee, who will assess the relevancy of work experience and the applicant’s qualifications for the program. The program director and program admissions committee may require additional documentation. The program director will inform the Director of University Admissions in writing of the committee’s recommendation for conditional admission, and the parameters for conditional admission, if applicable. Applicants are to refer to the graduate programs’ websites.
for additional criteria that programs may require for an exception to the policy regarding the minimum GPA.

**Non-Degree Enrollment**

Students who have completed a baccalaureate degree may elect to enroll in graduate courses as non-degree students. Students generally choose non-degree status when

1. their academic goal is not completion of a degree or certificate program
2. they wish to attempt course work prior to applying to or beginning a graduate program

Non-degree students should be aware that many departments limit entry to courses at the 600 level to fully matriculated students enrolled in a specific graduate program.

Students who have been denied admission to a degree-seeking program are not eligible for non-degree status for the same academic term. Students academically dismissed from a graduate program are not eligible for non-degree status.

Non-degree students must submit a transcript with a conferred bachelor’s degree in order to register for graduate courses. Students must have earned a minimum GPA of 2.75 (overall or final 60) in their undergraduate degree to be eligible for admission.

Non-degree applicants who earned their degree outside the U.S. must meet the minimum English language requirement.

Degree-seeking candidates have priority for registration above non-degree students. Non-degree students who wish to take courses above the 600 level may do so after a transcript evaluation. Requests for an evaluation should be directed to the program director. Some courses are available to degree-seeking candidates only. Students should consult the department with questions. A limit of 12 units, taken while a non-degree student, may be applied to a degree program with the approval of the program director. Students holding an F1 visa are not eligible for non-degree status. Non-degree students are not eligible for financial aid.

**Admission Prior to Receiving Baccalaureate Degree**

Admission to some programs may be granted to seniors in their final term. Undergraduate work through the first term of the senior year is evaluated; therefore, transcripts submitted must include all grades through that term. Admission standing is subject to cancellation or change if the admission credentials remain incomplete or do not meet the requirements for admission upon receipt of the final transcript. Final transcripts showing degree conferral must be received by University Admissions within six weeks of conferral. Some programs have accelerated master’s degree programs in which undergraduates are allowed to begin their graduate work. These are described in the individual program sections.

**Combined Bachelor's/Master's Degree**

Towson University offers a number of combined bachelor’s and master’s degree programs. There are two types: 1) structured plans within or among departments or program units, and 2) individualized student plans that are specific to a student’s career interests and goals. Undergraduate students typically are screened into a combined program when they have earned 60-89.5 units (Junior Standing) by the department chairpersons or designees for the undergraduate and graduate programs; some students may be screened into the combined program during their senior year. Once approved, these undergraduate students may begin taking graduate level courses.

Up to 9 units of graduate work can be counted toward the undergraduate degree and later applied to the graduate degree. The units and GPA for graduate courses taken as part of the combined program will count toward the undergraduate degree. Students must earn a grade of B or higher for these course units to apply to the graduate degree. The GPA for these graduate courses will not count toward the graduate degree.

During the senior year, students approved for the combined bachelor’s and master’s degree program must apply for formal admission to the graduate program. Once the bachelor’s degree is earned and the student is matriculated as a graduate student, the Registrar’s Office will apply the graduate courses to the graduate record.

Course requirements for the combined bachelor’s and master’s programs vary by program; some programs designate specific courses that must be taken to meet undergraduate and graduate degree requirements. Students are to consult with the Academic Departments for course requirements. Students are to abide by the time frame and unit requirements of the specific programs. Students can earn only one master’s degree through a combined bachelor’s and master’s program. Procedures to initiate screening into a combined bachelor’s and master’s program are posted on the Registrar’s website (https://www.towson.edu/registrar).

Students, with senior standing, wishing to take graduate level coursework without being screened into a combined bachelor’s to master’s program should contact the Registrar’s Office to discuss other options.

Graduate tuition and fees are assessed for graduate level courses taken on the undergraduate career and are not covered by undergraduate tuition.

**Dual Career Program**

Students who have already earned a baccalaureate degree and wish to pursue both a master's degree and second bachelor's degree (or undergraduate teaching certificate) at the same time may do so with permission from the Registrar's Office and must adhere to the following:

1. Subject matter for each of the graduate and undergraduate programs must be from different areas of study and not have any overlap between course work.
2. Graduate course work will only satisfy requirements for the graduate degree, while undergraduate course work will only satisfy requirements for the undergraduate degree.
3. Students may enroll for no more than 19 units total in any spring/fall term combined from both careers (4 units in minimester/13 units in summer).
4. Students must register for undergraduate courses on the undergraduate career and graduate courses on the graduate career. Failure to do so will result in courses not earning credit.
5. Students will be screened each term for the career requirement of good academic standing.

**Validation of Undergraduate Degree**

An applicant enrolled for courses is not allowed to register beyond the first term if the transcript validating the baccalaureate degree is not
received in University Admissions by the end of the student’s first term; no refund is granted, and the student’s application is removed from the graduate files. A new application and fee must be submitted if the student wishes to take courses for graduate credit at a later time.

Visiting Graduate Students
A student who is a candidate for a graduate degree at another college or university may take graduate courses at Towson University. To complete an admission application, the student must present a letter from the graduate dean of the home institution indicating that the student is in good standing and that credit earned at TU is acceptable toward his or her degree.

Joint Program with University of Baltimore
The program in Accounting and Business Advisory Services (p. 18) is operated as a joint program with the University of Baltimore.

Golden ID Program: Senior Citizens
Retired Maryland residents 60 years of age or older are eligible for the Golden ID senior citizen tuition waiver program. Golden ID students may enroll in most graduate courses for a maximum of two courses for the spring, summer and fall terms, and pay only the necessary fees. Golden ID students may take courses for audit or credit on a space-available basis. Exclusions include minimester, special format classes, independent study, internship and some satellite campus programs. All courses offered as part of the Towson Learning Network and the Applied Information Technology program are also excluded. To apply for the Golden ID card, call 410-704-2113 or stop by University Admissions, 7800 York Rd, Suite 216.

International Graduate Application and Admissions
International Applicants
In addition to program specific deadlines, we strongly encourage non-immigrant international students (F-1 or J-1 visa status) to complete the application process, including the submission of all required documents, as soon as possible. The earlier the application is complete and a decision made, the more time students will have to complete the visa process.

Towson University requires that applicants who received a degree outside the United States submit to University Admissions an official copy of their educational records, plus an assessment of their records from a credential-evaluating service center. This applies to applicants who are citizens and non-citizens of the United States. The assessment should include a course-by-course evaluation of the student’s academic records, including the degree received and GPA. This assessment usually takes three to four weeks and should be sent directly to University Admissions.

Among the authorized credential evaluation service centers are:

ASCISS
American Service Center for International Students and Scholars, Inc.
P.O. Box 250
Hunt Valley, MD 21030
t. 410-370-8092 f. 410-785-6638

www.asciss.org (http://www.asciss.org)

ECE
Educational Credential Evaluators
PO Box 514070
Milwaukee, WI 53203
414-289-3400
www.ece.org (http://www.ece.org)

WES
World Education Services
Bowling Green Station
P.O. Box 5087
New York, NY 10274
t. 212-966-6311 f. 212-739-6100
www.wes.org (http://www.wes.org)

Full-Time Study Requirement
Non-immigrant international students (F-1 or J-1 visa status) are required to enroll for full-time study. Full time study is defined as a minimum of 9 units for each spring, summer and fall terms for students enrolled in master’s and post baccalaureate programs. Full-time study is defined as a minimum of 6 units for each spring, summer and fall terms for students enrolled in doctoral programs. Since the required courses offered by some programs in a term may be less than needed to fulfill the full-time study requirement, students needing to maintain F-1 or J-1 student visa status may be required to take classes not associated with the program in order to comply with immigration regulations. This may result in increased tuition, fees and units beyond the normal program requirements.

English Proficiency
Students who received their degree outside the United States must provide official verification of their English competency by submitting an English assessment report from IELTS, TOEFL, or PTE Academic testing systems, or successfully complete Towson University English Language Center through (Level VI) program with a grade of B or better. International students are those who have earned their degree outside of the United States, regardless of citizenship status.

Admission for International Students Earning a Bachelor’s Degree or Higher within the United States
Unless otherwise noted, students who have earned their baccalaureate degree or a higher degree from an accredited U.S. college or university may be eligible to have the English Language Proficiency requirement (TOEFL, IELTS, PTE Academic or ELC through Level VI scores) waived.

International students who are in the process of earning a baccalaureate degree or higher from an accredited U.S. college or university may also be eligible to have the English Language proficiency requirement waived. Once they have completed the baccalaureate degree or higher, they are to submit evidence that their degree was conferred in order for their application to be considered complete.

International English Language Testing System (IELTS)
A minimum total score of 6.5 and a minimum score of 6.5 each for Listening, Speaking, Reading, and Writing are required for admission.
Scores are valid for two years after test date. Some programs may require higher scores. Information regarding the IELTS testing system is available online: www.ielts.org (http://www.ielts.org).

Test Of English As A Foreign Language (TOEFL)
A minimum total score of 550 on the TOEFL pBT is required for admission. A minimum total score of 80 and minimum scores of 20 each for Listening, Speaking, Reading, and Writing on the TOEFL iBT (Internet-based) are required for admission. TOEFL pBT is being phased out by ETS. TOEFL iBT scores are preferred. Scores are valid for two years after test date. Some programs may require higher scores. Information about the TOEFL test is available online at www.toefl.org (http://www.toefl.org).

Towson's institution code is 5404.

Towson University is a test site for TOEFL and also administers an institutional TOEFL in the fall, spring and summer. Information can be obtained from Towson's English Language Center at 410-704-2552. Visit Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/international.html) for additional visa and immigration information.

PTE Academic
A minimum total communicative skills score of 57 and a minimum score of 57 in listening, speaking, reading, and writing are required, except where noted. Scores are valid for two years after test date. Some programs may require higher scores. Information about the PTE Academic is available online at http://pearsonpte.com/

Provisional Admission for International Students Earning a Bachelor's Degree or Higher Outside of the United States
Towson University offers provisional admission in select programs for applicants who meet all of the Towson University and program specific requirements for full admission except the English Language proficiency requirement. Students who wish to be considered for provisional admission are to contact the TU Admissions Office at grads@towson.edu. Students who are provisionally admitted must complete the following before enrolling in any graduate courses:

• Enroll in the Towson University English Language Center and successfully complete ELC classes through Level VI with a grade of B or better or earn and confirm the required English Language Proficiency scores (TOEFL, IELTS, or PTE Academic).

Students should contact the University Admissions Office for a list of programs that can offer provisional admission.

Pre-Degree For International Students
Towson University offers international students the opportunity to apply for admission prior to the receipt of the bachelor's degree. There are certain conditions under which international students may apply for the status of pre-degree. Pre-degree admission does not guarantee that a student will be eligible to enroll for the intended admit term. All deadlines and requirements must be met, including but not limited to academic and immigration requirements, in order for a student to enroll at TU.

Students should submit their final degree reports by June 15 (October 1 for students seeking spring admission).

Required: At the time of application, students will submit a credential evaluation of their academic records and a letter of verification from their college or university validating that the student will be eligible for graduation at the completion of the current term. The final transcript indicating conferral of a bachelor's-level degree will be evaluated by Towson University Admissions. If students wish to have the I-20 form express mailed, express mailing charges and administrative fees associated with this process will be assessed. Students admitted prior to the receipt of their bachelor's degree(s) who are unable to obtain the necessary documents to begin course work at TU before the start of their admit term may request a deferral to the next term. The request must be in writing to Towson University Admissions. A deferral letter is sent to students showing the new starting term. The International Student and Scholar Office (ISSO) is notified and can issue a new I-20 form to the student, if and when the student requests, for the next term. Deferment I-20 forms will not be express mailed from TU Admissions.

Enrollment and Registration
A schedule of courses for the coming term and registration information is available on the TU website (https://inside.towson.edu/intranetstudents). Only students admitted to a graduate program without conditions may register for 700- and 800-level courses except with special permission from the graduate program director.

Deferred Registration after Admission
Students admitted to most degree programs may defer registration for initial courses for up to one academic year, with the consent of the graduate program director. If enrollment in courses does not occur within one academic year, or the student does not inform University Admissions of another starting date, the applicant's records will be removed from the program by the Registrar's Office and the student must reapply for future enrollment.

Class Attendance 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 discussion and student teaching. Frequent absences from these types of courses, whether excused or unexcused, may affect the final grade. Faculty members 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 the policy of TU to excuse 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 teams, 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 No. 2 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 should attempt to make a reasonable adjustment of the assignment. Students are expected to be available for the entire week of exams, as the dates of exams may change because of extenuating factors.

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 absences as soon as they learn they will be missing class. Faculty should use discretion regarding making up missed assignments and the ramifications of missing certain class periods.

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.

Reenrollment
https://www.towson.edu/registrar/reenrollment.html

Enrollment Services Center, Room 221, 410-704-2007

Students are expected to register for courses on a regular basis. Previous degree candidates who have missed one fall or spring term must apply for reenrollment (https://www.towson.edu/registrar/reenrollment.html), and pay a $25 processing fee through the Registrar’s Office (see the special policy on continuous thesis registration under Graduation Requirements).

The deadlines for reenrollment are August 15 for the fall term and January 15 for the spring term. Graduate non-degree students who have missed one fall or one spring term must complete a new application via University Admissions. Students in Towson Learning Network (TLN) programs taking closed contract courses are exempt from these policies.

Degree students who do not enroll in courses for graduate credit for 2 academic years, will be removed from the program by the Registrar’s Office. Students who desire to take graduate courses after this action must initiate the application process as a new applicant via University Admissions.

Full-Time and Part-Time Status

Graduate students in master’s or post-baccalaureate certificate programs who register for 9 or more graduate units in either the fall, spring or summer term are considered full time. Students who register for 6 to 8 units are half-time, and students who register for fewer than 6 units are less than half-time and therefore ineligible for financial aid. Graduate students in doctoral programs who register for 6 or more graduate units in either the fall, spring or summer term are considered full time. Doctoral students who register for 3 to 5 units are half-time, and students who register for fewer than 3 units are less than half-time and therefore ineligible for financial aid.

Auditing Courses

Students may audit courses that carry graduate credit with the written consent of the instructor. Any graduate student may audit a course through the 600 level. Courses at the 700 level may be audited only by students admitted to a degree program. Audited courses appear on the student’s record as AU and may not be used to repeat a course for which credit has already been earned. Audited courses may not count as part of the unit load or be applied toward the master’s degree. The regular tuition rate applies to audited courses.

Cross-Listed Courses

An equivalent, cross-listed course taken previously for undergraduate credit may not be repeated for credit at the graduate level.

Undergraduate Course Enrollment

Undergraduate course enrollment on the graduate career will not calculate into a student’s graduate term or cumulative statistics on the student’s academic record. Completed undergraduate courses on the graduate record will display the earned grade on the transcript but will not count toward the graduate record. Graduate students completing undergraduate courses where a grade has been rendered should be considered as having completed the course, but not earning credit toward the graduate degree.

Inter-Institutional Registration (IIR)

Enrollment Services Center, Room 221, 410-704-2007

Students admitted to graduate programs are eligible to take courses at other University System of Maryland institutions (with the exception of University of Maryland University College - UMUC, which does not participate in inter-institutional enrollment). Units earned at a host institution will be placed on the student’s Towson University record with the grade earned per Towson University’s grading policy. Tuition and fees for any such courses will be paid at Towson University. IIR registration regulations and forms can be found on the Registrar’s webpage (https://www.towson.edu/registrar). The form must be signed by the Registrar’s Office after appropriate approval is obtained. Inter-institutional enrollment is not available for the minimester or summer sessions. Students interested in IIR should contact the TU coordinator at interinstitutional@towson.edu.

Graduation Requirements

Eligibility for Graduation

• Students must have a minimum cumulative GPA of 3.0 to be eligible to apply for graduation and must apply by the following dates:
  - May graduation - apply by January 15
  - August graduation - apply by July 4
  - December graduation - apply by August 15
• Students must successfully pass all program prerequisites and requirements, and earn a minimum average GPA of 3.00 in all required and elective courses included in the program of study.

• Students must also pass the graduate degree written examination, internship practicum experiences, or thesis/dissertation if required by the particular program, and any additional oral or written examinations.

• A maximum of two courses of C grades is allowed in a program of study for graduation.

• A maximum of three 500-level courses may be counted toward a master’s degree.

• Any transfer courses counting toward a degree must be transferred to TU by the last day of classes of the term in which the student intends to graduate.

• All degree requirements, including resolution of incomplete grades and the submission of final approved copy of thesis or dissertation, must be completed by the last day of exams for the term in which the student intends to graduate.

• Once a student has graduated, any corrections or changes must be made before the end of the next academic term. Once this date has passed, the students academic record will be closed and no further changes can be made.

Application for Graduation

The request for graduation review ("graduation application") for a degree or certificate is submitted by the student to the Graduation Office by the published deadline. Instructions on how to apply for graduation, as well as general graduation application information can be found at www.towson.edu/registrar/graduation/.

Graduation applications received after the deadline will be handled on a case-by-case basis by the Graduation Office. Students who do not complete requirements for graduation must submit a new application during the term in which graduation is intended. A student must be accepted into a degree or certificate program PRIOR to applying for graduation.

Time Limitation for Completion of Degree, Certificate Requirements

All requirements for a certificate or master’s degree must be completed within a seven-year period. All requirements for terminal or doctoral degrees must be completed within a 10-year period. The seven- and 10-year time clock begins with the earliest course applied toward the degree program. Post-baccalaureate certificates must be conferred prior to or at the same time as any corresponding degree that shares the same course work; post-baccalaureate certificates cannot be conferred after any corresponding degree that shares the same course work.

Courses Taken as a Non-Degree Student

A limit of 12 units taken by non-degree students who later apply for degree status may be used in the program.

Special Format Courses

In all degree programs, a limit of 12 units is placed on workshops, independent study, travel and study, directed reading or other special format courses.

Policies on Academic Progress

• Academic Standing (p. 143)

• Advising and Program of Study (p. 144)

• Change from One Degree Program to Different Program (p. 144)

• Credit for Prior Professional Learning (p. 144)

• Grading System (p. 144)

• Post-Baccalaureate Certificate Courses (p. 145)

• Re-entry to Degree Program After Lapse in Time (p. 145)

• Repeating Courses (p. 145)

• Transfer of Credit (p. 145)

• Withdrawal from a Course (p. 146)

Academic Standing

Good academic standing in a degree program requires a minimum 3.00 cumulative grade point average (CGPA) for all courses taken for graduate credit, whether or not they are required for the degree. Good academic standing is necessary to transfer course work and to graduate.

Should the degree student’s CGPA for courses fall below a 3.00 (including graduate level and prerequisite courses that are taken after being admitted to the program), a letter will be sent from the Registrar’s Office placing the student on academic warning. A student placed on academic warning must restore the CGPA to at least a 3.00 within 9 graded, graduate units. The 3.00 CGPA may be restored by repeating courses or by taking additional courses. With written approval from the graduate program director, the student may use a maximum of two courses beyond those required in the degree to raise the CGPA. Once the CGPA is restored to 3.00, the student must maintain a minimum CGPA of 3.00 throughout the remainder of the program. If the CGPA falls below 3.00 again, the student will be academically dismissed from the university and will not eligible to reapply to the same program.

All requirements for the program must be completed within the time limitation policy. A student on academic warning who does not restore the CGPA to 3.00 within 9 graded, graduate units or who does not maintain a minimum CGPA of 3.00 for the remainder of the program after returning to good academic standing, will be dismissed from the degree program.

Admission To Second Program After Academic Dismissal

A student academically dismissed from a degree program is not eligible to re-enter the same program or enroll in courses as a non-degree student, but may apply to another degree program. To be eligible for admission to the second program, the student must meet all current university and program requirements. A student academically dismissed from a degree program must obtain written approval from the new program director and the program admissions committee to be eligible to apply a maximum of 12 units from the first program into the second program for courses where a grade of B or higher was earned. Students who are entering a new program after dismissal and are not applying any of their course work earned while in the first program can request to have their cumulative statistics reset for their new graduate career by making the request directly to the Registrar’s Office. No additional admission requests will be accepted from a student academically dismissed from two programs.
Advising and Program of Study

Advising

At the time of admission to a graduate program, the student is assigned a faculty adviser by the department responsible for the student's program of study. In a number of graduate programs, the faculty adviser is the program director. Registration for a newly admitted student begins with a visit to the academic adviser, who will assist the student with information about specific courses and degree requirements, and the development of a program of study. The student should consult with the adviser before registration each term.

Program of Study

Each degree student must follow a program which is approved by the student's adviser and the program director and which conforms to Graduate Studies policy. Courses taken prior to planning the program of study can be included only if approved by the program director. The adviser's and the program director's approvals are needed for any revisions. The program of study may include no more than three courses at the 500-level.

Students may enroll in a second master's degree program after completing their first master's degree if the majors are distinct from one another. Students may not complete two master's degrees, concurrently or sequentially, in the same major regardless of whether the concentrations or tracks are different.

Degree Requirements

It is expected that students will receive assistance from their program director and/or faculty adviser, but students must assume responsibility for completing published degree requirements by reviewing their "Academic Requirements" degree audit often. It may be viewed through Towson Online Services: Click Self Service. Choose Student Center. From the Other Academics menu, select Academic Requirements.

Change from One Degree Program to Different Program

Students may apply for a change of program at any time, but may not be enrolled in two master's degree programs concurrently. The student will need to complete a new application via University Admissions. Since all graduate programs have different admission requirements, additional documents may be required before the file can be reviewed for admission to the new program. Admission granted in the original program does not guarantee admission to the new program.

Courses taken prior to the change of program may be utilized as part of the new degree program if approved by the program director. All courses, including those taken in the earlier program and used in the new program, are calculated in the GPA considered for graduation. The time limitation policy for completion of program requirements begins with the earliest course taken in the former program that is applied to the new program.

It is possible to return to the first program if the return is requested in writing within 60 days of the original request to change programs. The student may return to the original program after the 60-day period, subject to admission policies in effect at the time of the application to return.

Credit for Prior Professional Learning

The credit for prior professional learning (CPPL) offers an opportunity for Towson University graduate students to receive graduate credit for abilities they may have acquired through non-credit courses, structured, non-credit professional development programs, and professional work experiences. CPPL does not apply to coursework completed by the student for which credit previously was granted. To receive CPPL the student must demonstrate mastery and application of knowledge and skills commensurate with graduate level academic expectations and the graduate program's student learning outcomes. The student can demonstrate mastery and application of knowledge and skills by successfully completing the graduate program's challenge exam or individualized assessment process.

A student can earn a maximum of nine graduate units for prior professional learning acquired through non-credit courses, structured, non-credit professional development program, and professional work experiences to fulfill required or elective courses, if approved by the graduate program. The number of units accepted by the program for prior professional learning also cannot exceed 30% of the total units required for graduation from that program. Students must be graduate degree candidates with at least a 3.00 cumulative GPA to have the units recorded on the TU transcript. To be accepted as CPPL, the dates for the non-credit course work and professional development programs must abide by the seven-year time limit for degree completion for master's programs and the ten-year limit for degree completion of MFA and doctoral programs.

Some graduate programs do not accept CPPL; others may accept a lower maximum number of units or have additional restrictions. Students are to check whether their graduate programs grant CPPL and if additional restrictions exist.

Students will be assessed $30 per unit for assessment for CPPL and $30 per unit for posting of units to the transcript. Departments should contact the Registrar's Office when students apply for CPPL to determine billing procedures.

Graduate Program Challenge Exams

Graduate programs can offer challenge exams that have been approved by their department and college curriculum committees to assess students' mastery and application of graduate level knowledge and skills and to grant course credit for prior learning.

Individualized Assessments

Graduate programs that do not have standardized challenge exams may appoint a committee to conduct an individualized assessment of the student's abilities acquired through non-credit courses, structured non-credit professional development program, and professional work experiences. Such an assessment is to be based upon department and college criteria for demonstration of mastery and application of graduate level knowledge and skills. This type of assessment may include portfolio review, oral or written examination, performance-based assessment, and demonstration.

Grading System

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<tr>
<th>Grade</th>
<th>Points</th>
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<tr>
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<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
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</tbody>
</table>
Courses must have been completed with a grade of B or higher and Towson University or at a regionally accredited college or university. Courses taken as part of a post-baccalaureate certificate (in progress or completed) can be used toward a master's or terminal/doctoral degree. The grade of S in thesis/project/dissertation continuum is given when a student has a grade of IP (in progress) for thesis/project/dissertation and is making satisfactory progress, but has not completed the requirements of the thesis/project/dissertation. Once the student has successfully completed the requirements of the thesis/project/dissertation course, the IP grade for the course is changed to S.

A grade of U is given to students whose work is below 3.00 level quality for thesis, dissertation, project, field-based courses, or other courses for which special permission was given for S-U grading. A grade of U in thesis/project/dissertation continuum also is given when a student has a grade of IP (in progress) for thesis/project/dissertation, but is not making satisfactory progress toward completing the requirements of the thesis/project/dissertation. Grades of S or U in thesis/project/dissertation continuum courses are not counted towards satisfying graduation requirements. To be eligible to graduate a student must successfully complete the requirements and earn a grade of S in the thesis/project/dissertation, the field-based course or other courses for which special permission was granted for the S-U grading.

FX - assigned when the student registers for a course but does not attend, or fails to withdraw officially from the course by the published last date to drop the course.

I (incomplete) - assigned at the end of the term because of documented illness or other reasons beyond the control of the student. Unless the course is completed within 180 days, the grade becomes F. It is the responsibility of the student to make arrangements to complete course requirements for removal of the I.

IP (in progress) - assigned for the thesis or dissertation that is in progress but not yet completed. When the thesis/dissertation is completed, the IP grades are changed to S (satisfactory) or U (unsatisfactory). See S or U guidelines for thesis or dissertation continuum.

W (withdrawn) - assigned when the student withdraws from the course according to policy.

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

Changing to the Pass/No Pass grading option is not available for graduate students.

**S or U (Satisfactory or unsatisfactory)** - used primarily for thesis, dissertation, thesis/project/dissertation continuum or field-based courses or other courses with special recommendations from a program director with approval of the Graduate Studies Committee. A grade of S in thesis/project/dissertation, field- based courses or other graduate courses denotes that work of 3.0 level or higher has been completed. A grade of S in thesis/project/dissertation continuum is given when a student has a grade of IP (in progress) for thesis/project/dissertation and is making satisfactory progress, but has not completed the requirements of the thesis/project/dissertation. Once the student has successfully completed the requirements of the thesis/project/dissertation course, the IP grade for the course is changed to S.

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FX - assigned when the student registers for a course but does not attend, or fails to withdraw officially from the course by the published last date to drop the course.

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W (withdrawn) - assigned when the student withdraws from the course according to policy.

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

Changing to the Pass/No Pass grading option is not available for graduate students.

**Post-Baccalaureate Certificate Courses**

Courses taken as part of a post-baccalaureate certificate (in progress or completed) can be used toward a master's or terminal/doctoral degree if approved by the program director. Courses must have been taken at Towson University or at a regionally accredited college or university, and must be applicable to the graduate degree at Towson University. Courses must have been completed with a grade of B or higher and be taken within the program's time limit (7 or 10 years depending on program). Pass/Fail or S/U grading is not acceptable. However, courses taken as part of a master's degree which already has been conferred by Towson University or another regionally accredited college or university, cannot be applied to the post-baccalaureate certificate program.

**See Exceptions to Policy in Graduate Admissions (https://www.towson.edu/academics/graduate/admissions/apply/policies.html).**

**Re-entry to Degree Program After Lapse of Time**

For re-admission to the same or another degree program after the time limitation policy for completion of the degree has elapsed, the student's records are evaluated and admission is granted under current University Admissions policy. Previous course work will be reviewed by the program director. Up to 12 units of courses taken while previously admitted may be applied to the degree if they are still part of the program curriculum within the time limit and are approved by the program director. Any courses not approved must be repeated or replaced with additional courses approved by the program director.

**Repeating Courses**

Courses for which a grade has been awarded may be repeated only once. Students must abide by the program's policies and procedures to be eligible to repeat a course. The grade of W does not replace a previously awarded grade. When the course is repeated, the student receives the units for the course (counted once) and the higher of the two grades. Grades for courses taken at other institutions may not be used to replace grades for courses completed at Towson University. Courses taken for undergraduate credit may not be repeated for graduate degree credit.

Students wishing to appeal for approval to make a third attempt at a course, must complete the Third Attempt of a Course petition (https://www.towson.edu/registrar/forms.html).

**Transfer of Credit**

A maximum of up to 50 percent of the units required for a certificate or degree program may be transfer units, subject to approval by the program director. (Please see each program's specific transfer policy for more information.) The seven-year limitation cannot be extended for transfer units within a certificate or master's program, and the 10-year limitation cannot be extended for transfer units within a terminal or doctoral degree program.

Courses taken prior to admission must have been taken at a regionally accredited college or university, must be applicable to a graduate degree at the offering institution, and cannot be utilized if part of an already conferred bachelor's, master's or terminal/doctoral degree, unless variance is specified by an approved and/or accredited program of study. Terminal or doctoral degree candidates may transfer courses that have been conferred in a master's degree, at the discretion of the program director.

When such variance is permitted, course work completed at an institution of higher education that is not regionally accredited but hold national or specialized accreditation recognized by the U.S. Department of Education and/or the Council for Higher Education Accreditation (CHEA), may be considered for transfer credit on a case-by-case basis. Course work completed at an international institution also may be considered for
Transfer credit on a case-by-case basis. If such individual review is requested, the student must submit course descriptions and copies of course syllabi for those courses for which transfer credit is desired. The student also may be requested to submit an institutional catalog or program of study.

Transfer courses must have been completed with a grade of B or higher. Pass/Fail or S/U grading is not acceptable. Grades for courses taken at other institutions may not be used to replace grades for courses completed at Towson. The Graduate Transfer Petition can be found on the Registrar's Office website (http://www.towson.edu/registrar/forms.html).

**Withdrawal from a Course**

When a student drops a course within the change of schedule period, no grade is recorded. If the course is dropped after the change of schedule period but within the period to drop with the grade of W, the W grade will be recorded on the permanent record. Courses with W grades will not affect the GPA because they are excluded from GPA calculations. Students who receive financial aid, should review the policy on Drops and Withdrawals (http://www.towson.edu/admissions/financialaid/guide/requirements/withdrawals.html). Students who do not officially drop a course during the established time periods will receive the grade earned in the course (A, B, C, F) as determined by the instructor.

Students with documented medical problems or verified circumstances beyond their control may petition the Registrar's Office to drop a course after the established deadline and receive a grade of W. Documentation must accompany the petition. Students are responsible for informing their instructors of the petition to withdraw for medical reasons. If approved, grades of W will be recorded for all unearned grades (FX). Earned grades (A, B, C, F) will not be changed.

**Other Academic Policies**

**Towson University Policies**

**Privacy Rights of Parents and Students**

Towson University is in compliance with Section 513 (protection of the rights and privacy of parents and students) and Section 514 (protection of pupil rights) of Title V Education Administration of the Education Amendments of 1974. University policies on this issue are spelled out in detail in Appendix B.

**Nondiscrimination in Education and Employment**

Towson University 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, gender identity or expression, disability, and sexual orientation. For further information, contact the TU Office of Diversity and Equal Opportunity, 410-704-2360, www.towson.edu/odeo.

**Maintenance and Disposition of Records**

Students who do not register within one year of admission must submit a new application and appropriate admission credentials if they wish to take courses. All student records, including academic records from other institutions, are part of the official file and are retained subject to stated policies. They cannot be returned or duplicated for any purpose. Students should obtain their own copies of official credentials for advisory purposes and other personal uses.

**Confidentiality of Records**

In keeping with the Family Educational Rights and Privacy Act of 1974, Towson University respects the confidential relationship between TU and its students by preserving, to the maximum extent possible, the privacy of all records relating to its students. Records are kept only on matters relevant to the academic admission process and to the student's progress toward a degree. The records will not be disclosed except upon student's written request, written consent, under legal compulsion, or in carefully circumscribed instances based on clearly defined policies of the university (see Appendix B).

**Substance Abuse Policy**

Each student is expected to read and abide by the policies and regulations of Towson University concerning drug and alcohol abuse. The substance abuse policy is found in Appendix D.

**University E-mail Policy**

All students, faculty and staff members are issued a TU email address and must establish their TU email account. This account must be used for any and all communication to and among students, faculty and staff as well as departments, offices and units on TU matters or business. It is the responsibility of each account holder to monitor email on a regular basis.

**Graduate Policies**

**Student Responsibility**

It is the responsibility of the student to become knowledgeable of and to observe all TU policies, regulations and procedures. In no case will a waiver of requirements or an exception be granted because a student pleads ignorance of policy or regulation or asserts that information of specific requirements was not provided by an adviser or other TU authority. The student should become especially familiar with:

1. the regulations in this catalog,
2. the section presenting requirements for the degree sought, and
3. the offerings and requirements of the student's major department.

Policy for graduate study, as stated in this current catalog, is in effect for all students admitted to a program for the current academic year, and under which the student operates through the term of their study toward completion of degree requirements (subject to the disclaimer in the next paragraph).

While the provisions of this catalog will ordinarily be applied as stated, the catalog and the information contained herein do not constitute a contract. Towson University reserves the right to change any provision listed in this catalog, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students advised of any such changes.

Information on changes will be available from advisers and in the dean's office. It is especially important to note that it is the individual student's responsibility to keep apprised of current graduation requirements for the particular degree program.

**Academic Integrity**

Students are expected to maintain a high standard of academic integrity. Inappropriate classroom conduct and violations of academic integrity may result in course-related sanction. See Appendix F (p. 306) for the Towson University Academic Integrity Policy.
**Academic Standards, Appeals, Hearings and Grievances**

Students are expected to abide by all policies and procedures of their academic program and department, and of Towson University. Policies and procedures for appeals, hearings and grievances are found in Appendix F (p. 306) of this catalog. In all cases involving disciplinary action or other charges, procedures of due process are followed.

**Exceptions to Academic Policies, Regulations or Requirements**

Exceptions to academic policies, regulations or requirements, as stated in this catalog or elsewhere, are rarely made, and then only for truly extenuating circumstances. Students who believe an exception is justified are to follow procedures outlined in Appendix F (p. 306).

**Academic Terminology**

**Unit:** 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 8-8:50 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 three hours reading, writing and engaged in scholarship and other learning activities outside of class for each hour spent in class.**

**Unit Load:** In a regular fall or spring term, full-time graduate students take a minimum of 9 units; full-time doctoral students take a minimum of 6 units. The precise number is determined by the program of study. In Minimester, graduate students may take a maximum of 4 units. Students may register for a maximum of 9 units during the summer.

To be considered full-time, graduate students must take a minimum of 9 units each regular term (fall and spring); doctoral students take a minimum of 6 units each regular term (fall and spring).

**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 12 units and should have enough unique units to distinguish it from another concentration or a track. No course can be common to all tracks and concentrations within the program. A concentration will appear on the student’s transcript.

**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 9 and 11 units and should have enough unique units to distinguish it from another concentration or a track. No course can be common to all tracks and concentrations within the program. A track will appear on the student’s transcript.

**Term:** The academic year consists of two regular terms (sometimes called semesters), plus minimester and summer. The spring and fall terms each include 15 weeks of instruction, including 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:** 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 4 units in this term.

**Prerequisites/Corequisites:** Prerequisites are requirements imposed by an academic program for certain courses within its curriculum. Such requirements may include, but are not limited to, other courses. Prerequisites also may include successful completion of screened requirements, where applicable, or successful completion of a specific test or examination, either departmental or standardized, where applicable. Prerequisites also may include department or instructor permission in addition to, or in lieu of, a specific course, testing or class standing requirements.

Programs specify the grade a student must earn for the course to meet the conditions of the prerequisite; this grade typically is minimum of a B. For courses transferred from another institution, the grade must be a B or better.

Corequisites are courses that must be taken together; for example a lecture course that has a related lab course. Occasionally a requirement may be stated as either a corequisite or prerequisite, and the student may decide whether to take the courses concurrently or complete the requirement prior to enrolling in the other course.

Most enrollment requirements (prerequisites and corequisites) are enforced automatically when the student registers; however, it is ultimately up to the academic department to enforce enrollment requirements. Some departments make the determination after registration, and students not meeting the requirements will be notified to drop the class. Therefore, students should carefully read course descriptions before registering to make sure they have met any prerequisite or corequisite requirements. Failure to meet published requirements or to withdraw from the course by the published deadline is not a basis for petitioning the Registrar’s Office for an exception to academic policy.

**Course Numbers**

Academic departments use specific abbreviations for each general subject area (for example, MATH for Mathematics). These three- or four-letter abbreviations (subject codes) are followed by a three-digit code, which signifies course level:

<table>
<thead>
<tr>
<th>Course Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-499</td>
<td>Undergraduate courses</td>
</tr>
<tr>
<td>500-599</td>
<td>Graduate level courses that are available to post-baccalaureate students and provide broad based disciplinary knowledge in preparation for more advanced graduate work. (500-599 courses sometimes are cross-listed with upper-level undergraduate courses) A maximum of three 500-level courses may be counted towards the graduate degree requirements.</td>
</tr>
</tbody>
</table>
600-699 graduate level courses that are available to post baccalaureate students and provide in-depth exploration of specialized disciplinary knowledge. (600-699 level courses sometimes are cross-listed with 400 level undergraduate courses)

700-799 graduate courses available only to fully admitted graduate students

800-899 graduate research and thesis courses

900-999 doctoral research and dissertation courses

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### Thesis and Dissertation Information

#### Procedures

Students intending to write a thesis or dissertation should obtain the manual Graduate Thesis Guidelines from either their program director or online ([https://www.towson.edu/academics/graduate/office](https://www.towson.edu/academics/graduate/office)). In most master’s degree programs, students can do their thesis work in one 6-unit 897 thesis course or divide their work into two 3-unit 898 courses, normally taken in two consecutive terms. Students need special permits from the program director to register for 897 or 898.

Doctoral dissertation/thesis work uses the same Guidelines, plus additional policies within the doctoral program. Normally, the dissertation courses are 997 and 998. Depending upon the program, a minimum of 12 to 24 units are needed to complete the dissertation. Students are expected to maintain continuous registration in a thesis/dissertation course (or continuum- see below) each academic term until they successfully complete all of the requirements of the thesis/dissertation. This also includes summer and minimester for those students who work with their chair or committee members on their thesis/dissertation during these terms.

Thesis/dissertation coursework will receive grades of IP (in progress) and not earn credit until the thesis or dissertation is complete and successfully defended at which time all IP grades will be changed over to grades of S (satisfactory).

#### Thesis/Project Continuum Registration

Students who do not complete their thesis during the regular thesis course registration must register for Thesis Continuum (899 or 999) every term until the work is finished, submitted and approved. Doctoral students who do not complete their dissertation during the regular dissertation course registration must register for Dissertation Continuum (999) or additional units of Dissertation every term until the work is finished, submitted and approved. Students who do not complete the project work during the regular project course registration must register for Project Continuum (885) the following term to complete the work. Normally, students will only be allowed one term of Project Continuum.

Students who make satisfactory progress on their thesis/dissertation/project during a term of continuum registration will receive a grade of S (satisfactory) while students who fail to make satisfactory progress will receive a U (unsatisfactory). Continuum registration does not count toward degree requirements.

Students who miss a term and return will need to register for thesis/dissertation/project units after the fact for the missed term(s). Any exceptions will be handled on a case-by-case basis by the program director and the dean of Graduate Studies.
FINANCIAL INFORMATION

- Tuition and Fees (p. 149)
- Financial Aid (p. 150)
- Other Financial Resources (p. 153)

Tuition and Fees

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. Consult the website (https://www.towson.edu/admissions/tuition) for most current fees.

Proposed rates for the 2018-2019 academic year are:

Graduate Application fee: (nonrefundable)
- Online $45

Tuition
- Undergraduate, per unit - In-state $293
- Undergraduate, per unit - Out-of-state $846
- Undergraduate, per unit - Regional $443
- Graduate, per unit - In-state $418
- Graduate, per unit - Out-of-state $865
- Graduate, per unit - Regional $627

Athletics fee $43/unit
Auxiliary services fees $85/unit
Technology fee $9/unit, up to $100/term
Graduate Student Association (GSA) fee $4/unit

Private music lessons (per unit plus tuition)
- Major instrument $120
- Non-major instrument $300

Enrollment Deposit (non-refundable and applied to student's first term bill)** $200***

*These rates are subject to change.
***Excludes Physician Assistant Studies and Audiology programs which have a separate enrollment deposit.

To view an expanded listing of all university associated fees, visit http://students.towson.edu and select Tuition & Fees.

Fee Refunds

The following fees are nonrefundable:

1. Late payment fee
2. Graduate application fee
3. Closed contract fee
4. Enrollment deposit
5. Physician Assistant Program Early Admit Deposit
6. Audiology, Speech-Language Pathology and Deaf Studies Deposit

The following fees are nonrefundable after the official start of the classes for the term:

1. Applied fee (private instruction, student teaching, clinical practicum, etc.)
2. Parking permit fee (Students wishing to park on campus must purchase a parking permit and pay the applicable parking rate. Individuals who no longer need a parking permit may cancel their permits throughout the academic year and may be eligible for a pro-rated refund. See the parking website rate and refund information.)

The following fees are nonrefundable after the official change of schedule period:

1. Mandatory university fees
2. Technology fee

Center For Applied Information Technology (AIT Courses)

AIT rates differ from university rates. For details, see the Bursar website at www.Towson.edu/Bursar (http://www.Towson.edu/Bursar).

M.S. Accounting And Business Advisory Services (Joint Degree Program With University Of Baltimore)

Students in the Accounting and Business Advisory Services Joint Degree Program will be assessed tuition and fees based on the University of Baltimore's graduate rates. For classes not part of this joint program, tuition and fees will be assessed according to Towson University's rates. View the University of Baltimore's rate structure at http://www.ubalt.edu/merrick/graduate-programs/master-of-science/accounting-and-business-advisory-services-ms/index.cfm

Late Registration

A $75 late registration fee may be assessed for courses added after the change of schedule period.

Refund Policy

Students may be eligible for a full or partial refund of tuition and certain fees if some or all of enrolled courses are dropped. Notification to the instructor does not constitute a proper withdrawal. A course drop must be done in writing to the Registrar’s office or online through Self Service. If you fail to officially drop you will be financially responsible for all term charges. To drop online: Login to Towson Online Services > Self Service > Student Center > Enroll/Drop.

Students must drop courses by the end of the Change of Schedule period for the class session in order to receive a 100 percent refund of tuition and certain fees. If courses are dropped after the Change of Schedule period for the class session, the last date on which withdrawn online from a class determines the percentage of the refund. If dropped in writing, the date on which written notification is received by the Registrar’s office determines the percentage of the refund. All refund percentages are based on the official start of the class session. The timing for refunds is as follows:
1. Through the end of each change of schedule period, 100 percent of tuition and fees is refunded to the student.

2. Beginning with 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 is refunded to the student who fully withdraws from the university.

3. Beginning with the 22nd calendar day after the official start of the term, no tuition and fees are refunded to the student.

NOTE: Based on documentation of extraordinary circumstances, including medical, exceptions may be made to this policy. Requests for refunds for extraordinary circumstances should be submitted immediately; however, no requests will be considered 30 days beyond the session in question.

Graduate students should submit request to:

Bursar’s Office
Enrollment Services Center, Room 336
Towson, MD 21252.

Any unpaid charges on a student’s financial account with the university 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 that credit cards 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.

For more information, visit http://students.towson.edu and select “Bursar’s Office.”

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 email 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.

All checks or money orders should be made payable to Towson University for the exact amount of the charges. Student’s name and TU ID number should appear on all checks submitted to TU. The student’s liability is not discharged until their balance is satisfied in full. The student’s balance can be satisfied through cash, check or credit card payment, as well as financial aid, a payment plan agreement through the TU offered Tiger Installment Plan, or a combination of all options.

The Tiger Installment Plan (TIP) extends the student a monthly budget plan for meeting education expenses for individual regular terms. To view more details or to enroll online, visit www.Towson.edu/paymentplan. TU accepts Visa, Discover, MasterCard, and American Express credit cards through a third-party processor online. All credit card transactions incur a 2.85% fee on the amount charged. It is imperative that students adhere to published payment deadlines. A $150 late fee is assessed to any student who pays after published bill deadlines. Payment of term bill secures the student’s class schedule for a term; otherwise, cancellation of the student’s class schedule may occur. Students may pay by either returning the remittance portion of their billing statement to the Bursar’s Office, Enrollments Services 336, with payment or verification of funds to cover all charges, or online at http://students.towson.edu.

To use: click Towson Online Services; click Self-Service; click Campus Finances; click Account Inquiry; click Make a Payment. The student’s TU username and password are required to make a payment on the Web. NOTE: Bank check card or debit card payments cannot be processed through the online payment site.

Students whose term bill reflects a credit or zero balance and who choose NOT to attend the upcoming term must notify the Registrar’s Office on or before the Change of Schedule period end date to have their class schedule canceled. Students who fail to do this will be financially responsible for all term charges. If tuition, fees and related charges are not paid by the established payment date, the student’s class schedule will be voided and, if applicable, residence hall space will be forfeited. If a check given in payment of fees, fines or services is returned unpaid by the bank for any reason, a penalty fee of $50 is charged. Failure to reimburse TU for an uncollectible check with guaranteed funds may result in a student’s class schedule being canceled.

WARNING: Processing of financial billing statements is the responsibility of the student and is due to TU each term as outlined at www.towson.edu/bursar. Non-delivery of the billing statement does not release the student from the payment or late payment assessments.

Financial policy set by the Board of Regents and supported by the legislative auditors of the State of Maryland states that all previous balances must be paid prior to registration for the following academic term. Towson University employs a “first in/first out” technique when applying payments to accounts. Therefore, 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 sent to the Central Collection Unit of the State of Maryland, it is deemed delinquent, and a collection fee not to exceed 20 percent will be charged to the student by the Central Collection Unit. In accordance with COMAR Title 17, Subtitle 01, Chapter 02, Section 01 through 05, the Central Collection Unit may report debt to a credit bureau and begin intercepting Maryland income tax refunds of individuals indebted to the state colleges and universities for tuition, fees and other costs. Students with outstanding balances should contact the Bursar’s Office. Transcript and diploma requests will not be honored if a student has a financial obligation to TU. 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.

NOTE: TU will retroactively bill when coding errors are identified.

The Bursar’s Office is open Monday—Friday, The Customer Service Center’s business hours are 8 a.m. - 5 p.m., and the Payment Center business hours are 8:30 a.m. - 4 p.m. The Bursar’s Office can be contacted at 410-704-2100, toll free at 1-888-5BURSAR or www.towson.edu/bursar.

Financial Aid

Enrollment Services 339
Phone: 410-704-4236
Fax: 410-704-2584
finaid@towson.edu
Call Center Hours: Monday - Thursday, 8:30 a.m. - 5:00 p.m.; Friday, 8:30 a.m. - 4:30 p.m.
Reception Desk Hours: Monday - Thursday, 8 a.m. - 5 p.m.; Friday, 8:00 a.m. - 4:30 p.m.

The TU Financial Aid Office coordinates the application process for scholarships, work-study funds, all student loans and most student grants. These aid programs are funded by the U.S. Department of Education, the State of Maryland, Towson University or private sources.

Advising: To schedule an in-person or phone appointment with a financial aid adviser, call the office to schedule an appointment.

Federal Aid Eligibility Requirements

- Admission to a degree or graduate certificate program.
- Valid Social Security number.
- Applicant must not be in default (https://studentaid.ed.gov/repayloans/default) on a student loan or owe a repayment of a Federal Title IV grant.
- Male students must register for Selective Service.
- At least once per year, the Financial Aid Office must determine if students are meeting the requirements of the Financial Aid Satisfactory Academic Progress (SAP) Policy. Failure to meet these requirements can lead to loss of eligibility to receive aid. To view the Financial Aid SAP policy, visit www.towson.edu/finaid.
- Federal Work-Study funds require financial need and funding is limited.

Financial Need Formula

Most graduate student aid programs do not require financial need, but programs that do required need use the following formula:

\[
\text{Cost of Education Budget} - \text{Expected Family Contribution (EFC)} - \text{Outside Resources (scholarships, tuition waivers, etc.)} = \text{Financial Need}
\]

TU prepares standardized Cost of Attendance (https://www.towson.edu/admissions/tuition/cost.html) budgets that include direct university costs such as tuition, fees, and on-campus room and board charges, and allowances for indirect costs such as transportation, personal expenses, and off-campus room and board charges. The Expected Family Contribution (EFC) is calculated from your Free Application for Federal Student Aid (FAFSA) data based on a federal formula that considers factors such as income, certain assets, family size and number of family members in college.

Deadline And Application Procedures

1. Free Application for Federal Student Aid (FAFSA)
   - You must submit a FAFSA to apply for all federal aid programs including loans, most state aid programs and some scholarships.
     - Apply online every year at www.towson.edu/fafsa.
     - TU School Code: 002099.
     - First date to apply: October 1.
     - Aid period: Use each FAFSA to apply for aid for the following academic year (Fall-Spring-Summer).
     - MHEC FAFSA Deadline

   - To be considered for most aid from the Maryland Higher Education Commission (MHEC) (http://www.mhec.state.md.us/preparing/Pages/FinancialAid/financialaid/programs/scholarships/private.html), you must submit a FAFSA. The maximum annual borrowing limit is $20,500. The maximum aggregate Direct Student Loan limit (including any previous Subsidized Direct Student Loans) is $138,500. Students are responsible for all interest costs, and interest accrues during enrollment and throughout the grace period and repayment. Students can defer payments during enrollment periods by choosing to capitalize their interest, but capitalization increases the loan principal and overall borrowing costs. All borrowers must also pay a loan origination fee, which is deducted from the loan disbursements. The interest rates are set annually in July. For current rates, visit https://studentaid.ed.gov/sa/types/loans/interest-rates. To borrow new loans and to remain eligible

2. State Aid Programs
   Maryland residents should also visit the Maryland Higher Education Commission (MHEC) (http://www.mhec.state.md.us/preparing/Pages/FinancialAid/financialaid/programs/scholarships/private.html) website, because many MHEC aid programs require additional application steps.

3. TU Scholarship Seeker
   To apply for scholarships from TU departments and the TU Foundation, please visit the Scholarship Seeker (https://inside.towson.edu/scholarshipSeeker/TU-Scholarships.html).

4. Private Scholarships
   To search for scholarships from private organizations, including businesses, foundations and civic organizations, visit Private Scholarships (https://www.towson.edu/admissions/financialaid/programs/scholarships/private.html).

Notification Process And Award Guide

After you have been offered aid, the Financial Aid Office will notify you by sending an email to your TU email account. The email will include instructions on how to view your aid offers online, and will also include a link to Your Award Guide (https://www.towson.edu/admissions/financialaid/financialaid/). All aid recipients must read the Award Guide, which includes instructions on how to accept your aid and all the terms and requirements for each aid program.

Direct Aid Programs

Funding for the Direct Federal Aid programs (Unsubsidized Direct Student Loans, Graduate PLUS Loans and the Federal TEACH Grant) is available to all students who meet the eligibility requirements, but annual limits still apply. To apply, submit a FAFSA (https://www.towson.edu/admissions/financialaid/apply/financialaid.html).

Federal Direct Unsubsidized Loans

These loans do not require financial need, but students must still submit a FAFSA. The maximum annual borrowing limit is $20,500. The maximum aggregate Direct Student Loan limit (including any previous Subsidized Direct Student Loans) is $138,500. Students are responsible for all interest costs, and interest accrues during enrollment and throughout the grace period and repayment. Students can defer payments during enrollment periods by choosing to capitalize their interest, but capitalization increases the loan principal and overall borrowing costs. All borrowers must also pay a loan origination fee, which is deducted from the loan disbursements. The interest rates are set annually in July. For current rates, visit https://studentaid.ed.gov/sa/types/loans/interest-rates. To borrow new loans and to remain eligible

for enrollment-based payment deferments on prior loans, borrowers must enroll at least half time for each term.

1 Graduate students used to also be eligible to borrow Direct Subsidized Student Loans, but federal legislation eliminated that option beginning with the 2012-2013 academic year.

**Federal Graduate PLUS Loans**

- These loans are only available to graduate students who have already borrowed their maximum annual Federal Direct Unsubsidized Loans ($20,500).
- These loans require a credit check.
- They do not require financial need.
- The interest rate is set annually in July, and borrowers must also pay a loan origination fee, which is deducted from the loan disbursements. For current rates, visit https://studentaid.ed.gov/sa/types/loans/interest-rates.
- The maximum annual loan amount is your Cost of Attendance Budget minus all your other financial aid.
- While you are enrolled at least half time, you are eligible for an in-school deferment and can postpone payments until you graduate or drop below half time. Repayment begins within 45 days after the in-school deferment ends.
- The loan processor deducts an origination fee from your loan disbursements of approximately 4.3%.
- For more details, visit https://studentloans.gov.

**Federal TEACH Grants**

This federal program provides up to $4,000 per year to students who agree to serve as full-time teachers for at least four years in high-need subject areas at schools serving students from low-income families. If you do not complete the service obligation, all your TEACH Grant funds will be converted to a Federal Direct Unsubsidized student loan, and you will be charged interest from the date the TEACH Grant funds were disbursed. This program does not require financial need. For more information, see TEACH Grants (https://www.towson.edu/admissions/financialaid/programs/teachgrant.html).

**Private/Alternative Loans**

Some students choose to borrow alternative loans from private lenders. The Federal Direct Unsubsidized Loans usually offers better interest rates and other loan features than the Federal PLUS Loan and most private loans. When comparing the Federal PLUS Loan to private student loans, you should carefully compare the interest rates and the other PLUS Loan benefits. If you can find a private loan with an interest rate that is significantly lower, then you will have to weigh the benefits of that lower interest rate against the other PLUS Loan benefits and repayment options. For more information, see Private Loans (https://www.towson.edu/admissions/financialaid/programs/loans/private.html).

**Financial Aid Disbursements**

Generally, students receive one half of academic year financial aid funds each term. The university will credit aid toward term charges for tuition and fees and other direct TU charges.

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

- Submit your FAFSA by January 17.
- Complete the admission requirements early.
- Register for classes at the earliest opportunity.

Whenever the amount of term aid exceeds charges to TU, students will receive a financial aid rebate to use for books and day-to-day indirect educational expenses.

The Bursar’s Office can disburse rebates as early as 10 days before the start of the term. Students can ask the Bursar’s Office to convert a portion of their credit balances to retail points on their Towson University OneCard for the purchase of books or for use at any campus food location.

Students who receive late aid offers may not receive rebates until at least three weeks after the creation of the credit balance. Students with revised aid offers may also experience rebate delays.

**Minimester Aid**

The financial aid disbursement process bases eligibility for spring federal aid disbursements on students’ total combined minimester and spring units. Example: You must enroll at least half time each term to receive federal loan disbursements for that term. To receive federal spring loans, your combined minimester and spring term units must meet the half-time requirements. See the Financial Aid Award Guide (http://www.towson.edu/aidguide) for more details.

**Summer Aid**

To request a loan for the summer, see Applying for Summer Aid (https://www.towson.edu/admissions/financialaid/apply/summer.html). Your combined fall, spring and summer loans cannot exceed annual loan limits.

**Refund Policy**

When a student completely withdraws from Towson University while receiving Federal Title IV student aid, the Financial Aid Office must determine what portion of the student’s term aid (not including Federal Work-Study funds) will revert to the federal programs. The Financial Aid Office uses a statutory federal refund formula required by the U.S. Department of Education to determine what portion of aid paid to TU 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 federal aid assistance disbursed for the term.

If the student has received more assistance than the amount earned, TU or the student (or both) must return the unearned funds to the Federal Title IV programs.

Towson University returns the lesser of the unearned amount of Title IV assistance, or the institutional charges incurred for the term, multiplied by the unearned percentage of Title IV grant and loan assistance. (Institutional charges are limited to tuition, fees, and room and board, if the student paid these charges to TU.)
The student returns unaired Title IV assistance minus the amount the university returns. The U.S. Department of Education does not allow discretion on the part of TU for non-institutional costs. In most cases, when a student receives Title IV assistance greater than the amount of institutional charges and completely withdraws from TU, the student will have to return some of those federal funds.

**Private Scholarship Payments**

If you receive scholarships from private organizations outside TU (not including Maryland state scholarships), you must contact the Bursar’s Office to arrange for payment of scholarship funds. Scholarship funds are disbursed in accordance with procedures and policies set by the private scholarship donors and Towson University. Students may defer partial payment of TU charges before receiving scholarship proceeds by forwarding a copy of the scholarship award letter to the Bursar’s Office. Any outstanding balance created when a student or donor fails to provide TU with adequate, timely information will become the financial obligation of the student.

**Scholarship 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 adjust or reduce aid offered by the university.

**Other Financial Resources**

**Assistantships**

The Office of Graduate Studies and various departments of the university offer a limited number of graduate, teaching and research assistantships each year to qualified degree-seeking students.

Assistantships provide academic and professional enrichment to graduate students. They also offer stipends to compensate for the hours worked and tuition waivers for graduate units required for the degree. The amount of the stipend and tuition waiver varies depending on the type and nature of the assistantship. There are 10- and 20-hour positions available in academic and several administrative departments. These positions are highly competitive.

Applicants are encouraged to view Handshake on the Career Center web page and to contact their departments for graduate assistantship openings. Applicants also are encouraged to submit their résumés to their departments and the Graduate Assistance Office (GAO) by early spring for fall semester positions and by early fall for spring semester positions so that departments may have time to review the information. Interested applicants may contact the Graduate Assistance Office for more information at 410-704-4484, gao@towson.edu or https://www.towson.edu/academics/graduate/assistantships/.

**Fellowships**

The Office of Graduate Studies is committed to supporting students enrolled in doctoral and other terminal degree programs at Towson University. The purpose of the Towson University Graduate Student Fellowship program is to advance the goals of increased excellence and diversity of graduate students. Awards are made to students on the basis of academic merit and/or depth of professional experience. For more information, contact the Office of Graduate Studies at 410-704-2078 or gradstudies@towson.edu.

**Alumni Association Graduate Fellowship Awards**

The Alumni Association awards several scholarships each year to TU students who are full- or part-time graduate or post-graduate students and are active leaders in their communities. The Alumni Association recognizes and rewards students who demonstrate the highest levels of intellectual achievement and the potential to be active supporters of TU and the larger community. Each award shall consist of a certificate and a $1,000 to $2,000 scholarship that will be deposited directly into the student’s TU account for tuition, books and/or living expenses. Applications may be obtained from the Towson University Office of Alumni Relations, 1-800-887-8152 or alumni@towson.edu, and must be postmarked no later than June 15.

**Student Employment**

Handshake is a graduate student’s main resource for locating jobs and internships. The on- and off-campus opportunities posted in Handshake are full- and part-time. The Career Center also manages several job fairs throughout the year and offers students individual job search assistance. For more information on Handshake or the Career Center, call 410-704-2233, email careercenter@towson.edu, stop by the Career Center at 7800 York Road, Suite 206, or visit www.towson.edu/careercenter.

**Veterans Benefits**

Towson University provides coordination between veteran/dependent students and the regional office of the Department of Veterans Affairs. TU’s Certifying Official establishes procedures and prepares forms and correspondence for eligible students to receive educational benefits. Additionally, they monitor class attendance and evaluate academic progress to ensure that those receiving benefits maintain satisfactory progress.

Students taking courses at other institutions concurrently with courses at Towson University may be certified for both institutions. The normal 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 / FX Grades**

Students who decrease their unit load during the course of the term or receive an FX at the end of the term must notify the TU Certifying Official. Failure to do so could result in termination of benefits and a financial debt to the U.S. Department of Veterans Affairs.

**Change of Major**

Veterans may change their academic major once without VA approval. For more than one change of major, however, veterans are required to undergo counseling by the VA. A change of major with the VA is required 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 TU 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 to qualify for advance payment.

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

**Approved Major**
The VA will pay veterans only for the courses listed in this catalog that are required for a degree and for majors that have been approved for study by the VA. If students take courses in addition to those listed for their approved major, they will not be entitled to receive VA benefits for them.
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Albert S. Cook Library

Albert S. Cook Library
Phone Circulation Services: 410-704-2456
Phone Research Help: 410-704-2462
Text Research Help: 410-774-1398

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 300 computer workstations available to connect users to library catalogs, electronic databases, electronic books, online journals and the Internet. The library has three electronic classrooms with wireless Internet. Cloud printers, scanners and photocopy machines are located throughout the building as well. Graduate students have access to a graduate reading room on the 2nd floor as well as the 24/7 study space on the main floor. Individual quiet study areas and group study spaces are available across the library. Room 200c on the second floor is dedicated to quiet study and there are study cubicles and rooms located on the second and third floors for group work. In addition, the library provides a leisure reading collection on the second floor and hosts events throughout the year, such as book discussions and noontime jazz concerts in the lobby. Starbucks is also located conveniently in the library lobby.

Individualized research help is available to students in person and virtually via text messaging, instant messaging, email and telephone. Research & Instruction 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 Towson University students any time, anywhere through the library’s web page (https://libraries.towson.edu). The library’s collection contains more than 400,000 books, including 240,000-plus electronic books. Students have access to more than 150 electronic databases and about 60,000 electronic and print journals. The TU Archives and Special Collections give students an opportunity to experience history at their fingertips through digital collections, rare books, and historical Towson University documents and photographs. In addition, Towson University students can utilize other area library collections. Students may request books from the University System of Maryland and Affiliated Institutions (USMAI) libraries, as well as 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 and graduate students have access to document delivery as well.

University Librarians

SARA ARNOLD-GARZA, Librarian II, Research & Instruction [2011] B.S., M.S.I.S.


MARY RANADIVE, Associate University Librarian for Administrative Services [1988] B.A., M.S.L.S.

MORGAN DAVIS, Residency Librarian for Diversity and Innovation [2017] B.S., M.L.S.


MARY GILBERT, Librarian IV, Assistant University Librarian for Content Management [1996] B.S., M.L.S.


CLAIRE HOLMES, Librarian III, Assistant University Librarian for Public Services [2000] B.A., M.L.S.


MARY RANADIVE, Associate University Librarian for Administrative Services [1988] B.A., M.S.L.S.

TU offers countless ways to stay in shape and have fun. Towson University students have free access to all Campus Recreation facilities, including the newly renovated fitness center, gymnasiums, pool, Outdoor Adventure Center, and turf fields. Campus Rec programs (Aquatics, Fitness, Intramurals, Outdoor Adventures and Sport Clubs) offer a great way to stay active, learn new skills and meet new people.

Aquatics and Safety
Campus Recreation is home to a 25-yard, eight-lane pool. Students can take a few laps during open swim hours or learn how to swim during private or group swim lessons. Campus Rec also offers a variety of American Red Cross safety courses, including CPR/AED with First Aid and lifeguarding certification courses. Learn more about aquatics and safety (https://www.towson.edu/studentlife/activities/recreation/campusrec/safety) at Towson.

Competitive Sports
TU students participate in a variety of sport activities offered through Campus Recreation’s Sport Clubs and Intramural Sports (http://www.towson.edu/studentlife/activities/recreation/campusrec/sports) programs. With many sport teams available at varying levels of competition, there’s something for all sports-loving students and for those who just want to have some fun being active with friends.

Fitness
In addition to a facility full of state-of-the-art exercise equipment, the Campus Recreation Fitness (https://www.towson.edu/studentlife/activities/recreation/campusrec/fitness) program offers many services that support TU’s pursuit of a healthy, active lifestyle. Campus Rec provides group fitness classes, equipment orientations, fitness testing and personal training services.

Outdoor Adventures
Outdoor Adventures provides educational, inspiring and exciting opportunities for students to enjoy the great outdoors. Students can venture outdoors on a backpacking, climbing or kayaking trip, or stay indoors and take advantage of the 33-foot climbing wall located in the new Outdoor Adventure Trip and Education Center.

Career Center
7800 York Road 206
Phone: 410-704-2233
Fax: 410-704-3459

Email: careercenter@towson.edu
Hours: Monday - Friday. 8:00 a.m. - 5:00 p.m.

The Career Center provides TU graduate students with:

• Supportive and encouraging experts who care about your success;
• Insight and empowerment to better understand who you are and where you want to go;
• A personalized job search plan that allows you to navigate the job search process with confidence;
• Connections to employers who are motivated to hire TU students for jobs, internships and research;
• An advantage over the competition with impressive interview skills, an incredible resume/CV and a polished professional image.

The Career Center’s services include a career mentor database, one-on-one counseling, drop-in express hours, a computer lab, on-campus interviews, job fairs, Handshake (https://www.towson.edu/careercenter/hire) job and internship postings, resume/CV reviews and mock interviews, LinkedIn photo booth, an information-packed Web site and more.

Center for Student Diversity
University Union 313
Phone: 410-704-2051
Fax: 410-704-4229
Office Hours: Monday-Friday, 8:00 a.m. - 5:00 p.m.

The Center for Student Diversity (CSD) provides intellectual, social, personal, and cultural enrichment programs and services that build community and foster 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 African American Student Development, Asian, Pacific Islander & Desi American Student Development, Cultural Competency Education, LGBTQ+ Student Development, Latinx Student Development and Women’s Resources. The center also partners with and supports Campus Ministries.

African American Student Development Program
African American Student Development (AASD) (http://www.towson.edu/aasd) supports, promotes and enhances the intellectual, academic, social and personal development of African, Afro-Caribbean and African American students. AASD provides programs and services that enhance the students’ overall experience at TU and increase awareness and appreciation of African, Afro-Caribbean and African American culture. We also assist TU in the recruitment and retention of students from these populations.
Asian, Pacific Islander & Desi American Student Development

The Asian, Pacific Islander & Desi American Student Development Program (https://www.towson.edu/apilatino) offers events and spearheads initiatives that focus on social, political and cultural issues pertaining to Asian, Pacific Islander & Desi American communities. The program supports Asian, Pacific Islander & Desi American students’ transition and adjustment to college life by working in close collaboration with individual students and student organizations.

Campus Ministries

Campus Ministries represents a variety of faith communities on campus through the support of staff assigned to TU. Several campus ministers advise student religious organizations, provide personal ministry and counseling, lead theological discussions, and provide other religious and spiritual support. Campus Ministries sponsors speakers, films and discussions on contemporary issues. The goal of Campus Ministries is to promote understanding and appreciation of religious diversity and serve the religious and spiritual needs of the campus community.

Cultural Competency Education

The Cultural Competency Education Program (https://www.towson.edu/culturalcomp) provides training, workshops, and resources that build cultural competence and capacity for students, staff, and faculty around diversity, inclusion, identity and social justice. The program works collaboratively to enhance the cultural capacity on campus to address the needs of underrepresented and marginalized communities. Each semester, interactive workshops explore diversity's complex and dynamic dimensions.

Latinx Student Development

The Latinx Student Development Program (https://www.towson.edu/latinsd.html) offers events and spearheads initiatives that focus on social, political and cultural issues pertaining to Latinx communities. The program supports Latinx students’ transition and adjustment to college life by working in close collaboration with individual students and student organizations, including the Latin American Student Organization (LASO).

Lesbian, Gay, Bisexual, Transgender, QUEER+ (LGBTQ+) Student Development

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, Transgender, Queer+ (LGBTQ+). The LGBTQ+ Student Development program (https://www.towson.edu/lgbt) exists to create a welcoming and nurturing environment for LGBTQ+ students so that they become engaged in leadership and mentoring opportunities on campus and in the wider community.

Women’s Resources

The Women’s Resources program (https://www.towson.edu/womensresources) exists as the central contact for resources and support for women on campus.

The program provides a wide range of services to women students focusing on leadership development and mentoring. In addition, the program offers a wide range of programming for the entire student body on issues of gender and equality. Common topics covered include Women’s Health and Fitness, Safety and Sexuality, Women in the Workforce and Sexual Assault Awareness. The program also connects female students with community resources for internships and community service projects.

Civic Engagement & Social Responsibility

Administration Building, Second Floor
Phone: 410-704-2806
Fax: 410-704-3441
Email: civicengagement@towson.edu
Office Hours: Monday-Friday, 8:00 a.m. - 5:00 p.m.

Change toward a more democratic society doesn’t just happen; it depends on people stepping up and doing the work of leadership—making connections, offering a vision, mobilizing others, recognizing and seizing opportunities.


Additionally, we provide resources (https://www.towson.edu/studentlife/housing/offcampus) to students considering moving off campus. Our Off-Campus Living series includes events and workshops that educate students about the importance of choosing the right roommate, navigating leases, locating housing and utilizing public transportation. Towson University students take the Tiger Pledge (https://www.towson.edu/studentlife/activities/leadership/pledge.html) during New Student Convocation and at Commencement and are challenged to live up to the ideals of the pledge.

We offer many opportunities for students, faculty and staff to practice civic engagement and social responsibility at Towson University.

Counseling Center

Health and Counseling Centers at Ward & West Building, Second Floor
Phone: 410-704-2512
http://www.towson.edu/counseling

Graduate school presents many stresses and many opportunities to advance yourself in your future career and in your life. To meet these challenges, it is important to resolve emotional problems, enhance professional and social skills, strengthen your resilience and self-care, and formulate wise personal goals. The Counseling Center provides help in all of these areas through personal counseling and other psychological services. Our services are not only for students in difficulty, but also for those who are striving for self-improvement.
Counseling Center clinicians are ready to provide assistance on many different issues:

- Stresses stemming from personal or educational challenges
- Blocks to educational or career achievement
- Anxiety, depression and behavioral difficulties
- Suicidal or self-destructive thoughts or behavior
- Setting and meeting personal goals
- Self-esteem and self-confidence
- Relationships with friends, roommates, parents, romantic partners or spouses
- Family problems
- Grief and loss
- Sexual matters
- Body Image and eating problems
- Physical or sexual mistreatment or abuse
- Alcohol and drug-related problems
- Problems encountered in the TU environment

The Counseling Center is staffed by psychologists, substance abuse clinicians, consulting psychiatrists, health educators, and other clinicians and counselors working under supervision. All services provided at the Counseling Center are confidential, and nearly all are provided free of charge. For more information or to make an appointment, call or drop by the Counseling Center.

**Hours**

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

**Group, Individual and Couples Counseling & Therapy**

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 further help might be appropriate. A series of individual counseling or brief psychotherapy sessions offered in a private setting can help you to resolve problems and achieve personal growth. Our various therapy and support groups are particularly helpful for self-improvement, 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 relationship.

**Psychiatry**

Psychiatric evaluation and medication are available when needed by students engaging in counseling and therapy services at the Counseling Center.

**Mindfulness Meditation**

Mindfulness Meditation has been shown to help reduce stress and anxiety, and to promote a more peaceful, creative and self-compassionate approach to one's life. Meditation opportunities are many, from group meditation workshops, to reserving private time in the Counseling Center’s Meditation Room for self-guided meditation, to using one of the meditation apps or links on our website.

**Alcohol and Drug Abuse Program**

The Counseling Center offers alcohol and other drug assessment and treatment that is intended to meet various personal needs. Programs are available in both individual and group formats. Services can assist in achieving a greater awareness of a problem or correcting a problem through education and recovery.

**Life and Career Planning**

The Counseling Center assists students in their personal lives and decision-making in a variety of ways. While the Career Center is the place to go for 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’s professional and student staff members provide workshops and programs to the TU community on various topics, including time management, assertiveness training, stress management, and communication skills. We can also work with members of the campus community to develop programs that meet individual needs. Professional staff members are also available to consult with TU students, faculty and staff on various topics, including 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 and a variety of self-help resources, apps and assessments are available on our website ([https://www.towson.edu/counseling](https://www.towson.edu/counseling)). Using these resources, you can self-evaluate and practice healthy behavior, download useful apps and determine whether you might benefit from in-person counseling or other services at the Counseling Center.

**Referrals**

Students frequently need services that are available outside the Counseling Center, whether on campus or in the surrounding community. Our clinicians can assist in locating appropriate outside resources when they are needed. In addition, our website includes a Community Provider Search link that anyone can use to identify mental health providers in the nearby community who accepts one’s brand of health insurance.

**Your Initial Contact**

Call 410-704-2512 or stop by the Counseling Center to arrange your first appointment with a counselor. Emergency appointments are available if you need to speak with someone immediately. Your Counseling Center clinician will help you to deal with your immediate concerns and determine what kinds of additional help will be most useful to you.

**Confidentiality**

Counseling often deals with very personal, private issues. Successful counseling depends on having the freedom to express feelings, attitudes, and thoughts with someone who is respectful of the person’s right to privacy. Our counseling sessions are confidential—personal 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 Maryland Law and also to the Code of Ethics of the American Psychological Association.

**Dining Services**

University Union
Phone: 410-704-2302
http://dining.towson.edu
The key word for eating at Towson University is “choice.” There are 18 great places to eat at TU. You can dine a la carte at 15 locations on campus, or at three all-you-care-to-eat dining halls. Flex or block meal plan options are available. Call 410-704-2530 for more information.

Students who have a Dining Points debit account can use their OneCard to save 6 percent sales tax on food purchased at Dining Services locations. Please visit our website for information concerning meal plans, dining locations, hours of operation, menu (https://www.dineoncampus.com/towson) or any other questions you might have.

**Disability Support Services**

Administration Building 232-235  
Phone: 410-704-2638  
Fax: 410-704-4247  
Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m.

Disability Support Services (DSS) at Towson University works with students with various disabilities and some temporary impairments that substantially limit one or more major life activities. The DSS staff is available to answer questions concerning accommodations and services as well as to provide information about other resources on and off campus. Students who suspect they may have a disability but do not have the required documentation should contact DSS for a consultation.

DSS works with students with disabilities such as learning disabilities, attention-deficit/hyperactivity disorder, mental health disabilities, autism spectrum disorder, brain injuries, physical/mobility and medical disabilities, as well as vision and hearing impairments.

DSS works with each student individually to determine and implement reasonable accommodations based on documentation and a personal interview. Students are encouraged to register with DSS as soon as possible after admission to TU to ensure timely provision of services. DSS encourages new students to maintain regular contact with our office, especially during their first year. This contact provides the opportunity for DSS staff to guide students and to work with them proactively to resolve problems that may arise.

Through an interactive process, DSS works closely with the faculty, staff and students to implement the provision of accommodations. Accommodations are determined on a case-by-case basis and may include priority registration, testing accommodations and use of the Testing Services Center, note-taking assistance, interpreting services, alternative formats for printed materials, assistive technology, para-transit registration and internship accommodations. DSS also offers short-term help with organization and study skills, disability consultation and advocacy assistance, help with course load and selection, as well as information and referral services.

Students should initiate the registration process by calling or visiting the DSS office or by submitting an application, located on the DSS website, along with documentation of a disability.

**Testing Services Center**

www.towson.edu/testing

Administration Building, Rooms 227-231  
410-704-2304  
Fax: 410-704-4699

The Testing Services Center provides testing accommodations for students registered with Disability Support Services. Services provided by the center include, but are not limited to, extended testing time, reduced distraction testing spaces, reader and writing software, computers and assistive technology, as appropriate. All tests are proctored to ensure academic honesty.

**Graduate Student Association**

Psychology Building 206  
Phone: 410-704-3967  
Fax: 410-704-5716  
Email: gsa@towson.edu

The Graduate Student Association (GSA) upholds the mission of academic excellence at TU and provides a vehicle for graduate students to express their needs, concerns and ideas. The GSA provides research and travel grants to help defray costs for graduate students who wish to pursue scholarship, and attend or present at a professional conference. Graduate students are encouraged to apply for these grants. The GSA represents graduate student views on various university-wide committees and distributes a newsletter that addresses various topics specific to the graduate student. Graduate student fees fund the GSA; therefore, all graduate students automatically become members of the GSA and active participation is encouraged. Visit the GSA website (http://www.towson.edu/gsa) for the list of social events and meetings.

**Health Center**

Health Center at Ward & West  
Phone: 410-704-2466  
Fax: 410-704-3715  
Email: healthcenter@towson.edu  
Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m.

The Health Center offers high-quality primary health care to any registered student regardless of insurance status. The center has an experienced staff of physicians, nurse practitioners, physician assistants, registered nurses and health educators. Services include treatment of common illnesses and injuries, a full range of sexual health and women’s health services, contraceptives and emergency contraception, HIV testing, immunization services, lab tests, health education and a limited formulary of prescription medications. Students can schedule an appointment by calling 410-704-2466 between 8 a.m. and 5 p.m. or online by logging in to our secure web portal (https://tigerhealth.towson.edu/login_directory.aspx). Uncomplicated problems (colds, sore throat, UTI's, etc.) can be seen in our Fast Track Clinic from 9 a.m.-5 p.m. where door-to-door time is usually less than one hour.

Charges for Health Center services can be paid by check or billed to the student’s university account. The Health Center is an “in-network” provider with many large insurance plans and will bill the plans directly for covered services. Referrals for X-rays, outside lab and diagnostic tests, and specialty and hospital care are the student’s financial responsibility, so we strongly encourage all students to carry health insurance (see Health Insurance below).

For after-hours medical emergencies, students should call 911 or if calling from a campus phone, dial 9-911 and notify the University Police by calling 410-704-2133. For non-emergencies students can call our After-hours Nurse Advice Line at 410-704-2466. St. Joseph Medical Center and Greater Baltimore Medical Center, as well as several free-standing urgent care centers, are available to provide urgent care to students at their own
expense when the Health Center is closed. Check your insurance plan to verify coverage for these services and visit our website for numbers and locations of facilities near campus.

**Immunization Requirements**

All 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 TU's immunization requirements to attend class. For details, visit the Health Center website (https://www.towson.edu/healthcenter). New students must log on to our secure web portal to enter their immunization record and complete all required forms (https://tigerhealth.towson.edu/login_directory.aspx). A copy of the immunization record signed by a healthcare provider should be mailed or faxed to the Health Center by January 1 for students entering for the spring term or by August 1 for students entering for the fall term. Late admissions have one month from the date of receiving their admission packet to submit their health records to avoid jeopardizing their class schedule. Students who fail to comply with the requirements by the start of classes, will have a health hold placed on their university account after the add/drop period and will be blocked from registration for the following term until they have complied.

Students taking courses exclusively online, overseas, at their place of employment if employment is off-campus, or at any of the city/county K-12 schools, are exempt from this policy. Required immunizations and immune antibody titers are available at the Health Center for a fee. Students living on-campus housing must also provide documentation of immunization against meningococcal meningitis or sign a waiver indicating they understand the risks of the disease and decline to be immunized. That form should be returned to the Department of Housing and Residence Life.

**Health Insurance**

Health insurance is strongly recommended to help defray the costs of services at the Health Center and unexpected illness or injury requiring costly hospital care or diagnostic tests. TU offers an excellent 12-month insurance plan that provides coverage for such services at a very reasonable cost and full or partial coverage for most services and drugs provided by the Health Center.

The plan uses the 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 when 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 of the following year) for one term, or for the summer only.

Information for the Towson-sponsored plan is mailed to all registered students that are U.S. citizens or permanent residents in the summer. Online enrollment is available on the Health Center website (https://www.towson.edu/healthcenter). For additional information, contact the Health Center.

**Mandatory Insurance Policy for International Students**

All international students on F and J visa status are required to have health insurance that meets TU's minimum standards. These students are automatically enrolled in the university-sponsored insurance plan and the cost is billed to their tuition account. Students with their own comparable insurance may submit an online waiver application. If the waiver is approved, the insurance charge will be refunded. NOTE: Waiver deadlines are September 15 (fall term) and February 15 (spring term). Waiver applications submitted after the deadline will not be considered and refunds of insurance premiums will not be given. Waiver applications must be re-submitted every fall term. See the Health Center website for waiver standards and application instructions.

**International Student and Scholar Office**

Psychology Building, 408
410-704-2421
Email: isso@towson.edu

The International Student and Scholar Office (ISSO) provides services and programs for more than 500 international students and international scholars/faculty 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 TU offices.
- Coordination of programs and ongoing services to enhance international students’ social lives, encourages their interaction with American peers, 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.

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

Please note that the ISSO can provide the necessary immigration-related information and assistance to students, but it is the student, not TU, who is ultimately responsible for maintaining legal F-1 student status. F-1 students should contact an ISSO adviser 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 does not work for the Department of Homeland Security or the federal government, but are employees of TU who want international students to be successful. Students must:

- Report any change of local or foreign address to the U.S. government’s SEVIS (electronic information system) by reporting it to TU through Online Services within 10 days of any move.
- Enroll at the school that issued the active SEVIS record Form I-20.
• Attend a full course of study (generally 9 units) each fall and spring term. See the section “Full-Time and Part-Time Status” in the Procedures and Policies section of this catalog for complete information about exceptions to the 9 units-per-term normal course load. Please also note that:

• Students must both register for and attend class for the entire term.

• A “W” (withdrawal) for a class means that class cannot count toward the full course of study.

• Receiving a grade of “FX” means that the student never attended class or stopped attending during the term without officially withdrawing, so an “FX” grade cannot count toward the full course of study.

• Units taken on an “Audit” basis do not count toward the full course of study.

• Under extremely limited circumstances, an international student may obtain an exception to the full course of study requirement. Any possible exceptions must be discussed and approved in advance by a Designated School Official (DSO), per federal Immigration regulations. Towson’s DSOs are the international student advisers at the ISSO.

• Make satisfactory academic progress.

• Complete the degree or program by the date indicated on the Form I-20; if a student is not able to complete the program by that date due to valid academic or medical reasons, he or she must apply at the ISSO for an F-1 program extension before the Form I-20 expires.

• Follow special immigration status transfer regulations when transferring to another academic institution.

• Have an unexpired passport at all times, with a validity date at least six 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, Minimester and spring breaks.

• Receive written authorization for any and all off-campus employment via the ISSO.

• Complete special U.S. tax forms and submit to the U.S. Internal Revenue Service even if no U.S. income was received.

• When nearing the end of the degree or program, or within 60 days of completing all degree requirements either:
  a. obtain a new Form I-20 for a new institution or program and attend the new school or program’s next available term within 5 months of the current program completion date
  b. apply to change to another immigration status or
  c. apply for optional practical training work permission, if eligible.

If the degree or academic program is not completed and the student withdraws or takes a leave of absence, the student must depart the U.S. within 15 days.

The ISSO staff is available Monday–Friday from 8:30 a.m.–4:30 p.m. Any student who has an emergency outside of normal business hours may contact the University Police at 410-704-2133. The police may assist the student or may contact an ISSO staff member at home.

Office of Technology Services
Administration Building 113 & Cook Library 29
Phone: 410-704-2041
Fax: 410-704-3111
www.towson.edu/ots

The Office of Technology Services (OTS) provides computing support to the Towson University community. Student Computing Services (SCS) and OTS Training are units within OTS responsible for providing technology services and support directly to students.

Student Computing Services (SCS)
Cook Library 35 and Towson Run 123
Phone: 410-704-5151
SMS Text Message: 410-324-7271
Email: scs@towson.edu
www.towson.edu/scs

Technology Support
SCS provides technical resources and support for students of all majors and experience levels. The SCS Service Desk is the point of contact for technology-related issues, supporting access and use of all the major student systems at Towson University, including Towson Online Services (https://inside.towson.edu/mytu/myTu.cfm) (advising, schedules, course registration, bill payment), BlackBoard (https://blackboard.towson.edu/webapps/portal/execute/tabs/tabAction?tab_tab_group_id=_1_1) (course management system) and Webmail Powered by Google. Students can also get assistance with connectivity issues, wireless network configuration, virus and spyware removal, and general application and computer questions.

 Studios, Computer Labs, and Printing
In addition to the Service Desk, on the first level of Cook Library, SCS operates a computer lab, a learning center, and multimedia production studios, offering access to standard and course-based software applications; wepa printing, 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. At SCS in Towson Run 123, get late night access to technology support and computers in West Village.

TU NetID
Your NetID (https://www.towson.edu/technology/netid/tools.html) is a user-specific ID that grants access to TU resources, like your financial information and grades, and it should be kept confidential. Do not share it with anyone! No one at TU will ever ask for your NetID password, so be cautious of “phishing” emails asking you to enter your NetID password. Visit the phishing (https://www.towson.edu/technology/security/phishing.html) web page for more information.

As a Towson University student, you have access to the following resources:

• Microsoft Office 365 (https://adfs.towson.edu/adfs/ls/?wa=wsignin1.0&wtrealm=um.federation:MicrosoftOnline&wctx=%26LoginOptions%3D1%26wa%3Dwsigin1.0%26wreply%3Dhttps%3A%252F%252Fportal.office.com%252F) - Free downloads available.

• Lynda.com (https://www.towson.edu/technology/training/resources/lynda.html) – Unlimited access to thousands of courses on a wide range of topics. Login using your NetID.

• Wēpa printing (http://www.towson.edu/wepa) – Convenient printing from Mac, Windows, iOS and Android devices to kiosks located throughout campus.

• Webmail Powered by Google (https://www.google.com/a/students.towson.edu/acs) – Check your University email daily for important communications from your instructors and various University offices.
OTC Training

Cook Library 408
Phone: 410-704-4070
Email: training@towson.edu
www.towson.edu/otstraining

OTC Training offers free workshops and training on technology topics such as Office 365. Visit the OTC Training webpage (http://www.towson.edu/otstraining) to access 180+ self-help training documents, and 100+ video tutorials on technology related topics, including our biweekly Computer Therapy series via YouTube (http://www.youtube.com/playlist?list=PLxqZTEhmBuag3BlBNtayeqBhbrRS6Tc). We offer one-on-one sessions for students, or customized group training for student organizations where we bring the training - and laptops - to you. Email us directly (training@towson.edu?subject=Customized Training Sessions) to schedule a workshop.

OneCard - TU ID Card

University Union 118
Phone: 410-704-2284

OneCard - TU ID Card

University Union 118
Phone: 410-704-2284

Parking and Transportation

University Union Garage
Phone: 410-704-PARK (7275)
Fax: 410-704-3370
Email: Upark@towson.edu

Para transit service is provided to students who are registered with Disability Support Services (DSS) (https://www.towson.edu/dss) or faculty/staff registered with Office of Human Resources (https://www.towson.edu/hr). The service offers on-campus scheduled pick-up.
ups to all faculty, staff, students and campus guests with certified Para transit needs.

### Parking & Transportation Information

All motor vehicles, except those parked at short-term parking meters, are required to have a valid parking permit on their parking account if they will be parked on campus from 6 a.m.–8 p.m., Monday–Thursday, and from 6 a.m.–3 p.m. on Fridays. A License Plate Recognition (LPR) system is used for parking enforcement. This system reads license plates and verifies there is a valid permit associated with that plate. As such, all permit holders must ensure they have their accurate and complete license plate(s) registered with the department. Vehicles in violation of the regulations will be ticketed and/or towed at the owner’s expense. Both resident (30 completed credits or more) and commuter students may purchase a parking permit online through eParking. Commuter students have the option of purchasing a permit to park on campus during the daytime or a permit that is only valid during the evening after 3 p.m. Resident (30 completed credits or more) are eligible to purchase a resident permit based on availability. Students purchasing a parking permit must park in those areas designated by their specific permit type and time restrictions. For information regarding permit rates, purchasing options and parking restrictions, please visit our website (http://www.towson.edu/parking).

Visitors to campus are required to purchase an hourly or one-day Visitors’ Parking Permit from a pay station at a designated visitor location or through the pay by phone app. Those visitors participating in official University Admissions tours are excluded from this requirement but must display the permit distributed by admissions staff and be parked in Visitor Spaces on the ground floor of the West Village garage located off Towsontown Boulevard. For more information regarding the pay by phone app, please visit our website (https://www.towson.edu/parking).

TU provides both on-campus and off-campus shuttles to transport students, faculty and staff to various locations throughout and near the campus. TU shuttles only operate during the regular academic terms for the regular route schedule when the campus is open. Campus shuttles operate an abbreviated schedule during the winter and summer only when classes are in session. There is no fee to ride any shuttle; however, a valid TU OneCard ID must be presented to ride off-campus shuttles. To view the shuttle schedules and routes or to obtain more information, please visit TUTIGERRIDE.com (https://www.tutigerride.com).

### Office of Student Activities

At Student Activities, we focus our efforts to foster academic success and personal growth, provide new and diverse opportunities, connect students with supportive role models and create positive, fun-filled memories.

To check out our upcoming events, like us on Facebook (https://www.facebook.com/TowsonSAM), check out our videos on YouTube (https://twitter.com/TowsonSAM) or follow us on Twitter (https://twitter.com/TowsonSAM) or Instagram (https://instagram.com/towsonsam).

### University Child Care

University Child Care Center, Auburn Drive
Phone: 410-704-2652
Fax: 410-704-3771
Office Hours: Monday–Friday, 7:30 a.m. - 5:30 p.m (all year round)

The Towson University Child Care Center provides a rigorous educational program for children between the ages of 2 and 5. We offer tiered tuition rates for students of TU/Staff-Faculty-Alumni/Community families. We have a Reggio Emilia and Project Based curriculum, which promotes the growth of the Whole Child. Interested families are urged to take a tour and see us in action, and learn more about our school. Tours are conducted Monday through Friday, from 8 a.m.–11:30 a.m. We typically enroll children in the March prior to a school year start in the middle of August. All contracts are 44 weeks long and we provide an optional summer camp.

Please consult our website (https://www.towson.edu/childcare) for more specific information.

Director: Sarah Fike
Office Assistant: Debbie Koman

### University Store

University Union, first floor
Phone: 410-704-BOOK (2665)

Regular hours for spring and fall terms:
Monday–Thursday, 8:30 a.m.-7:00 p.m.
Friday, 8:30 a.m.–5:00 p.m.
Saturday, 10 a.m.–4:00 p.m.

*Hours are extended during the first week of classes and move-in weekend. Summer and January hours vary; please call or visit our website (http://towsonustore.com/home.aspx) for more information.*

The Towson University Store staff takes pride in satisfying the diverse needs of the campus community by offering a variety of goods and services. Distinctive merchandise, which promotes school spirit and recognition, consists of quality TU emblematic adult and children’s clothing, stationery, giftware and the official TU class ring. Since the University Store is owned and operated by TU, all profits generated from the sale of merchandise are reinvested into TU. No student fees are used to support the University Store.

Students can find the following at the University Store:

- required and recommended textbooks and supplies,
- basic school, art and computer supplies,
- a large selection of quality emblematic gifts and clothing (online or in the Ustore),

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University Union

• boutique gifts, greeting cards and games,
• snacks and beverages
• reference materials
• Book Buyback, and
• graduation regalia, announcements and diploma frames.

Participate in the Textbook Advance Program. This is a short-term, interest free loan available to all eligible TU students.

Not sure you are getting the best deal? There is Price Matching and Price Comparison for all New and Used Textbooks. Check out our new Digital Direct Access program for all available courses at discounted prices, available to review for free the first week of classes!

Visit our website [http://towsonustore.com/home.aspx](http://towsonustore.com/home.aspx) to order merchandise, request a store catalog and obtain information about Course Materials, graduation, location, store hours, refund policy and any other services listed. The University Store accepts cash, personal checks with proper ID, OneCard Retail Points, Visa, MasterCard, Discover and American Express.

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 PNC 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 Reservations office.

**Second floor**

• University Union Information Desk,
• Susquehanna Food Court (a mall style eatery),
• Patuxent Grill (which offers high-quality dining at reasonable prices),
• Offices of the Student Government Association (SGA),
• Office of Student Activities (which includes Commuter Affairs, Greek Life [fraternities and sororities], the Student Leadership Programs and Off-Campus Housing Programs),
• Office of the Black Student Union,
• Campus Ministries Office,
• New Student and Family Programs,
• Office of Diversity Resources,
• Offices of Event and Conference Services (where reservations for rooms and other campus facilities may be made and audiovisual/technical services requested), and
• University Union office suite.

**Third floor**

• Towerlight (Towson University’s student newspaper),
• African American Cultural Center,
• Women’s Center,
• Offices of the Students Achieve Goals through Education (SAGE) Program,
• Queer Student Union,
• several multipurpose conference rooms, and
• a number of open spaces for socializing.

**The Writing Center**

Liberal Arts Building 5330
Phone: 410-704-3426
https://www.towson.edu/cla/centers/writing/

Director: Wayne Robertson

The Writing Center provides individual writing support to all members of the Towson University community, including undergraduate and graduate students, faculty and staff, native English and second-language writers. Writing Center tutors work with writers at any stage of the writing process from brainstorming to polishing the final draft. They provide feedback to help writers develop and organize their thoughts, sharpen their focus, and communicate their ideas more clearly and precisely. Writers can bring any type of writing project, including essays, research papers, lab reports, PowerPoint presentations, resumes and creative writing.

Writers are encouraged to call to schedule an appointment at least a day in advance. They should plan to bring their assignment sheets as well as two printed copies of their paper.

In addition to face-to-face appointments, the Writing Center provides feedback to writers via its Online Writing Center as well as grammar-specific exercises through its Online Writing Support Program. Both services can be found on the Writing Center website above.
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Accounting (ACCT)

Courses

ACCT 505 Accounting Essentials (1.5)
Introduces MBA students to the basics of corporate financial reporting and financial statement analysis from the manager's perspective. Emphasizes the preparation and analysis of financial statements and provides an overview of U.S. GAAP and IFRS rules for most critical accounting items. Prerequisite: Graduate Standing.

ACCT 601 Forensic Accounting Principles (3)
Provides students with an overview of the field of forensic accounting focusing on the roles, responsibilities and requirements of a forensic accountant in both litigation and fraud engagements. This course examines basic litigation and fraud examination theory, identifies financial fraud schemes, explores the legal framework for damages and fraud and damage assessments and methodologies, and reviews earning management and financial reporting fraud. Other topics include computer forensics and corporate governance and ethics. Actual litigation and fraud cases are used to highlight the evolving roles of forensic accounting. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.
ACCT 602 DISSECTING FINANCIAL STATEMENTS (3)
Students will learn how to review, detect, and investigate possible financial statement concerns of publicly and privately held businesses, as well as nonprofit organizations and family businesses. Topics covered include legal elements of financial statement fraud, management’s and auditor’s responsibilities, improper revenue/sales recognition, inadequate disclosure of related-party transactions, improper asset valuation, improper deferral of costs and expenses, financial statement red flags, and inadequacies in management’s discussion and analysis. Students will learn how to detect and investigate possible financial statement problems by addressing such factors as off balance sheet activity, liquidity, financial performance indicators, unreported intangibles, and lease auditing. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 603 INVESTIGATIVE ACCOUNTING AND FRAUD EXAMINATION (3)
Topics include the in-depth review of sophisticated fraud scheme, how fraudulent conduct can be deterred, how allegations of fraud should be investigated and resolved, the recovery of assets, methods of writing effective reports, and complying with SAS 82 and other fraud standards. Fraud and investigation topics cover acts of skimming, cash larceny, check tampering, register disbursement schemes, billing schemes, payroll and expense reimbursement schemes, improper accounting of inventory and other assets, corruption, bribery, conflicts of interest, security fraud, insurance fraud, anti-terrorist financing, and money laundering. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 604 LITIGATION SUPPORT (3)
Addresses the relationship between the forensic accounting professional and the litigation process in which they may play a role. Specifically, this course will cover the litigation process, the legal framework for damages and fraud, damage assessment methodologies, issues related to the presentation of evidence through expert testimony, practices used in supporting divorce cases, and basic rules of evidence as they apply to forensic accountants. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 605 PERFORMANCE MANAGEMENT AND ACCOUNTING CONTRLS (3)
Focuses on how managers can use accounting information in the budgeting process to assist them in planning, controlling, and making decisions. Introduces students to internal controls, corporate governance, and enterprise risk management. Prerequisite: ACCT 505 or permission of the MBA program director.

ACCT 630 CONTEMPORARY ISSUES IN FINANCIAL ACCOUNTING (3)
Theoretical and conceptual foundations of generally accepted accounting principles and practices as well as certain other principles and practices not generally accepted. Recent and current literature is studied to provide coverage of the basic postulates, assumptions and standards underlying the measurement criteria and practices of financial accounting. Prerequisites: undergraduate degree in accounting and/or admission to the M.S. in Accounting and Business Advisory Services Program.

ACCT 655 TAX POLICY (3)
The evolution and structure of the federal income-tax system from a public policy perspective. Focus is placed on legal, economic, social and practical considerations. Alternatives, including current legislative proposals, are considered. Students prepare a research paper on a topic related to tax policy. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 660 TAXATION OF ENTITIES (3)
Federal income taxation of corporations, partnerships, estates, and trusts, and the taxation of gifts and estates. Analysis includes consideration of the sources of tax law, weight or authority, ethical issues, planning and administrative procedures. Prerequisites: Course equivalence to an undergraduate degree in accounting including a tax course and admission to the MS in Accounting and Business Advisory Services Program.

ACCT 665 INDEPENDENT RESEARCH IN ACCOUNTING (1-3)
Individual and supervised research in selected areas of accounting. Special permit required. May be repeated for a maximum of 6 units. Prerequisites: Entry into the Accounting and Business Advisory Services Program and Consent of instructor.

ACCT 667 GRADUATE ACCOUNTING INTERNSHIP (3)
Students work on assigned projects within an actual accounting environment. Grade requirements include a work supervisor evaluation, a research paper and a journal detailing the work experience. Prerequisites: Admission to the MS in Accounting and Business Advisory Services Program and permission of the graduate director of the accounting program.

ACCT 720 DESIGN OF MANAGERIAL COST AND CONTROL SYSTEMS (3)
The design of cost and control systems for decision making and for measurement of the performance of processes, product lines, managers and organizational studies highlight the experiences of companies and include modifying cost and control systems in response to technological, institutional and global changes. Prerequisites: undergraduate degree in accounting and/or admission to the M.S. in Accounting and Business Advisory Services Program.

ACCT 730 FINANCIAL STATEMENT ANALYTICS AND VALUATION (3)
Focuses on financial statement analytics, i.e., detailed analyses of cash flow, income recognition, profitability analysis, risk analysis, forecasts and projections. Students will develop risk adjusted rates of return, and valuation techniques using asset based, income based, and market based approaches. By the end of the course, students should be able to use financial statements to develop to analyze company performance and make reasonable valuation estimates. Prerequisites: undergraduate degree in accounting and admission into the M.S. in Accounting and Business Advisory Services Program; ACCT 630 or consent of instructor.

ACCT 740 ADVANCED TOPICS IN ASSURANCE SERVICES (3)
A study of the application of generally accepted auditing standards to auditing practice issues of academic and practitioner research, internal auditing, EDP auditing and governmental auditing issues. Prerequisites: undergraduate degree in accounting and/or admission to the M.S. in Accounting and Business Advisory Services Program.

ACCT 750 FORENSIC ACCOUNTING (3)
Forensic accounting is an interdisciplinary study of social learning/ process theories, accounting, law, the systems of internal controls, evidence gathering, interpersonal skills, communication skills and information technology skills. This course provides foundation knowledge about fraud prevention, detection and investigation for an accountant. Prerequisite: ACCT 640 or consent of instructor.

ACCT 752 ADVANCED TOPICS IN ACCOUNTING SYSTEMS (3)
An exploration of advanced accounting information system topics such as ERP Systems, E-Business applications, AI Implementation, security. Prerequisites: ACCT 300 and admission to Accounting Program.
ACCT 755 GOVERNMENTAL AND NOT-FOR-PROFIT ACCOUNTING (3)
Advanced study of generally accepted accounting principles and procedures of governmental units and not-for-profit organizations, emphasizing current issues, external financial reporting and the relevant authoritative accounting pronouncements. Topics include characteristics and types of not-for-profit organizations, accounting and reporting entity, fund accounting, budgetary accounts, contributions received and made, investments and the encumbrance system. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 761 ACCOUNTING FOR HEALTH CARE ORGANIZATIONS (3)
Financial reporting, analysis and strategy principles applied to for-profit and not-for-profit health care organizations. Financial and managerial accounting issues related to strategic decision making are emphasized. Includes review of the authoritative health care accounting literature, overview of the health care accounting environment, issues in revenue and expense recognition, balance sheet valuations, budgetary control systems, cost accounting, performance measurement and financial implications of third-party payment systems and managed-care arrangements. Prerequisite: ACCT 504 or equivalent. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 762 ACCOUNTING FOR MEDICARE REGULATION (3)
Principles and applications of Medicare payment systems and rate regulation for health care providers, emphasizing understanding the Medicare system, developing the technical skills required to identify and research problems in Medicare payments, isolating relevant regulatory issues and developing documentary support and arguments for proposed solutions to problems in health-care payment claims. Topics include Medicare and the U.S. health care system, Part A hospital insurance benefits, Part B supplemental medical insurance benefits, exclusions from coverage, fraud and abuse, physician self-referral, payment rules, cost reports, claims and appeals and managed care plans. Prerequisite: ACCT 504 or equivalent. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 770 SEMINAR IN CURRENT TOPICS IN ACCOUNTING (3)
A study of current developments and contemporary problems in accounting. Topics vary from year to year. A significant research project is a key component of the course. May be repeated for a maximum of 6 units. Prerequisites: Intermediate accounting I, II, and III or equivalent.

ACCT 780 SUSTAINABILITY ACCOUNTING (3)
Sustainability accounting concerns the process of identifying, measuring and reporting the entities' impact on the planet with a focus mainly on the environmental impact. Determining how different entities affect the environment, measuring that impact and deciding what, how and who to report this impact to, are all part of the course. Will cover topics dealing with greenhouse gas emission, trading and sustainability investing. Prerequisite: ACCT 640 or equivalent.

ACCT 797 SPECIAL TOPICS IN ACCOUNTING (3)
Specialized topics in accounting, allowing flexibility for both the changing developments in accounting and the educational needs of students. Exact topics and prerequisite structure appear in the schedule of classes. Prerequisite: ACCT 640 or area approval. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

ACCT 799 INDIVIDUAL RESEARCH (1-3)
Prerequisite: approvals of accounting instructor and chair of accounting department. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

African and African-American Studies (AFST)

Courses

AFST 511 TOPICS IN AFRICAN AND AFRICAN AMERICAN STUDIES (3)
Extensive study of a specific topic chosen from a variety of disciplines in African and African American Studies. Content varies. May be repeated for a maximum of six 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 instructor.

Allied Health (AHLT)

Courses

AHLT 513 CLINICAL PROGRAM PLAN & EVALUATION (3)
Overview of the clinical program planning and evaluation process. Development of clinical health programs based on community/medical needs or needs of healthcare systems. Prerequisite: Admission to the Allied Health program or permission of instructor.

AHLT 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. Prerequisites: Admission to the Allied Health Program of permission of instructor.

AHLT 545 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, quantitative and qualitative methodologies, literature search and critique, basic statistical procedures for data analysis, and research ethics.

AHLT 570 SPECIAL TOPICS IN ALLIED HEALTH (1-3)
Topics in Allied Health as approved by department. May be repeated for a maximum of 3 units provided a different topic is taken.

Anthropology (ANTH)

Courses

ANTH 501 ANTHROPOLOGICAL THEORY (3)
Survey of the theoretical contribution made by American, British and Continental anthropologists. Prerequisites: ANTH 207 plus 9 hours of anthropology.

ANTH 502 ENVIRONMENTAL ARCHAEOLOGY (3)
Analysis of pre-Columbian Native American environmental adaptations. Special focus on Ancestral Puebloans in the American Southwest. Prerequisites: ANTH 207 or ANTH 208.

ANTH 507 KOREA AND GLOBALIZATION (3)
Tensions and contradictions in Korean society and culture brought about by globalization; Koreans in diaspora, and Korea as a globalized, multicultural nation; Korean culture as a global commodity consumed outside of Korea. Prerequisite: ANTH 207.
ANTH 521 ANTHROPOLOGY OF GENDER (3)  
Anthropological analysis of gender in a global context, including contemporary forms of gender inequality and diverse meanings of gender across cultures; themes include gender, colonialism, and capitalism; the intersections of gender, sexuality, race, ethnicity, and class; kinship, nationalism, and reproduction; and gendered labor in the global economy. Prerequisite: ANTH 207.

ANTH 525 MORAL PANICS (3)  
Anthropological theories and methods used to analyze moral panics; role of the global media in the culture of fear. Prerequisites: ANTH 207.

ANTH 530 TOPICS IN ANTHROPOLOGY (3)  
Examination of current topics in anthropology, designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. Prerequisite: ANTH 207.

ANTH 531 TOPICS IN ANTHROPOLOGY (3)  
Examination of current topics in anthropology, designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. Prerequisite: ANTH 207.

ANTH 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 553 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 or ANTH 208 or WMST 231 or consent of instructor.

ANTH 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 565 NORTH AMERICAN INDIANS (3)  
The traditional culture of native North Americans and their sociocultural place in modern American society. Prerequisite: ANTH 207.

ANTH 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 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 568 GLOBALIZATION IN CROSS-CULTURE PERSPECTIVE (3)  
Analyzes various approaches to globalization and examines the consequences of globalization and development among selected contemporary populations, primarily southern countries of the world. Prerequisites: ANTH 207 and SOCI 101.

ANTH 569 TRADITION AND REVOLUTION IN LATIN AMERICA (3)  
Legacies, both real and imagined, of revolution in contemporary politics and social change in Latin America; new forms of resistance and movements for social and economic justice in the Global South. Prerequisite: SOCI 101, ANTH 207, or ANTH 208.

ANTH 570 SPECIAL TOPICS IN ANTHROPOLOGY (1-3)  
Examination of current topics in anthropology at the most specialized level. May be repeated for credit provided a different topic is covered. Prerequisites: ANTH 207 and 6 additional units of anthropology.

ANTH 581 ARCHAEOLOGICAL METHODS AND THEORY (3)  
Methods of excavating and recording archaeological data. Investigation of problems of current research interest. Prerequisite: ANTH 207.

ANTH 582 VISUAL ANTHROPOLOGY (3)  
Study of ethnographic media and representation of various cultures globally; theories and methods related to the production of various forms of visual anthropology. Prerequisites: ANTH 207.

ANTH 583 NORTH AMERICAN ARCHAEOLOGY (3)  
Regional survey of the prehistory of native North American cultures. Prerequisite: ANTH 207 or ANTH 208.

ANTH 584 NORTH AMERICAN ARCHAEOASTRONOMY (3)  
Prehistoric roots of astronomy in the New World, with an emphasis on the American southwest. Celestial motions and the development of a calendar, related folklore and case studies concerning solstice and equinox observations. Prerequisite: ANTH 207 or ANTH 208.

ANTH 585 RETHINKING INDIGENEITY (3)  
Indigenous traditions, ideals, and customs and their impact on contemporary law, economics, politics, and ways of life; how indigenous peoples organize and present themselves in national and global debates over citizenship, resource politics, and participatory democracy; anthropology's historical role in defining the indigenous "other" and recent politicization of the concept of indigeneity as a language to create change. Prerequisite: SOCI 101 or ANTH 207.

ANTH 591 INTERNSHIP IN ANTHROPOLOGY I (3)  
Supervised experience in work setting which facilitates understanding of rules and relationships relevant to anthropological inquiry and application of anthropological knowledge. While 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 semester for 3 units (591) or two semesters for 3 units each (591-592), in one agency for both semesters or in a different agency each semester. No more than 3 units may be earned in a semester; without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

ANTH 592 INTERNSHIP IN ANTHROPOLOGY II (3)  
Supervised experience in work setting which facilitates understanding of rules and relationships relevant to anthropological inquiry and application of anthropological knowledge. While 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 semester for 3 units (591) or two semesters for 3 units each (591-592), in one agency for both semesters or in a different agency each semester. No more than 3 units may be earned in a semester, without consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

ANTH 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.
Courses

AIT 500 FUNDAMENTALS OF COMPUTER PROGRAMMING AND DATA STRUCTURES (6)
Structured problem solving, algorithm development, fundamentals of computer programming, basic data structures and their implementation, sort and search algorithms, and an introduction to the design and development of information systems. Serves as a preparatory/foundational course for MS in AIT and does not count towards the degree. Prerequisite: Admission to AIT program.

AIT 600 INFORMATION TECHNOLOGY INFRASTRUCTURE (3)
A discussion of information systems architectures including software systems, hardware, operating systems, data bases, object-oriented technology, networking and enterprise-wide systems. Prerequisite: Admission to AIT program.

AIT 610 SYSTEMS DEVELOPMENT PROCESS (3)
Structured and object-oriented analysis, design and implementation of information systems; distributed information systems; information systems life cycle models, platforms and security. Discussions of requirements definition, modeling quality assurance and development environments. Prerequisite: AIT 600; may be taken concurrently with AIT 600.

AIT 612 INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS (3)
The identification of vulnerabilities and risks inherent in the operation of information systems will be explored. Countermeasures will be discussed and documented in an effort to counter identified vulnerabilities. Prerequisite: AIT 610. May take concurrently with AIT 610.

AIT 613 INTRODUCTION TO SOFTWARE SECURITY (3)
A study of security concepts in software. This course discusses design principles for secure software development, and some of the security issues in current applications, database systems, and web systems. It provides the foundation for identifying vulnerabilities, their impact, and solutions to securing them. Prerequisite: AIT 610.

AIT 614 NETWORK SECURITY (3)
Network security, hacker attacks, Web security, e-mail security, e-commerce security, systems and operation environment security, database security, algorithms for making data communications secure, encryption and coding techniques and IP security. Prerequisite: AIT 612.

AIT 616 FUNDAMENTALS OF WEB TECHNOLOGIES AND DEVELOPMENT (3)
Introduction to HTTP protocol, dynamic HTML and common gateway interface (CGI) programming. Study and practice of object-oriented programming concept using Java. Design and implementation of application software including graphical user interfaces (GUIs), concurrent and distributed programming, distributed information systems server architectures, database connectivity and the enterprise packages provided by the Java programming language. Prerequisite: AIT 610. May take concurrently with AIT 610.

AIT 618 CLIENT/SERVER-SIDE PROGRAMMING ON THE WEB (3)
Discussion of HTTP protocol, dynamic HTML, common gateway interface (CGI) programming, Java applets and server-side programming. Development of information systems incorporating applications executing on a client-server system. Design and implementation of distributed information systems involving the technologies developed for the Web. Prerequisite: AIT 616.

AIT 620 BUSINESS DATA COMMUNICATIONS (3)
Business data communications, distributed data processing, fundamental data transmission, network types, distributed applications, client/server architecture, network management and security, and Internet /intranet, extranet. Prerequisite: AIT 610; may be taken concurrently with AIT 610.

AIT 622 NETWORKS ARCHITECTURE AND PROTOCOLS (3)
Review of fundamentals of network technology, Internet protocols, multicasting, subnet and supernet addressing, routing algorithms, client-server, socket interface, bootstrap and auto configuration, file transfer, e-mail, and Internet security. Prerequisite: AIT 620.

AIT 624 SOFTWARE ENGINEERING FUNDAMENTALS (3)
Application of formal software engineering principles and practices to the development of information systems, application software and embedded, computer-based systems. A comprehensive description of the software engineering process will be presented along with a discussion of the approaches, methodologies and tools available to the practicing software engineer. Prerequisite: AIT 610.

AIT 628 INFORMATION TECHNOLOGY AND BUSINESS STRATEGY (3)
Design and evolution of technology strategy; the development of the firm's innovative capabilities and implementing a development strategy; changes in business strategies due to the emergence of the Internet and e-business; new business models that have emerged, the components of such models, the dynamics and appraisal of the models, and the new value configurations. Prerequisite: AIT 610; may be taken concurrently with AIT 610.

AIT 630 INFORMATION TECHNOLOGY PROJECT MANAGEMENT (3)
Tools and techniques for the successful management of information technology projects. Topics include project selection and approval, planning, estimation techniques, scheduling methods, budgeting, IT project organizations, and project control and assessment. Prerequisite: AIT 628.

AIT 632 DATABASE MANAGEMENT SYSTEMS (3)
Study of database management system fundamentals, data models, design, implementation and processing. Most popular database management systems such as Oracle, SQL Server, and Access are used throughout the course to illustrate design and implementation of real-world database applications and processing. Prerequisite: AIT 610; may be taken concurrently with AIT 610.

AIT 641 SOFTWARE REQUIREMENTS ENGINEERING (3)
Introduces the basic concepts and principles of software requirements engineering. Designed to expose student to common tools and techniques, established methods for modeling software systems and various approaches to requirements engineering (structured, object oriented, and formal). In essence, the course intends to cover in its entirety the process of requirements engineering. Prerequisites: AIT 610, AIT 624/COSC 612, Software Engineering.

AIT 642 SOFTWARE TESTING AND MAINTENANCE (3)
A comprehensive survey of software maintenance and testing, principles, methodologies, management strategies, techniques and tools. Software testing at the unit, subsystem levels using various test design techniques, as well as integration, regression, and system testing methods, and software testing tools. Designing and implementing software technologies to increase maintainability and testability, evaluating software for change and validating software changes. Prerequisites: AIT 610, AIT 624/ COSC 612.
AIT 643 ENTERPRISE ARCHITECTURE (3)
Provides a set of latest approaches in designing IT infrastructures aligning them with enterprise business activities at the architectural level, including business architecture, information architecture, solution architecture, and technology architecture. Institutionalization of enterprise architecture frameworks and standards will be discussed. Topics include the fundamentals of business functions and IT infrastructure of an enterprise including definitions frameworks, business process modeling process institutionalization using CMMI, EA implementation through service-oriented architecture (SOA), and the various networking technologies in LAN/MAN/WAN as the enablers for EA. Prerequisites: AIT 610, AIT 624/COSC 612.

AIT 644 HEALTH INFORMATION TECHNOLOGY (3)
Provides students in-depth understanding of the important health care information technology (HIT) topics such as inter-operable electronic health records, health information exchanges, data standards, public health informatics, disease classification coding, and emerging trends in health information technology. Students will also learn to apply modeling techniques, HIT methodologies for building intuitive and user-friendly health information systems. Prerequisite: AIT 610.

AIT 645 HEALTHCARE DATA ANALYTICS (3)
Overview of the data analysis methods used in health care. The course emphasizes experiential and applied learning. Using an open source statistical computing language, students will gain an understanding of the statistical analysis methods used in health care. Data visualization is also covered as well as database searching and mining of health care data. No background in statistics is required for this course. Prerequisite: AIT 610.

AIT 650 COMPUTER & NETWORK FORENSICS AND INCIDENT RESPONSE (3)
Traditional computer forensic analysis and network forensics are rapidly converging disciplines. Depending on one's objectives, incident response can be an active, real-time forensic analysis. At the very least, the process of incident response will have a significant impact on any later forensic analysis.

AIT 652 ETHICS, LAW AND POLICY IN CYBERSPACE (3)
This is a course for technical managers and is designed to create an awareness of the ethical issues, legal resources and recourses, and policy implications inherent in our evolving on-line society. The course provides an overview of the ethical challenges faced by individuals and organizations in the information age and introduces the complex and dynamic state of the law as it applies to behavior in cyberspace. It is intended to sensitize managers and professionals to the pitfalls and dangers of doing business in an interconnected world, and to familiarize the student with various organizations and materials that can be turned to for assistance in understanding how to ethically and legally operate and use modern computer systems and networks.

AIT 655 MANAGING INFORMATION SECURITY (3)
This is an advanced study course in information assurance. The focus is on applying the various specific information assurance concepts, understandings, methods, processes and tools for the previous IA, Telecommunication and IT courses taken by the student to formulate the basis for sound business decisions. Prerequisites: AIT 600, AIT 610 and AIT 614.

AIT 660 MOBILE DEVICE FORENSICS (3)
Presents a digital forensic analysis methodology applied to modern mobile devices such as cell phones, smartphones, GPS devices, tablet computers, and many other "embedded devices." Prerequisite: AIT 650.

AIT 670 SPECIAL TOPICS IN APPLIED INFORMATION TECHNOLOGY (3)
Selected topics in applied information technology. Emphasis on new and emerging applications in information technology. Prerequisites: 6 units of graduate work in AIT and consent of instructor.

AIT 695 INDEPENDENT STUDY IN APPLIED INFORMATION TECHNOLOGY (3)
Independent supervised study in selected areas of information technology and its application in a variety of fields. Prerequisites: 6 units of graduate work in AIT and consent of AIT graduate program director.

AIT 710 CASE STUDIES IN INFORMATION SECURITY (3)
Consists of a real-world project dealing with information security in distributed information systems including applications of theory and techniques in information security. This is a capstone course for the Information Security and Assurance certificate. Prerequisites: AIT 612, AIT 614 and consent of AIT graduate program director.

AIT 715 CASE STUDIES IN INTERNET APPLICATIONS (3)
Real-world project dealing with the development of information systems for Internet applications; emphasis on distributed information systems for Web deployment. This is a capstone course for the Internet Application Development certificate. Prerequisites: AIT 616, AIT 618 and consent of AIT graduate program director.

AIT 720 CASE STUDIES IN NETWORKING TECHNOLOGY (3)
Real-world projects dealing with the development, installation, and management of application systems or a variety of networks environment; emphasis is on distributed applications for LAN, WAN, Internet and intranet. This is a capstone course for the Networking Technologies certificate. Prerequisites: AIT 620, AIT 622 and consent of AIT graduate program director.

AIT 725 CASE STUDIES IN SOFTWARE ENGINEERING (3)
Real-world project dealing with design and development of large-scale information systems including applications of theory and techniques in software engineering. This is a capstone course for the Software Engineering certificate. Prerequisites: AIT 624 and AIT 626 and consent of AIT graduate program director.

AIT 730 CASE STUDIES IN INFORMATION SYSTEMS (3)
Real-world projects dealing with issues related to development, management and maintenance of large-scaled information systems; emphasis is on business information systems for a distributed environment. This is a capstone course for the Information Systems Management certificate. Prerequisites: AIT 628, AIT 630 and consent of AIT graduate program director.

AIT 732 ADVANCED DATABASE MANAGEMENT SYSTEMS (3)
Emphasizes advanced topics in database management systems. Topics include: query pro transaction processing, concurrency and recovery techniques, advanced database models, object-oriented databases, relational databases and Web databases, distributed databases, data warehousing and OLAP. Prerequisite: AIT 632.

AIT 735 CASE STUDIES IN DATABASE MANAGEMENT SYSTEMS (3)
Real-world projects dealing with issues related to development, management and maintenance of large-scaled information systems; emphasis is on the distributed database systems and related security issues. This is a capstone course for the Database Management Systems certificate. Prerequisites: AIT 632, AIT 732 and consent of AIT graduate program director.
AIT 740 CASE STUDIES ON HEALTHCARE INFORMATION TECHNOLOGIES (3)
Real-world projects that provide an integrative project experience with an interdisciplinary team of peers, and internal or external local partners. Provides opportunity for students to carry out a team-based project activity on a specified topic in the Health Information Technology (IT) domain. The final project should make an original contribution to the body of knowledge in the profession or otherwise demonstrate core competencies in Health IT. Prerequisites: 12 credits completed in Health Information Technology Management PBC and approval of Graduate Director.

AIT 745 CASE STUDIES IN COMPUTER FORENSICS (3)
Real-world project dealing with forensic investigation of computational devices including applications of theory and techniques in the area of computer forensics. This is a capstone course for the Computer Forensics certificate. Prerequisites: AIT 650 and AIT 660 and consent of AIT graduate program director.

AIT 880 GRADUATE PROJECT (3-6)
Students conduct a study in an advanced IT related topic or undertake the analysis, design and implementation of real-world application. The application may be related to an industrial project sponsored by a company or it may be a mutual interest to the student and the supervising faculty. Prerequisites: program admission and approval of program director.

AIT 885 PROJECT CONTINUUM (1)
Continuation of graduate project. Prerequisite: previous registration for project work.

AIT 895 DOCTORAL INDEPENDENT STUDY (3-6)
Independent guided study for doctoral students to prepare for qualifying exams in preparation for dissertation work. May be repeated up to a total of 9 units. Registration by special permit as authorized by doctoral program director or chair of the department. S/U grading.

AIT 997 DISSERTATION (3-6)
Independent guided research leading to the dissertation. May be repeated up to a total of 24 units. Registration by special permit as authorized by doctoral program director or chair of the department. Graded S/U.

AIT 999 DISSERTATION CONTINUUM (1)
Continuing work toward the completion of the dissertation. Registration by special permit as authorized by doctoral program director or chair of the department.

Art (ART)

Courses

ART 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. Prerequisite: ART 309, ART 310 or equivalent.

ART 507 MATERIALS: CONCEPT AND PROCESS (3)
Examination of the properties and characteristics of materials and methodology in the design and creation of objects through lecture, demonstration and directed studio problems. Prerequisite: ART 218, ART 231, or consent of instructor.

ART 508 CERAMICS: SCULPTURE (3)
Studio experience using a variety of ceramic techniques. Problems in sculptural directions for students' experiences in handbuilding and the potter's wheel. Prerequisite: ART 310 or consent of instructor.

ART 513 ELECTROFORMING AND ENAMELING (3)
Lecture, demonstration, directed studio problems in the electroforming process, continued investigation of vitreous enameling; enameling 3 dimensional form, new, alternative and experimental techniques. Prerequisite: ART 313 or consent of instructor.

ART 514 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisite: Must have exhausted other courses in particular field or obtained written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

ART 515 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisite: Must have exhausted other courses in particular field or obtained written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

ART 516 ADVANCED STUDIO (2-3)
Independent work for advanced students in field of special interest. Prerequisite: Must have exhausted other courses in particular field or obtained written consent of instructor. Student must make arrangements in advance of registration with instructor of choice.

ART 518 JEWELRY II (3)
Intermediate design and studio experience. Directed problems in the techniques of metal construction, forging, stone setting and cold joinery. Prerequisite: ART 318.

ART 519 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. Prerequisites: Art 218, Metals and Jewelry I.

ART 520 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. Prerequisites: ART 218.

ART 522 DESIGNING FOR PRODUCTION (3)
Experience designing and manufacturing multiples. Historical and contemporary object production and production methodologies. Various aspects of business, pricing, market analysis. Prerequisites: ART 319, ART 418.

ART 527 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. Emphasis on interdisciplinary work. Examination of social entrepreneurship. Prerequisites: Consent of instructor.

ART 529 PAINTING IV (3)
Continued studio experience for advanced students, with emphasis on personal direction. May be repeated for a maximum of 9 total credits. Prerequisite: ART 336.

ART 534 PHOTO IMAGING-CONCEPTS I (3)
The aesthetic of black and white image making using advanced analog and electronic imaging techniques. Prerequisite: ART 236, Photo Imaging-Light, ART 237 Photo Imaging-Alternative process, ART 238 Photo Imaging-Motion, ART 259 Photo Imaging-Digital I.

ART 535 PHOTO IMAGING-CONCEPT II (3)
Aesthetic of color image making using advanced analog, alternative/mixed media and electronic imaging techniques. Prerequisite: ART 334(534) Photo Imaging-Concepts I.
ART 536 PHOTO IMAGING-PORTFOLIO (3)
Portfolio construction using advanced analog, alternative/mixed media, and electronic imaging technology. May be repeated for up to 9 units. Prerequisites: ART 334, ART 335, ART 421; may be taken concurrently with ART 421.

ART 543 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 547 SCREEN PROCESS II (3)

ART 549 RELIEF PROCESS II (3)
Traditional and experimental processes. Advanced color assignments using oil and water-based inks.

ART 553 LITHOGRAPHY PROCESS II (3)
Personal expression; advanced printing including stone-plate and photo plate. Multiple color printing. Prerequisite: ART 353 or consent of instructor.

ART 555 NEW DIRECTIONS IN PRINTMAKING (3)
Using technology to link printmaking to digital, photo and Xerox images. Prerequisite: ART 217.

ART 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. Prerequisites: ART 211.

ART 557 GRAPHIC DESIGN III (3)
Problems in graphic communication on the Macintosh computer, emphasizing individual portfolio development. Prerequisite: ART 417.

ART 561 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. Prerequisites: ART 361, Digital Object Design.

ART 573 ILLUSTRATION II (3)
Continued studio experience in illustration and development of personal approaches in various media. Emphasis on practicing professional assignments and preparing portfolio. Prerequisite: ART 373 or equivalent.

ART 578 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART I (3)
Continued studio experience: for advanced student with emphasis on personal direction. Prerequisite: Permission of instructor.

ART 602 ELEMENTS OF VISUAL DESIGN (3)
Creative process and research of elements and principles of visual design, design thinking, and color theory explored through a variety of visual digital processes. Prerequisite: acceptance in the Interactive Media Design Certificate Program or consent of the IAMD program director.

ART 608 GRADUATE CERAMICS I (3)
Advanced problems in selected ceramic areas. Repeatable for a maximum of 6 credits with consent of program director and instructor.

ART 610 ELEMENTS OF WWW DESIGN (3)
Production techniques and research as related to digital imaging, electronic page layout and WWW design. Prerequisite: Acceptance in the Interactive Media Design Certificate Program or consent of the IAMD program director.

ART 611 GRADUATE DRAWING I (3)
Studio problems in expressive drawing. Repeatable for a maximum of 6 units with consent of program director and instructor. Prerequisite: ART 211 or consent of instructor.

ART 614 GRADUATE STUDIO (2-3)
Independent work for graduate students in field of special interest. Prerequisite: all courses in field completed and written consent of instructor.

ART 615 GRADUATE STUDIO (2-3)
Independent work for graduate students in field of special interest. Prerequisite: All courses in field completed and written consent of instructor.

ART 616 GRADUATE STUDIO (2-3)
Independent work for graduate students in field of special interest. Prerequisite: All courses in field completed and written consent of instructor.

ART 618 GRADUATE JEWELRY I (3)
Studio problems in shell construction, stone setting and mechanical joinery. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 418 or consent of instructor.

ART 620 GRADUATE TYPOGRAPHY (3)
Studio problems in the theory, concepts and aesthetics of type. Repeatable for a maximum of 6 units with consent of program director and instructor. Prerequisite: ART 610 or consent of instructor.

ART 622 GRADUATE EXHIBITION DESIGN (3)
Theory, concepts, planning, management, design and installation of art exhibits. Application for professional artists. Prerequisite: Graduate standing.

ART 629 GRADUATE PAINTING I (3)
Studio problems in painting: current trends, museum visits and lectures. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 229 or equivalent.

ART 630 WATERCOLOR (3)
Trends and outstanding painters and styles. Studio work, museum visits and lectures. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 331 or consent of instructor.

ART 634 GRADUATE PHOTOGRAPHY I (3)
Studio problems emphasizing personal investigation of the photographic medium as an art form. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 334 and consent of instructor.

ART 635 GRADUATE EXPERIMENTAL DIRECTIONS (3)
Conceptual, installation and performance art; studio projects. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: Consent of instructor.

ART 640 GRADUATE SCULPTURE I (3)
Studio problems in selected sculptural areas. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 340, ART 241, ART 339, ART 342, or any 400-level course; or consent of instructor.

ART 641 INTERACTIVE MEDIA CONCEPT AND THEORY (3)
Advanced study of multimedia concept, theory and aesthetics including research and studio application. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 610.
ART 650 GRADUATE INTAGLIO, RELIEF I (3)
Studio problems in intaglio and/or relief processes, including mixed media. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 349, ART 449 or equivalent.

ART 653 GRAPHICS: LITHOGRAPHY, SERIGRAPHY (3)
Studio work for artists with knowledge of lithography and/or serigraphy. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 347, or ART 450 or equivalent.

ART 661 DIGITAL OBJECT DESIGN I (3)
Focuses on graduate level research and advancement in 3D digital modeling with a focus on the larger context of digital object design, the influence on cultural objects, cultural production, and aesthetics. May be repeated for a maximum of 6 units. Prerequisite: ART 610 or consent of instructor.

ART 665 GRADUATE INFORMATION + INTERFACE DESIGN (3)
Introduction to information architecture and user interface design for interactive media applied art and design applications. Design projects and research with a focus on current interactive media design concept and theory. Prerequisite: ART 610 or consent of instructor.

ART 671 GRADUATE PROGRAMMING FOR DESIGN (3)
Investigation and research of programming for design applications. Basic to advanced script language projects with a focus on current art and design concept and theory. Prerequisite: ART 610 or consent of instructor.

ART 673 GRADUATE ILLUSTRATION I (3)
Studio problems in the concepts and techniques of objectives rendering, expressive painting and sequential imagery. Repeatable for a maximum of 6 credits with consent of program director and instructor. Prerequisite: ART 473 or consent of instructor.

ART 675 GRADUATE 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 610 or consent of instructor.

ART 678 NEW DIRECTIONS IN PAINTING, EXPERIMENTAL MEDIA AND ART II (3)
Continued studio experience: for advanced student with emphasis on personal direction. Prerequisite: Permission of instructor.

ART 685 GRADUATE INFORMATION + INTERFACE DESIGN II (3)
Advanced projects and research in information architecture, user interface design and usability for interactive media design applications. Prerequisites: ART 665 or consent of instructor.

ART 694 GRADUATE TRAVEL STUDY (3-6)
Global experiences in art. Selected graduate-level research and studio problems in area of special interest. Location and topics to be announced one year prior to travel experience. Course may be repeated. Prerequisite: TU Graduate School acceptance interview and consent of instructor.

ART 711 GRADUATE DRAWING II (3)
Studio problems in selected drawing areas: awareness, imagination and craftsmanship. Prerequisite: ART 611.

ART 715 MFA STUDIO I (3)
Independent problems in art. May be repeated for additional credit with art adviser consent. Prerequisites: M.F.A. status and written consent of art adviser.

ART 720 GRADUATE GRAPHIC DESIGN II: PORTFOLIO (3)
Studio problems in professional portfolio presentation. Prerequisite: ART 620 or consent of instructor.

ART 729 GRADUATE PAINTING II (3)
Studio problems in selected painting areas: watercolor, oil and other media. Prerequisite: ART 629.

ART 734 GRADUATE PHOTOGRAPHY II (3)
Studio problems in selected areas of photography with an emphasis on personal investigation of mixed media. Prerequisite: ART 634.

ART 740 GRADUATE SCULPTURE II (3)
Studio problems in selected sculptural areas. Prerequisite: ART 640 or consent of instructor.

ART 750 GRADUATE INTAGLIO, RELIEF II (3)
Studio problems in selected printmaking areas: etching, drypoint, aquatint, photo engraving, embossing, collographs, woodcuts, linecuts, wood engraving and subtractive relief. Prerequisite: ART 650.

ART 761 DIGITAL OBJECT DESIGN II (3)
Advanced independent studio work in digital 3D modeling, rendering, and rapid prototyping and manufacture. May be repeated for a maximum of 6 units. Prerequisite: ART 661.

ART 765 GRADUATE DESIGN FOR THE WWW (3)
Authoring techniques and research as related to interactivity, information design and digital imaging. Repeatable for a maximum of 6 units with consent of program director and instructor. Prerequisites: ART 610 and ART 641.

ART 766 ADVANCED PROJECTS IN WWW DESIGN (3)
Focus is on current web layout technologies, web standards, usability and research as related to interactivity, and information design. Prerequisites: ART 765 Graduate Design for the WWW.

ART 781 GRADUATE ILLUSTRATION II (3)
Studio problems in location drawing, figure and costume, experimental media, manuscript interpretation and portfolio analysis. Prerequisite: ART 673.

ART 782 ART TOPICS (3)
Visiting instructor teaching contemporary issues in art with written presentations, critiques, and discussions. May be repeated for a maximum of 9 units. Prerequisite: acceptance into the graduate program.

ART 783 MFA SEMINAR (3)
Lectures and discussions on the contemporary art scene, aesthetics and art concepts. Oral and written presentations, gallery/museum/studio visits included. Prerequisite: M.F.A. candidate.

ART 784 SEMINAR ON COLLEGE-LEVEL TEACHING (3)
Organization and management of studio art classes: critiquing skills, creation and presentation of assignments, developing outlines and grading. Prerequisite: Second-year M.F.A. graduate students and M.Ed. graduate students with departmental consent.

ART 785 MFA STUDIO II (3)
Independent problems in art with special emphasis on preparation for M.F.A. project. May be repeated for a total of 12 units. Prerequisite: M.F.A. Candidate.

ART 795 DIRECTED READING IN ART (3)
Extensive reading in an aspect of art. Prerequisites: Graduate standing and consent of art advisor.

ART 880 MFA PROJECT (9)
Preparation and installation of selected art works in an exhibition format as a final review for the M.F.A. degree. A written supportive paper defining the scope and philosophy of the work. Prerequisites: Being passed onto thesis by committee.
ART 885 PROJECT CONTINUUM (1)
Continuing work on previously started project. Prerequisite: Previous registration for project work.

Art Education (ARED)

Courses
ARED 500 SPECIAL TOPICS: ARED EDUCATION (3)
Selected topics relevant to Art Education. Prerequisite: consent of Instructor.
ARED 563 AUTHOR-ILLUSTRATOR: VISUAL AND LANGUAGE ARTS (3)
Children’s literature is examined as illustration and text to develop strategies for enhancing reading and writing skills applicable within art education programs at the elementary level. Prerequisites: Minimum of 2.75 overall GPA and a 3.00 GPA in major. Consent of Art Education program adviser.
ARED 564 AUTHOR ILLUSTRATOR STUDIES: INTEGRATION OF VISUAL AND LANGUAGE ARTS AT THE SECONDARY LEVEL (3)
Non-fiction is examined as illustration and text to develop strategies for enhancing reading and writing skills in art education at the middle and high school levels. Special permit required. Prerequisites: Consent of the instructor.
ARED 606 COMMUNITY-BASED ARTS TEACHING (3)
Theoretical, philosophical, and practical consideration for community-based arts teaching. Students develop service learning partnerships and projects among community-based organizations and programs with sensitivity to underserved populations. Prerequisite: Graduate standing.
ARED 607 ARTIST-TEACHER CONNECTION (3)
Exploration of the dual aspects of the art educator as artist/teacher. Includes studio work, museum trips, journal writing, research of cultural/historical expressions, and unit planning relevant to PreK-12 education.
ARED 608 INTERDISCIPLINARY ART EDUCATION (3)
Investigation of interdisciplinary connections between art and other subjects in the PreK-12 curriculum. Includes studio projects and unit and program planning.
ARED 609 MULTICULTURAL ART EDUCATION (3)
The study of multicultural art. Includes investigation of cultural contexts, studio processes and teaching strategies in grades PreK-12. Repeatable for a maximum of 6 units.
ARED 610 THEORY AND PRACTICE OF ART THERAPY (3)
Introduction to theory and practice of art therapy for the art education graduate student by investigating its history, theoretical framework and practical applications. Overview of the profession of art therapy, particularly where art therapy and art education coexist within rehabilitation settings, will inform the student of theoretical similarities and differences. Investigation of the principles of how unconscious thoughts reach expression in images rather than words. Engagement in art making experiences as a means to explore the creative process and its relationship to the psychological and emotional self.
ARED 787 SEMINAR IN ART EDUCATION (3)
Investigation of problems and theories in art education and related fields. Prerequisite: EDUC 601.
ARED 880 ART EDUCATION RESEARCH PROJECT (3)
Development of the art education capstone project that focuses on research in a selected area, writing of the research proposal, and developing the outline of the capstone project. Prerequisites: EDUC 605, ARED 797.
ARED 881 ART EDUCATION RESEARCH CAPSTONE (3)
Implementation, analysis, and evaluation of research project. Prerequisite: ARED 880.
ARED 885 ART EDUCATION RESEARCH CAPSTONE CONTINUUM (1)
Continuation of research capstone if not completed in ARED 881. Graded S/U.

Art History (ARTH)

Courses
ARTH 500 STUDY ABROAD (1-6)
Travel and study abroad; various topics in the history of art. Prerequisite: GPA of 3.25.
ARTH 501 INTRODUCTION TO MUSEUM STUDIES (3)
Introduction to the history and methods of museum work. Prerequisites: Graduate standing.
ARTH 502 MUSEUM AND COMMUNITY (3)
The role of museums as cultural and educational resources within the public sphere with respect to the needs of a community. Prerequisites: Graduate standing.
ARTH 570 SPECIAL TOPICS: ART HISTORY (3)
Selected topics in the history of art. May be repeated for a maximum of 6 units provided a different topic is taken.
ARTH 585 SEMINAR IN ART HISTORY (3)
Intensive analysis of a single artist or a defined historical period for a stylistic development. Directed reading in both period and contemporary sources. Discussions and museum tours; variety in content each semester. Prerequisites: ARTH 222 and one upper-division art history course or consent of instructor.
ARTH 591 RESEARCH METHODS IN ART HISTORY (3)
Basic research methods useful in art history, the historiography of the discipline, and career paths in the field. Students will read selected articles that illustrate the changing methods in approaching the field in order to understand current trends in scholarship. Not open to students who successfully completed ARTH 391. Prerequisite: graduate status.
ARTH 595 INDEPENDENT STUDY IN ART HISTORY (3)
Advanced research and examination of a topic in art history. Prerequisites: Art Survey I, Survey II and at least one 300-level art history course.
ARTH 596 INDEPENDENT STUDY IN ART HISTORY (3)
Advanced research and examination of a topic in art history. Prerequisites: Art Survey I, Survey II and at least one 300-level art history course.
ARTH 597 INDEPENDENT STUDY IN ART HISTORY (3)
Advanced research and examination of a topic in art history. Prerequisites: Art Survey I, Survey II and at least one 300-level art history course.
ARTH 600 STUDY ABROAD (1-6)
Travel and study abroad; various topics in the history of art. Prerequisite: GPA of 3.25.
ARTH 603 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 of why artifacts deteriorate and strategies for proper handling, storage, and exhibition. Prerequisites: Arth 501 intro to Museum Studies or Arth 502 Museum and Community.
ARTH 604 MUSEUM EDUCATION (3)
The history, theory, ad practice of museum education as a discipline in conjunction with educational outreach project that students design, prepare, and implement. Prerequisites: Arth 500, Intro to Museum Studies or Arth 502 Museum and Community.

ARTH 605 EXHIBITION DESIGN HISTORY AND THEORY (3)
An examination of the history and theory of exhibition design. Prerequisites: Arth 501, Intro to Museum Studies or Arth 502, Museum and Community.

ARTH 606 MUSEUM MANAGEMENT (3)
An examination of the organization, structure and ethical issues of managing museums. Prerequisites: Arth 501, Intro to Museum Studies or Arth 502, Museum and Community.

ARTH 607 COLLECTIONS MANAGEMENT (3)
The registration and movement of museum collections through database design, records management, photo documentation, and exhibition proposals. Prerequisites: Arth 501, Intro to Museum Studies or Arth 502, Museum and Community.

ARTH 608 CURATORIAL VISION AND PLANNING (3)
The planning, research, funding, and controversies involved in curatorial work through case studies, grant writing, virtual design, and on-site critiques in addition to developing and strengthening a curatorial eye toward exhibition design. Prerequisites: Arth 510 Intro to Museum Studies or Arth 502 Museum and Community.

ARTH 609 ISSUES IN MARKETING AND PUBLIC RELATIONS FOR CULTURAL INSTITUTIONS (3)
Graduate level examination of the principles of marketing and public relations for cultural institutions. Prerequisites: Graduate standing and completion of either ARTH 501 or ARTH 502 or permission of the instructor.

ARTH 610 DEVELOPMENT AND GRANT WRITING FOR CULTURAL INSTITUTIONS (3)
An examination of the methods and techniques of fundraising for cultural institutions. Prerequisites: Graduate standing and completion of either ARTH 501 or ARTH 502 or consent of the instructor.

ARTH 611 SEMINAR IN ART HISTORY (3)
Research on an architect, artist or historical movement. Course may be repeated for additional credit provided a different topic is taken. Prerequisite: graduate standing.

ARTH 615 INDEPENDENT STUDY IN ART HISTORY (3)
Advanced research and exploration of a topic in art history or museum studies selected in consultation with professor. Prerequisite: graduate standing.

ARTH 617 MUSEUM STUDIES INTERNSHIP (3)
A work experience in cooperating cultural organizations, institutions, and businesses. Prerequisite: ARTH 501 Intro to Museum Studies or ARTH 502 Museum and Community.

ARTH 770 SPECIAL TOPICS: ART HISTORY (3)
Selected topics designed for independent research in art. Prerequisites: graduate standing and consent of art adviser.

ARHT 790 CURATORIAL ISSUES IN CONTEMPORARY ART (3)
An examination of current theory and issues in curating exhibitions of contemporary art.

ARHT 795 DIRECTED READINGS IN ART HISTORY (3)
Extensive reading in an aspect of art. Prerequisites: graduate standing and consent of art adviser.

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**Audiology and Speech-Language Pathology (ACSD)**

**Courses**

**ACSD 600 SPECIAL TOPICS IN AUDIOLOGY (1-3)**
Current topics in audiology. May be repeated for credit provided a different topic is covered. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Consent of department.

**ACSD 601 PROFESSIONALISM AND ETHICS (1)**
Professional issues in audiology including ethics and multicultural aspects of patient care. Prerequisites: Graduate standing and/or consent of department.

**ACSD 603 NEUROANATOMY AND PHYSIOLOGY OF THE AUDITORY AND VESTIBULAR SYSTEMS (3)**
Electrophysiologic test procedures used in assessing the peripheral auditory system. Prerequisite: BIOL 110 and/or consent of the department.

**ACSD 604 NEUROANATOMY AND PHYSIOLOGY OF THE CENTRAL AUDITORY AND VESTIBULAR SYSTEMS (2)**
Neurological structure and function of the central auditory nervous sytems and the central vestibular pathways and vestibular-ocular reflex. Prerequisites: ACSD 603 and/or consent of instructor.

**ACSD 605 COUNSELING IN AUDIOLOGY I (1)**
Designed to help students to understand the theoretical framework for counseling in audiology and to develop and improve their counseling skills with patients with hearing loss and their families. Prerequisites: ACSD 690 and/or consent of department.

**ACSD 606 PHARMACOLOGY IN AUDIOLOGY (1)**
Provides an introduction to clinical pharmacology and address specific issues related to pharmacotherapeutics critical in the management of patients in an audiological practice. Prerequisites: ACSD 621, ACSD 721 and/or consent of department. Open only to audiology doctoral students.

**ACSD 607 GENETICS IN AUDIOLOGY (1)**
Covers the basic principles of human genetics and basic principles of heredity. The focus of this course will be on how genetic causes of hearing loss impact the function of the auditory system and the impact of these disorders on the patient and his/her family. Restricted to Doctor of Audiology students. Prerequisites: ACSD 603 and/or consent of department.

**ACSD 611 ACOUSTICS AND PSYCHOACOUSTICS (2)**
Study of the physical and psychological properties of sound.

**ACSD 621 AUDITORY DIAGNOSTICS I (3)**
Administration and interpretation of audiometric procedures for differential diagnosis of auditory pathology. Prerequisites: SPPA 321 and/or consent of department.

**ACSD 622 AUDITORY DIAGNOSTICS I LABORATORY (1)**
Laboratory exercises will be conducted to demonstrate the administration and interpretation of audiometric procedures for differential diagnosis of auditory pathology. May be repeated for a maximum of 6 units. Corequisite: Concurrent enrollment in ACSD 621 and/or department consent. Lab/class fee will be assessed.

**ACSD 636 APPLIED STATISTICS (2)**
Behavioral statistics will be introduced and applied to data sets using commercially available statistical analysis software. Basic parametric and non-parametric tests will be reviewed. Prerequisites: Graduate standing and/or consent of department.
ACSD 645 COMMUNICATION AND AGING (3)
The impact of the aging process on communication, and roles of health care professionals in the rehabilitation process of older adults with communication difficulties. Prerequisites: Graduate standing and/or consent of the department.

ACSD 655 HEARING AIDS I: SELECTION, VERIFICATION AND VALIDATION OF AMPLIFICATION (2)
Theoretical foundation and clinical application of amplification process in selection and fitting of hearing aids. Prerequisite: Graduate standing and/or consent of department.

ACSD 690 AUDIOLOGY CLINIC ON CAMPUS I (3)
On-campus supervised audiology clinical experience in the Towson University Speech-Language-Hearing Clinic with children and adults who have communication impairments. Prerequisites: Completed communication screening, ACSD 601, and/or consent of department.

ACSD 705 COUNSELING IN AUDIOLOGY II (1)
Students and professor will discuss audiology counseling using case studies and student experiences with clinical rotations. Prerequisites: ACSD 605 and/or consent of department.

ACSD 706 AUDIOLOGY PRACTICE MANAGEMENT (2)
Audiology practice management issues including financial management, personnel issues, insurance, licensing, certification, computer applications, and ethics. Prerequisites: Au.D. student and/or consent of department.

ACSD 714 RESEARCH METHODS IN AUDIOLOGY (2)
Application of the scientific method to audiological research: evaluation of research design; statistical analysis. Prerequisites: Undergraduate course in behavioral statistics.

ACSD 721 AUDITORY DIAGNOSTICS II (3)
Differential diagnosis of auditory pathology based on audiological test battery. The development of appropriate recommendations and patient management. Prerequisite: ACSD 621 and/or consent of department.

ACSD 723 MEDICAL AUDIOLOGY (2)
Provides detailed information on pathologies of the peripheral and central auditory and vestibular systems. Common medical terminology will also be reviewed. Restricted to Doctor of Audiology students. Prerequisites: ACSD 621 and/or consent of department.

ACSD 731 CALIBRATION AND INSTRUMENTATION (1)
Electroacoustic calibration of audiometry equipment using appropriate ANSI standards for calibration of the diagnostic and portable audiometers, immittance bridges and sound field systems. Prerequisite: ACSD 611, and/or consent of department.

ACSD 743 ELECTROPHYSIOLOGIC EVALUATION OF THE PERIPHERAL AUDITORY SYSTEM (3)
Electrophysiologic test procedures used in assessing the peripheral auditory system. Prerequisites: ACSD 603, and/or consent of instructor. Lab/Class fee will be assessed.

ACSD 744 ELECTROPHYSIOLOGIC EVALUATION OF THE CENTRAL AUDITORY NERVOUS SYSTEM (3)
Electrophysiologic test procedures used in assessing the central auditory nervous system. Prerequisites: ACSD 743 and/or consent of department. Lab/Class fee will be assessed.

ACSD 745 AUDIOLOGY CLINIC ON CAMPUS II (3)
Second on-campus supervised audiology clinical experience in the Towson University Speech-Language-Hearing Clinic. Prerequisites: ASCD 690 and/or consent of department.

ACSD 746 AUDIOLOGY CLINIC ON CAMPUS III (3)
Third on-campus supervised audiology clinical experience in the Towson University Speech-Language-Hearing Clinic with children and adults who have communication impairments. Prerequisites: ASCD 745 and/or consent of department.

ACSD 747 AUDIOLOGY CLINIC OFF CAMPUS I (2)
Audiology off-campus practicum clinical sequence I. Prerequisites: ASCD 746, a passing score on the Audiology Gateway Assessment (AGA): oral/practical and written portions.

ACSD 748 AUDIOLOGY CLINIC OFF CAMPUS II (2)
Audiology off-campus practicum clinical sequence II. Prerequisites: ASCD 747 and/or consent of department.

ACSD 751 HEARING CONSERVATION (1)
Legislative issues, instrumentation, and sound measurement; the audiologist's role in implementing hearing conservation programs. Prerequisites: ACSD 611 and/or consent of department.

ACSD 753 PEDIATRICS AND EDUCATIONAL AUDIOLOGY (3)
Principles and techniques for evaluation of auditory status and selection of hearing aids in children. Prerequisites: ACSD 721 and/or consent of instructor.

ACSD 755 HEARING AIDS II: HEARING AID MODIFICATION (3)
Amplification system and modification methodologies used to enhance hearing aid performance. Analysis of special purpose circuits, digital and analog Lab/Class fee will be assessed.

ACSD 790 AUDIOLOGY CLINIC ON CAMPUS CONTINUUM (3)
Audiology on-campus practicum for audiology doctoral students continuing in on-campus experiences. Open to audiology doctoral students only. May be repeated for a maximum of 6 units. A special permit is required for enrollment. Prerequisites: ACSD 746 and/or consent of department.

ACSD 796 DOCTORAL THESIS PROPOSAL DEVELOPMENT I (2)
A critical analysis of literature for the doctoral thesis. Graded S/U. Prerequisite: ACSD 714 and/or consent of department.

ACSD 797 DOCTORAL THESIS PROPOSAL DEVELOPMENT II (2)
Completing and successfully defending the audiology doctoral thesis proposal with faculty guidance. Graded S/U. Prerequisite: ACSD 796 and/or consent of department.

ACSD 843 VESTIBULAR ASSESSMENT AND REHABILITATION (3)
Assessment and treatment of balance and related auditory disorders. Prerequisites: ACSD 603, ACSD 604 and/or consent of instructor.

ACSD 844 TINNITUS (1)
Assessment and management of tinnitus. Prerequisites: ACSD 603, ACSD 604, and/or consent of instructor.

ACSD 845 VESTIBULAR DIAGNOSTIC AND TREATMENT LAB (1)
Vestibular diagnosis and treatment techniques learned in ACSD 843 will be reviewed and practiced until the student can perform the skills independently. Prerequisite: ACSD 843.

ACSD 847 AUDIOLOGY CLINIC OFF CAMPUS III (2)
Audiology off-campus practicum clinical sequence III. Prerequisites: ACSD 748, and/or consent of department.

ACSD 848 AUDIOLOGY CLINIC OFF CAMPUS IV (2)
Audiology clinic off-campus IV. Prerequisites: ACSD 847 and/or consent of instructor.
Audiology and Speech-Language Pathology (SPPA)

Courses

SPPA 525 INTRODUCTION TO AURAL REHABILITATION (3)
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 and/or consent of the department.

SPPA 600 LANGUAGE DEVELOPMENT AND DISORDERS FROM BIRTH THROUGH PRESCHOOL (3)
Theoretical and applied aspects of normal, delayed, and disordered language development in children ages 0 to 5 with an emphasis on family-centered assessment and intervention practices. Prerequisite: SPPA graduate students only and/or consent of instructor.

SPPA 604 ACQUIRED NEUROGENIC LANGUAGE AND COGNITIVE DISORDERS I (3)
Neuroanatomical models regarding language function, theories concerning brain function and localization of lesion following cerebral vascular accident. Assessment, diagnosis, and treatment of language deficits. Prerequisite: Graduate standing in the Speech-Language Pathology Program and/or consent of department.

SPPA 605 ACQUIRED NEUROGENIC LANGUAGE AND COGNITIVE DISORDERS II (3)
Pathophysiology and epidemiology of acquired adult neurogenic language and cognitive disorders, traumatic, brain injury and dementing processes, including assessment, diagnosis, recovery, prognosis, as well as treatment efficacy and outcomes. Emphasis on cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning), as well as social and cultural. Prerequisites: Graduate standing and/or consent of department.

SPPA 606 LANGUAGE DEVELOPMENT AND DISORDERS IN CHILDREN-AGE CHILDREN (3)
Characteristics of language disorders, assessment and intervention techniques for children and adolescents including the culturally linguistically different and specific disorder populations. Prerequisite: Graduate standing and consent of department.

SPPA 610 SPEECH SOUND DISORDERS (3)
Assessment and treatment of children with speech sound disorders resulting from phonological, articulatory, neuromotor, and/or structural etiologies. Prerequisites: Graduate standing and/or consent of department.

SPPA 614 FLUENCY DISORDERS (3)
Information on the nature of fluency and the etiology and treatment of fluency disorders through the life span. Prerequisites: Graduate standing and/or consent of department.

SPPA 615 AUTISM SPECTRUM DISORDERS & SPEECH-LANGUAGE PATHOLOGY (3)
Information for speech-language pathologists to assess, treat, and support individuals with autism spectrum disorders in speech, language, and social communication. Prerequisites: Graduate standing in the Speech-Language Pathology Program and/or consent of department.

SPPA 620 VOICE DISORDERS IN CHILDREN AND ADULTS (3)
Anatomy and physiology of the vocal mechanism with discussion and identification of abnormal voice qualities. Techniques of treatment and counseling of clients with organic and functional voice disorders. Prerequisites: Graduate standing and/or consent of department.

SPPA 626 NEUROLOGICALLY BASED SPEECH DISORDERS (3)
Neuroanatomical models regarding speech motor control, theories concerning brain function and localization of neurologic deficits following trauma or degeneration, and assessment and treatment of neurologically based speech disorders. Prerequisites: Graduate standing and/or consent of department.

SPPA 628 DYSPHAGIA (3)
Anatomy and physiology of normal and abnormal swallowing. Etiology, assessment and treatment of swallowing disorders. Prerequisite: SPPA graduate students only; SPPA 626 and/or consent of the department.

SPPA 670 SPECIAL TOPICS SEMINAR IN SPEECH-LANGUAGE PATHOLOGY (3)
Investigation of particular topics in the field of speech and language pathology. Topic varies each semester the course is offered. Prerequisite: Varies with topic.

SPPA 671 SPECIAL TOPICS IN SPEECH-LANGUAGE PATHOLOGY (3)
Investigation of particular topics in the field of speech and language pathology. Topic varies each semester the course is offered. Prerequisite: Varies with topic.

SPPA 680 SPECIAL TOPICS IN SPEECH LANGUAGE PATHOLOGY (1-2)
This seminar course provides elective courses in specialty areas of speech language pathology. Subtitles will vary accordingly. May be repeated for a maximum of 2 credits. Prerequisites: graduate standing in Speech Language Pathology program and/or consent of department.

SPPA 690 CLINICAL PRACTICUM ON-CAMPUS (3)
Supervised clinical experience in the university clinical facility with children and adults who have communication impairments. Prerequisites: Completed communication screening, SPPA 416 (or equivalent documentation of a minimum of 25 hours observation); graduate standing and/or consent of department.
SPPA 705 PROFESSIONAL ISSUES IN SPEECH LANGUAGE-PATHOLOGY (1)
Organization, administration, accreditation, and evaluation of speech-language pathology programs in universities, schools and other settings. Professional roles of direct clinical service across the life span, and consultation. Federal and state laws related to the special process and licensure will be presented. Prerequisites: Graduate standing in the Speech-Language Pathology program and/or consent of the department.

SPPA 710 WRITTEN LANGUAGE DEVELOPMENT AND DISORDERS (3)
Language theory and application for the development of written language skills in children. Assessment and intervention within the classroom curriculum. Prerequisites: SPPA Graduate students only; SPPA 606 and/or consent of instructor.

SPPA 713 SEMINAR: RESEARCH DESIGN IN SPPA (1)
Scientific method as applied to research; evaluation of research designs; development and implementation of a research project; and organization, analysis and presentation of data. Prerequisites: Graduate standing and/or consent of department.

SPPA 714 AUGMENTATIVE AND ALTERNATIVE COMMUNICATION (2)
Compensatory or augmentative use of various nonspeech communication modes with persons whose impairments prevent effective verbal communication. Prerequisites: Graduate standing and/or consent of department.

SPPA 745 ADVANCED CLINICAL PRACTICUM ON-CAMPUS (3)
Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisites: SPPA 690 and/or consent of department.

SPPA 746 ADVANCED CLINICAL PRACTICUM OFF-CAMPUS (3)
Advanced clinical practice in the identification, assessment, and treatment of various types of speech and language disorders in programs affiliated with TU Department of Communication Sciences and Disorders. Prerequisites: SPPA 745, GPA of ≥3.00, 50 graduate practicum clock hours, a minimum of 18 credits of course work exclusive of clinical practicum and/or consent of department.

SPPA 747 ADVANCED CLINICAL PRACTICUM IN SCHOOLS (3)
Advanced clinical practicum in school programs affiliated with TU for graduate students in speech-language pathology. The experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisites: SPPA 745, GPA of ≥3.00, 50 graduate practicum clock hours, a minimum of 18 credits of course work exclusive of clinical practicum and/or consent of department.

SPPA 748 ADVANCED PEDIATRIC PRACTICUM (3)
Advanced clinical practice in the identification, assessment and treatment of various types of speech and language disorders in pediatric programs affiliated with the Department of Communication Sciences and Disorders. Prerequisites: SPPA 745, GPA of ≥3.00, 50 graduate practicum clock hours, a minimum of 18 credits of course work exclusive of clinical practicum and/or consent of department.

SPPA 796 INDEPENDENT STUDY IN SPEECH-LANGUAGE PATHOLOGY (1-3)
Investigation in selected area of speech-language pathology. Prerequisites: Graduate standing and/or consent of department.

SPPA 797 DIRECTED READINGS IN SPEECH-LANGUAGE PATHOLOGY (1-3)
Readings in a particular topic in speech-language pathology. Prerequisites: Graduate standing and/or consent of department.

SPPA 798 ADVANCED CLINICAL PRACTICUM CONTINUUM ON-CAMPUS (3)
Advanced clinical practicum for students in the Speech-Language Pathology Program continuing in on-campus practicum experiences previously taken for credit. Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisite: SPPA 745 and/or consent of the department.

SPPA 799 CLINICAL PRACTICUM CONTINUUM OFF-CAMPUS (3)
Advanced clinical practicum for students in the Speech-Language Pathology Program continuing in off-campus experiences previously taken for credit. Supervised practicum experience includes the evaluation and treatment of various types of speech and language disorders. Prerequisites: Prior off-campus practicum placement and/or consent of department.

SPPA 897 SPEECH PATHOLOGY THESIS (6)
Original investigation using an acceptable research method and design conducted under the direction of a faculty committee. Prerequisite: SPPA 713.

SPPA 898 SPEECH PATHOLOGY THESIS (3)
The previous course SPPA 897, taken over two consecutive semesters.

Biology (BIOL)

Courses

BIOL 502 GENERAL ECOLOGY (4)
Effects of the abiotic and biotic environment on distribution and abundance of organisms: organization of biological communities, ecosystems, evolution of different reproductive strategies and application of ecological principles to natural resource conservation. Several day-long trips required. Prerequisites: BIOL 205 and/or BIOL 207 or equivalents.

BIOL 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 or BIOL 401/BIOL 501 or the equivalent.

BIOL 505 ELECTRON MICROSCOPY (4)
Theory, preparation and application of the electron microscope, including light microscopy. Average of 3 laboratory hours per week. Prerequisite: Consent of instructor.

BIOL 506 LIMNOLOGY (4)
Physical, chemical and biological factors that affect fresh-water organisms, and some of the standard methods used to analyze these factors. Average of 3 laboratory hours per week. Prerequisites: BIOL 205, BIOL 207 or equivalents; BIOL 402/BIOL 502 or equivalent recommended.

BIOL 508 CELL BIOLOGY (4)
The molecular and morphological organization of the cell in relationship to cellular activities with emphasis on eukaryotic cells. Average of 3 hours of laboratory or discussion per week. Prerequisites: BIOL 207 or BIOL 222/BIOL 222L (BIOL 214); CHEM 330 or CHEM 331 or equivalents.

BIOL 509 LIFE SCIENCES (3)
Living organisms in the environment, emphasizing modes of scientific inquiry and the utilization of living organisms in the classroom. For students pursuing a certificate to teach elementary education; does not count toward M.S. degree in Biology. Prerequisite: BIOL 110 or equivalent. Special permit required from elementary education department.
BIOL 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 202 and 10 hours of biology or combination of 10 hours from biology, geography, or physical science.

BIOL 513 EVOLUTION (3)
Concepts of biological evolution, the history of the development of these concepts and current topics in evolutionary biology. Prerequisites: BIOL 205 or BIOL 207 or equivalents.

BIOL 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. Either this course or BIOL 518, but not both, may count toward an M.S. degree in Biology.

BIOL 518 MICROBIOLOGY (4)
Biology of micro-organisms with emphasis on bacteria. Microbial morphology, physiology and genetics, and the role of micro-organisms in natural processes and disease. Laboratory will include methods of observing, isolating and identifying bacteria. Prerequisites: Either this course or BIOL 515, but not both, may count toward the M.S. degree in Biology.

BIOL 519 ENVIRONMENTAL MICROBIOLOGY (3)
Biology and ecology of microorganisms in natural and anthropogenic environments. Culture-based and molecular methods for detection, evaluation, and manipulation of microorganisms and their metabolism. Prerequisites: BIOL 202 (or permission of instructor), BIOL 309, CHEM 132, CHEM 132L; BIOL 318 (or BIOL 215) recommended.

BIOL 521 IMMUNOLOGY (4)
Fundamental principles of immunology with emphasis on the nature of antibodies and antigens, blood groups, antibody-antigen reactions, hypersensitivity, autoimmunization, tumor immunology, artificial grafting and the preparation of vaccines. Prerequisite: BIOL 315/515 or 318/518 or equivalent.

BIOL 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. Prerequisite: BIOL 221/221L (BIOL 213) or equivalent, and consent of instructor.

BIOL 527 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: Undergraduate course in human or vertebrate anatomy and permission of instructor.

BIOL 528 VIROLOGY (3)
Cell and molecular biology of viruses. General virology, including pathogenesis and mortality, interaction with the immune system, and some medically relevant viruses. Prerequisites: BIOL 315/515 or BIOL 318/518 or BIOL 408/409/602.

BIOL 530 HORTICULTURE (4)
Plant culture and application to developing desirable planting on home grounds or in public places with examples of appropriate types of plants for specific situations. An average of 3 laboratory hours per week. Prerequisites: BIOL 205 or equivalent.

BIOL 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 3 laboratory hours per week. Prerequisites: BIOL 205, BIOL 331/531, the equivalents or consent of instructor. Lab/Class fee will be assessed.

BIOL 535 PLANT ECOLOGY (4)
Environmental factors and processes which control plant distribution, plant communities and vegetational biomes of North America. An average of 3 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 205 or equivalent.

BIOL 536 PLANT PHYSIOLOGY (3-4)
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. Prerequisite: BIOL 205 or BIOL 208 and CHEM 132/132L (CHEM 111), CHEM 330 recommended.

BIOL 538 microscopy (3-4)
Microscopy of microorganisms. The production and use of microscopes, the use of stains, and the identification of microorganisms. Prerequisite: BIOL 202 and BIOL 205, or BIOL 207 or BIOL 208. Lab/Class fee will be assessed.

BIOL 546 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 or 207 or 208, or consent of instructor.

BIOL 549 MARINE BOTONY (4)
The ecology, physiology and identification of marine plants emphasizing the Chesapeake Bay and coastal areas of Maryland. Prerequisite: BIOL 347; BIOL 331/531 or equivalents strongly recommended.

BIOL 552 WETLAND ECOLOGY (4)
Wetland ecology and wetland management, with special focus on wetland 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. Five mandatory Saturday field trips. Prerequisites: BIOL 202 and BIOL 205, or BIOL 207 or BIOL 208. Lab/Class fee will be assessed.

BIOL 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 3 laboratory hours per week. Prerequisite: BIOL 207 or equivalent.
BIOL 554 ANIMAL PARASITOLOGY (3)
Major groups of animal parasites and their vectors. Emphasis will be placed on pathogenesis of medically relevant organisms. Lecture discussions will incorporate an examination of relevant literature. Prerequisite: BIOL 309 or permission of instructor.

BIOL 555 FISH BIOLOGY (4)
Introduction to the evolutionary history, functional biology, ecology and conservation of fishes. Laboratory experiences emphasize both identification of fishes and experiments designed to understand their functional biology. Independent research project and weekend field trips are required. Average of 3 hours of lecture and 3 hours of lab per week. Prerequisite: BIOL 207 and CHEM 132/132L (CHEM 111) or equivalents; BIOL 325 or equivalent recommended.

BIOL 555 ORNITHOLOGY (4)
Evolutionary history, morphology, physiology, behavior and ecology of birds. One daylong weekend field trip and several early-morning weekday field trips required. Prerequisite: BIOL 207 or equivalent.

BIOL 558 MAMMALOLOGY (4)
Evolution, comparative morphology, systematics, and distribution of mammals. Representative life histories are considered. Average of three laboratory hours per week.

BIOL 560 HISTOLOGY (4)
Tissues of the vertebrate body. Average of 2 laboratory hours per week. Prerequisite: BIOL 222/222L (BIOL 214) or equivalent. Lab/Class fee will be assessed.

BIOL 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 3 laboratory hours per week. Prerequisite: BIOL 207 or equivalent.

BIOL 563 DEVELOPMENTAL BIOLOGY (3)
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. Prerequisite: BIOL 309 and either BIOL 222/222L (BIOL 214) or BIOL 325.

BIOL 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 3 laboratory hours per week. Prerequisite: BIOL 207 or equivalent.

BIOL 568 ENDOCRINOLOGY (3)
Endocrine mechanisms regulating homeostasis and functional integrity of animals with emphasis on vertebrates. Prerequisite: BIOL 222/222L (BIOL 214) or equivalent.

BIOL 569 COMPARATIVE ANIMAL PHYSIOLOGY (4)
Functions, interactions and regulation of organ systems in animals and their roles in sensory perception and integration, movement, oxygen utilization, energy procurement, temperature regulation and water metabolism. Prerequisites: BIOL 221/221L (BIOL 213); BIOL 222/222L (BIOL 214), and BIOL 325 or equivalents.

BIOL 570 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. Prerequisites: BIOL 222/222L (BIOL 214) or BIOL 325, CHEM 132/132L (CHEM 111) (CHEM 332 and BIOL 207 or 208 recommended).

BIOL 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 recitation hours per week. Prerequisite: BIOL 207 or BIOL 208. BIOL 202 also strongly recommended.

BIOL 581 DIRECTED READING IN BIOLOGY (1-3)
Independent reading in an area selected by the student in consultation with the instructor.

BIOL 582 ENVIRONMENTAL EDUCATION & SERVICE LEARNING IN THE TROPICS (3)
Designed for those majoring in the sciences or education fields with an interest in environmental education. Coursework will take place largely in the tropics of Costa Rica. Emphasis will be placed on the application of forest ecology concepts to PreK-12 environmental education and human use and management of natural resources in the tropics. Prerequisite: Permission of instructor required.

BIOL 584 SEMINAR IN ECOLOGY, EVOLUTION AND BEHAVIOR (1)
Discussion and analysis of current research in ecology, conservation biology, environmental science, evolution and animal behavior. Prerequisites: 12 credit hours in Biology, including Viol 202 and one or more of the following: BIOL 310, BIOL 347, BIOL 371, BIOL 402, BIOL 411, BIOL 413, BIOL 435, or permission of the instructor. Repeatable.

BIOL 585 SEMINAR IN APPLIED BIOTECHNOLOGY (1)
Current research articles in cell biology and Microbiology are reviewed. May be repeated for a maximum of 2 credits. Prerequisites: BIOL 309; BIOL 409 also recommended.

BIOL 589 SPECIAL TOPICS IN BIOLOGY (3)
Current topics in varying areas of biology. May be repeated provided a different topic is covered. Prerequisite: a suitable background in the area emphasized.

BIOL 594 TRAVEL STUDY (1-3)
A detailed investigation of field-oriented problems in biology away from the TU campus. Location and topics to be selected by the department and instructors sponsoring the program. Prerequisite: Consent of instructor; may be repeated for a maximum of 3 credits.

BIOL 601 CURRENT TOPICS IN BIOLOGY (3)
Current topics in a specific area of biology. The area will vary each time the course is offered. May be repeated provided a different topic is covered. Prerequisite: a suitable background in the area emphasized.

BIOL 602 MOLECULAR BIOLOGY (3)
Overview of the base principles of molecular biology including: macromolecules, nucleic acid/protein interactions, replication, transcription, translation, mutations, DNA repair mechanisms, gene regulation and tools and applications of recombinant DNA technology.
Biol 603 Data Analysis and Interpretation for Biologists (3)
Information, techniques, and skills useful in gathering, analyzing, and interpreting data in the Biological Sciences. Topics include introduction to the role of statistical analysis in the biological sciences, hypothesis testing, experimental design, and current controversies in use of statistics in the biological sciences. Graduate students only. Prerequisites: None.

Biol 604 Mechanisms in Animal Physiology (3)
Functional design of animal organ systems and discussion of selected adaptations permitting survival in challenging environments. Prerequisite: Students must meet the requirements for admission to the master’s degree program in Biology.

Biol 605 Biochemical Adaptations (3)
Characterization of adaptational challenges facing biochemical systems and how these systems have been modified through evolution to permit comparable structures and processes to be persistent in all organisms and in all environments. The underlying unity of biochemical design existing in the face of remarkable adaptive diversification is a theme. Prerequisites: Biol 604 or upper-level advanced undergraduate course in physiology.

Biol 607 Evolutionary and Ecological Physiology (3)
The study of how physiological characters evolve and contribute to organismal success and the nature of research in this field. Prerequisites: Previous evolution and/or physiology course highly recommended.

Biol 608 Systematic Biology (3)
Theory and procedures of modern systematics with emphasis on data gathering, use of morphological and/or molecular characters, analysis, and interpretation of results. A variety of approaches for analysis of systematic/phylogenetic data and methods for determining support of phylogenetic hypotheses will be explored. Prerequisites: open to graduate students and advanced undergraduates; formal prerequisites are limited to the biology core classes throughout the junior year (Biol 200/ Biol 200L [Biol 201], Biol 202, Biol 205, Biol 207, Biol 208, Biol 432 or equivalent).

Biol 609 Community Analysis and Bioassessment (3)
Principles of design of environmental sampling studies, statistical analysis of data composed of multiple species, and environmental variables. Use of statistical software for data analysis projects. Emphasis on application of these methods in bioassessment of aquatic ecosystems, as well as community ecology and evolution. Prerequisite: Biol 610 or Envs 604 or equivalent at the upper-undergraduate level.

Biol 610 Population and Community Biology (3)
Processes in biological populations, including population growth, competition and predation, analyzed by the use of conceptual-systems models and simple mathematical models. Prerequisite: Biol 402/502, Biol 413/513 or equivalents.

Biol 612 Molecular Ecology and Evolution (3)
Use of molecular techniques in ecology and evolution. Application of DNA sequencing, PCR analysis and DNA fingerprinting to understanding genome evolution, the species concept, evolutionary basis of behavior, population structure and gene flow and efforts in species conservation. Reading and discussion of recent scientific literature. Prerequisites: Biol 602 or permission of instructor.

Biol 614 Applied Biotechnology (3)
Overview of basic recombinant DNA technology, gene expression and regulation; medical, agricultural and ecological examples of applied biotechnology; regulations, risks, benefits and bioethics of biotechnology. Prerequisites: Biol 602 or permission of instructor.

Biol 615 Pathogenic Microbiology (3)
Pathogenic bacteria and viruses, including virulence of causative agents, epidemiology, pathogenesis, diagnosis, prevention and treatment of representative bacterial and viral diseases. Prerequisite: Biol 421/521, Biol 315/515 or 318/518 or equivalents.

Biol 616 Membrane Biology (3)
Structure, function and biogenesis of biological membranes. Emphasis on role of membrane in cellular homeostasis, energy transduction and interaction with the extracellular environment. Multidisciplinary perspective taken, drawing on information from molecular biology, cell biology and biophysics. Extensive use of current literature. Prerequisites: Biol 602 or permission of instructor.

Biol 618 Molecular Medicine (3)
Molecular biology as it applies to medicine, including molecular genetic approaches to clone/detect disease genes, analysis of gene function based on human/microbial homologies, prenatal and neonatal diagnosis/screening, tracking infectious disease outbreaks, molecular therapies for disease and impact of human genome project. Ethical issues raised by application of molecular methodology also discussed. Prerequisites: Biol 602 or permission of instructor.

Biol 619 Environmental Microbiology (3)
Topics to be covered include: the historical importance of environmental microbiology, the different methods of molecular genetic analysis, microbially mediated biogeochemical cycles and their global importance, the adaptability of microorganisms to different environments, microbial functional metabolic plasticity facilitating xenobiotic compound degradation, and the use and importance of metagenomics in environmental microbiology. Prerequisites: None.

Biol 621 Cell Signaling (3)
Analysis of the signal transduction pathways used by cells to communicate with each other and with their outside environments. Special emphasis on cell signaling pathways involved in the regulation of immune responses. Prerequisites: Biol 408/508 and Biol 421/521 or equivalent are recommended.

Biol 622 Gene Expression and Regulation (3)
Examining how changes from the DNA level to the protein level alter the resulting gene’s final expression. Special emphasis on eukaryotic mRNA stability and translatability and on eukaryotic post-translational modifications. Prerequisites: Biol 602 or permission of instructor.

Biol 635 Physiological Plant Ecology (3)
Interactions of plants with the physical environment at a biochemical, physiological and organismal level of integration. Prerequisite: Biol 402/502 or Biol 435/535 or Biol 436/536 or equivalents.

Biol 650 Modern Microscopy and Microtechniques (3)
Histology of the majority of tissues in the human body through theory and microscopic examinations. Preparation of specimens for microscopic examination. Use and relevance of various types of microscopy: dark-field, phase contrast, fluorescence, confocal, transmission electron-, and scanning electron.

Biol 651 Environmental and Biological Science in Integrated STEM Education (3)
Students investigate place-based education, environmental literacy, and outdoor applications of biology education, and consider how teachers teach and students learn about life science and environmental concepts in the context of integrated STEM (Science, Technology, Engineering and Mathematics) education in grades PreK-12. Not for credit toward M.S. in Biology.
BIOL 653 BIOLOGY OF FRESHWATER INVERTEBRATES (4)
Biological of free-living freshwater macro-invertebrates is emphasized. Extensive field and laboratory work deals with morphological, taxonomic, ecological and behavioral features of selected macro-invertebrates. Students must demonstrate a knowledge of scientific literature pertaining to identification of selected genera, demonstrate identification skills via laboratory practicals and collection of local macro-invertebrate fauna. Field trips, collection of macro-invertebrates identified to the genus level and student seminars are required. Prerequisites: BIOL 353/553 and 461/561 or equivalents recommended.

BIOL 654 LANDSCAPE ECOLOGY (3)
Spatial and temporal landscape heterogeneity; how is arises, its quantification and its influence on population, community and ecosystem dynamics over multiple scales. Prerequisites: Upper level undergraduate course in ecology or permission of instructor.

BIOL 655 THE BIOLOGY OF CANCER (3)
Overview of human cancer including risk factors, causes, types, epidemiology, the genetic basis of the disease, molecular and cellular alterations, diagnosis, treatment and current research. Extensive use of seminal and current literature. An upper level cellular or molecular biology course is recommended.

BIOL 701 NON-THESIS RESEARCH (1-3)
Field or laboratory research in addition to and/or unrelated to any thesis research. May be repeated for a maximum of 6 units. Graded S/U. Prerequisites: student must submit research proposal prior to enrollment and obtain approval of program director.

BIOL 703 INDEPENDENT STUDY (1-3)
Independent exploration of the concepts, research techniques and recent discoveries in a sub-discipline of the biological sciences in collaboration with a faculty mentor. Prerequisite: Student must submit study proposal prior to enrollment. Requires special permit from graduate program director. May be repeated for a maximum of 6 credits.

BIOL 731 PLANT COMMUNITY ECOLOGY (3)
Analysis of plant community ecology through the historical development of the concept of plant succession. Prerequisites: BIOL 402/502 or 435/535 or equivalents, BIOL 610 and 9 graduate credits in biology.

BIOL 781 RECENT ADVANCES IN BIOLOGY (4)
Factual and technological advances in the following five areas: botany, zoology, ecology, genetics and evolution, cellular and molecular biology. Prerequisites: 9 graduate units in biology.

BIOL 796 PROFESSIONAL ASPECTS OF BIOLOGY (2)
Information, techniques, and skills useful in completing a MS degree, gaining employment and functioning as a professional biologist, or gaining access to Ph.D programs. Topics include literature retrieval, the publication process, obtaining funds for research, presentations at national meetings, job hunting, and professional ethics.

BIOL 797 GRADUATE SEMINAR (1)
Student reports and discussion dealing with biological research. An outline of the seminar and bibliography are required. A maximum of 1 credit is allowable for an M.S. degree in Biology.

BIOL 896 BIOLOGY THESIS (1-8)
Thesis research. See program director for permit.

BIOL 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Communication Studies (COMM)

Courses

COMM 518 COMMUNICATION TRAINING AND DEVELOPMENT (3)
Instructional strategies for implementing objectives, specifying and evaluating results.

COMM 519 ORGANIZATIONAL COMMUNICATION (3)
Theories and processes of decision making in organizations including classical, human resources, cultural, systems, and critical approaches. Emphasis on the role of communication plays in assimilation, decision making, conflict, diversification, and crisis management.

COMM 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. Prerequisite: Consent of instructor.

COMM 522 CONFERENCE AND MEETING MANAGEMENT (3)
Communicative details in preparing for and conducting events.

COMM 795 INDEPENDENT STUDY IN COMMUNICATION STUDIES (1-6)
Directed study through readings, projects, papers or seminars. May be repeated for a maximum of 6 credits. Prerequisite: 15 credits of graduate-level communication or mass communication courses and consent of instructor.

Computer Science (COSC)

Courses

COSC 501 FUNDAMENTALS OF DATA STRUCTURES AND ALGORITHM (6)
Designed for graduate students to provide them with the necessary background in data structures and algorithm analysis. Topics include: objects and abstract data types, dynamic variables and pointers, recursion, sort and search algorithms, linear and non-linear structures such as linked lists, trees and graphs, hashing, algorithms time complexity analysis, object-oriented design and programming. Prerequisite: Admission to COSC MS program.

COSC 502 COMPUTER ORGANIZATIONAL AND ASSEMBLY LANGUAGE FOR NON CS/CIS MAJOR (3)
Computer organization and architecture including computer arithmetic, digital logic, assembly language, memory system organization, and computer interfacing. This course is a preparatory course for the Masters in Computer Science Program. Course is S/U grading. Prerequisites: Graduate Standing.

COSC 519 OPERATING SYSTEMS PRINCIPLES (3)
An overview of the principles of operating systems. Topics include multiple processes, process synchronization and intercommunication, resource allocation, memory management, processor scheduling and I/O device management. Prerequisites: COSC 501 or equivalent; COSC 502 or equivalent; and MATH 263 or equivalent; or consent of the instructor.

COSC 571 COMPUTER PERFORMANCE EVALUATION (3)
Computer system performance evaluation methodologies, techniques and tools including different types of monitors as a measurement tool, workload 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. Prerequisites: MATH 363 and COSC 439/ COSC 519 (may be taken concurrently).
COSC 578 DATABASE MANAGEMENT SYSTEMS I (3)
Build theoretical foundation for database management systems, study different database models, relational algebra, relational calculus, SQL, ER, EER models, structured query formulations, database design, analysis and modeling, functional dependencies and normalization, and overview of next generation database management systems. Prerequisites: COSC 501 or equivalent; COSC 502 or equivalent; and MATH 263 or equivalent; or consent of the instructor.

COSC 581 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 304.

COSC 583 DESIGN AND ANALYSIS OF ALGORITHMS (3)
Algorithm design such as heuristics, backtrack programming, branch and bound, recursion, simulation and conquer, balancing and dynamic programming. Efficiency of algorithms-NP-complete problems. Prerequisite: COSC 336 or COSC 304.

COSC 600 ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS (3)
Data abstraction, linear data structures, file organization and access methods, memory management, advanced internal and external sort and search algorithms and the trade-offs involved in the use of different data organization. Prerequisites: COSC 501 or equivalent; COSC 502 or equivalent; and MATH 263 or equivalent; or consent of the instructor.

COSC 601 SOFTWARE REQUIREMENTS ENGINEERING (3)
Introduces the basic concepts and principles of software requirements engineering, and is designed to expose student to common tools and techniques, established methods for modeling software systems and various approaches to requirements engineering (structured, object oriented and formal). Intends to cover in its entirety the process of requirements engineering. Prerequisites: AIT 624/COSC 612-Software Engineering.

COSC 602 COMPUTER VISION AND IMAGE PROCESSING (3)
The study of image acquisition, representation and pattern recognition, edge detection for computer vision. Topics to be covered include digital image formats, image storage and display, bilevel image processing, measurable properties of objects, grey-level image processing, image classification and object recognition. Prerequisite: COSC 305.

COSC 603 SOFTWARE TESTING AND MAINTENANCE (3)
A comprehensive survey of software maintenance and testing, principles, methodologies, management strategies, techniques and tools. Software testing at the unit, subsystem and system levels using various test design techniques, as well as integration, regression, and system testing methods, and software testing tools. Designing and implementing software technologies to increase maintainability and testability; evaluating software for change and validating software changes. Prerequisites: AIT 624/COSC 612-Software Engineering.

COSC 605 HUMAN FACTORS AND HUMAN-COMPUTER INTERACTION (3)
Design of information systems interfaces. Discussion of how information systems components and work environments can be constructed to make people more effective, productive and satisfied with their work life. Output and input design, arrangement of displays and controls, case studies in human factors. Prerequisite: TU graduate standing or consent of instructor.

COSC 609 SOFTWARE PROJECT MANAGEMENT (3)
Factors necessary for the successful management of information systems development or enhancement projects. Both technical and behavioral aspects of project management are discussed. Topics include project management concepts, needs identification, the software project manager, software teams, software project organizations, project communications, software project planning, scheduling, control and associated costs. Project-management software tools will be an integral part of the course. Prerequisites: COSC 501 or equivalent, COSC 502 or equivalent, and MATH 263 or equivalent; or consent of the instructor.

COSC 611 COMPUTER SIMULATION (3)
Continuous and discrete event systems simulation application, implementation, role of modeling and languages, experimental design, data collection, verification, validation, object-oriented simulation, random variable generation, Monte Carlo methods for performance evaluation, sensitivity analysis and optimization. Prerequisite: COSC 305.

COSC 612 SOFTWARE ENGINEERING I (3)
Formal software engineering principles and practices and their application to the development of computer-based systems. Prerequisite: COSC 600.

COSC 614 SOFTWARE ENGINEERING II (3)
Formal process leading to requirements, design and test specifications, quantitative measures of useful software parameters, review of software systems components and complete design and test processes. Prerequisite: COSC 612.

COSC 617 ADVANCED WEB DEVELOPMENT (3)
Design and implementation of distributed information systems involving the technologies developed for the World Wide Web (WWW). Emphasis will be given to server architectures, database connectivity and the enterprise packages provided by web development languages. Prerequisites: COSC 600 and COSC 457/ COSC 578.

COSC 618 ENTERPRISE ARCHITECTURE (3)
Provides a set of latest approaches in designing IT infrastructures aligning them with enterprise business activities at the architectural level, including business architecture, information architecture, solution architecture, and technology architecture. Institutionalization of enterprise architecture frameworks and standards will be discussed. Topics include the fundamentals of business functions and IT infrastructure of an enterprise including definitions, frameworks, business process modeling, process institutionalization using CMMI, EA implementations through service-oriented architecture, (SOA), and the various networking technologies in LAN/MAN/WAN as the enablers for EA. Prerequisites: AIT 624 and COSC 612.

COSC 638 ADVANCED COMPUTER ARCHITECTURES (3)
Design principles for multiprocessor and RISC machines, comparison between RISC and CISC architectures, multiprocessor interconnection networks, memory organizations, parallel algorithms for sorting, image processing, FFT and various applications, data flow computers and VLST computations. Prerequisite: COSC 304.

COSC 639 OPERATING SYSTEMS II (3)
Implementation of operating systems for online multiprogramming environment. Primary and secondary storage management techniques, file security, data integrity and a detailed study of operating systems such as UNIX. Prerequisite: COSC 439/ COSC 519 or equivalent.
COSC 641 INTRO TO E-COMMERCE (3)
A broad overview and discussion of the technologies relevant to
electronic commerce, including communication networks and the
Internet, Web programming languages, computer security, electronic
payments, multimedia databases and distributed transaction processing,
and legal and ethical issues. Prerequisite: COSC 600 or equivalent.

COSC 643 INTRNET SUPPLY CHAIN MNG (3)
E-business strategies, Web-based system architecture, collaboration
techniques among buyers and sellers. Business-to-business system
requirements analysis in the context of supply chain management.
Focus on the technical aspects of supply chain management system,
which include message passing framework, XML, DTD, XSL, XSLT, XPath,
Web-based database manipulation, and VPN. Managerial aspects of e-
business as well, which include the integration of e-business systems
and back-end systems such as enterprise resource planning ERP
systems and business security. Student will implement a B2B site as a
team project. Prerequisite: COSC 60.

COSC 644 INTRODUCTION TO INFORMATION ASSURANCE (3)
Principles, mechanisms, and implementation of information assurance.
Emphasis on human and technological aspects of information assurance
and issues relevant to the risks in which information systems are
exposed and methods of dealing with such risks. Not open to students
who have taken IHSM 620. Prerequisites: COSC 600 or equivalent or
consent of instructor.

COSC 645 APPLIED CRYPTOLOGY (3)
A broad introduction to cryptography and its application to computer-
network security services and mechanisms, such as confidentiality,
digital signature, access control and electronic payments. Analysis of
software implementations of cryptographic algorithms and network-
security protocols. Prerequisite: COSC 600.

COSC 647 APPLICATION SOFTWARE SECURITY (3)
Security concepts in developing software applications. Discusses design
principles for secure software development, and some of the security
issues in current programming and scripting languages, database
systems and Web servers. Prerequisites: COSC 578 and COSC 600.

COSC 650 COMPUTER NETWORKS (3)
Computer networking concepts and technologies. Architectures and
protocols, LANS, Internet working, and applications. Prerequisites: COSC
501 or equivalent; COSC 502 or equivalent; and MATH 263 or equivalent;
or consent of the instructor.

COSC 657 DATABASE MANAGEMENT SYSTEMS II (3)
Relational database systems application, implementation, management,
administration, design, advanced data modeling, object-oriented
databases, deductive databases, query optimization, functional
dependencies, concurrency, security and integrity. Prerequisite: COSC
457/ COSC 578 or equivalent.

COSC 661 ARTIFICIAL INTELLIGENCE PROGRAMMING AND ADAPTIVE
SYSTEMS (3)
Major differences between AI and conventional programming, symbolic
programming techniques and adaptive systems, PROLOG and LISP.
Prerequisite: COSC 461/ COSC 581.

COSC 665 EXPERT SYSTEM DESIGN AND DEVELOPMENT (3)
Approaches and methods employed in expert system design and
development analysis of selected expert systems, prototyping and
presentation. Prerequisite: COSC 581 or equivalent.

COSC 670 SPECIAL TOPICS IN COMPUTER SCIENCE (3)
Reading and study in selected topics in the field of computer science;
emphasizes on an increased knowledge of computer science. A project
or paper is required. Prerequisite: COSC 600 or equivalent and consent of
instructor.

COSC 680 SEMINAR IN COMPUTER SCIENCE (1)
Presentation and discussion of research trends and advanced topics in
computer science. Students may enroll in this course up to three times
for a total of 3 credits. Prerequisite: Consent of instructor.

COSC 683 SECURITY AND INTERNET ALGORITHMS (3)
State of the art trends in designing algorithms for the Internet and
security. Typical topics include network routing, Web search engine
algorithms, data compression algorithms, caching, online algorithms,
number theoretical algorithms relevant in cryptography, error-correcting
codes, zero-knowledge protocols, secret-sharing protocols, one-way
functions, pseudo-random generators. Prerequisite: COSC 600.

COSC 685 INFORMATION SECURITY AND RISK MANAGEMENT (3)
Explores approaches for performing risk assessment of information
systems. Foundational concepts in risk management will be introduced,
as well as approaches and tools for monitoring, identifying, analyzing,
and responding to risks. Students will become knowledgeable of general
information security risk management frameworks, how to identify
and model security risks, and know how to conduct thorough business
impact analyses to provide recommended action plans. Prerequisite:
COSC 650.

COSC 686 COMPUTER GRAPHICS (3)
A presentation of the basic concepts in the field of computer and/or
displayed graphics. The students will get an understanding of the basic
mathematical and physical principles behind computer graphics and
will learn a concrete programming package for computer graphics.
Topics include animation, user interface, affine geometry and 3-D
transformations, lighting and shading, texture mapping, rendering
algorithms, ray tracing and modeling. Prerequisite: COSC 305.

COSC 695 INDEPENDENT STUDY IN COMPUTER SCIENCE (3)
Independent study in selected areas of computer science. Prerequisite: 9
credits at the graduate or upper-division level.

COSC 710 SOCIAL NETWORK ANALYSIS (3)
Covers the concepts, structures and analysis of large social and
information networks. Hands-on techniques will explore how to analyze
large-scale social network data, explore social behavior, and apply the
techniques to real-world problems. Students will work on cases on actual
social network data and present strategic recommendations based on
analysis of the data. Prerequisite: COSC 600 or permission of instructor.

COSC 714 FUZZY LOGIC IN CONTROL APPLICATIONS (3)
Control theory and dynamical systems are first studied, followed by fuzzy
sets, fuzzy memberships functions, fuzzy rules, fuzzy logic and use of
neural nets to generate fuzzy rules. Two control applications are studied
in department. Prerequisite: COSC 600 or equivalent.

COSC 715 ROBOTICS (3)
Physical mechanisms of robotics, issues of modeling, planning control
and programming. Principles underlying the design and analysis of
robotic systems. Prerequisite: COSC 600 or equivalent.

COSC 716 OBJECT-ORIENTED METHODOLOGY (3)
Object-oriented approach to modeling, problem solving, requirement
analysis, system design, system implementation, database design,
system engineering and software engineering. Prerequisite: COSC 600 or
equivalent.
COSC 725 PROCESS CONTROL AND REAL-TIME SYSTEMS (3)
Analog to digital and digital to analog conversions, signal conditioning and processing, direct digital control of processes, adaptive control of nonlinear systems and real-time programming considerations: response time, survival time, recovery time, and throughput, executive-system calls, memory-related system calls, task-synchronization system calls, multiprocessing, interrupts, task scheduling and task concurrency. Prerequisite: Graduate standing or a course in computer architecture.

COSC 730 NETWORK MANAGEMENT SYSTEMS (3)
Principles and practice of network management including architectures, protocols and tools.

COSC 732 WIRELESS NETWORKS AND MOBILE COMMUNICATIONS (3)
The principles and practice of wireless networks and mobile communications. Wireless transmission and media access technologies, study of a typical cellular system, satellite networks, wireless LANs, wireless ATM, mobile IP, mobility and TCP, and the wireless application protocol (WAP). Prerequisite: COSC 650.

COSC 734 NETWORK SECURITY (3)
Principles and practice of network security. Topics include authentication services, email security, IP security, Web security, security systems and threats, wireless security, and security applications. Prerequisite: COSC 650.

COSC 735 ADVANCED TOPICS ON COMPUTER NETWORKS (3)
Advanced networking, covering various aspects of new technologies and current topics in computer networks. Topics will include design architecture, network threats and monitoring, network anonymity, sensor/actor networks, cyber-physical systems (CPS), networks visualization, and other current topics. Prerequisite: COSC 650.

COSC 740 PARALLEL COMPUTING (3)
Parallel computing and its applications including parallel computer models, parallel matrix algorithms, optimization algorithms, complexity of parallel algorithms, parallel programming environment, application of parallel algorithms in sorting, searching, matrix operations, system of linear equations and optimization. Prerequisites: COSC 600 or equivalent and a course in linear algebra.

COSC 741 E-COMMERCE CASE STUDIES (3)
Key elements of E-commerce such as catalog, marketing, enterprise resource planning (ERP), Web-based database, network security, Internet supply chain, XML, two or three e-business models will be analyzed and discussed in class. The analysis includes system structure and technology review, marketing strategy review, and is followed by presentations and discussions. Based on the e-commerce concepts studies, students will examine the advantages and the disadvantages of various e-commerce systems. Class can choose an e-commerce model (a B2B model) as a class project. The class project will be divided into several small group projects (buyers and sellers, B2B models) so that each group of students can take each piece. Each group will design and implement the part of e-business model of their choice and integrate with other group’s project at the end of the semester. Prerequisite: COSC 64.

COSC 745 ADVANCED TOPICS IN COMPUTER SECURITY (3)
In-depth study of advanced topics in computer security. Topics will vary according to current trends and research directions in the field. Possible topics include: secure file and mail systems, operating system vulnerabilities, firewall and intrusion detection system design, denial of service attack issues, malicious code, virus detection and removal, router security, password attacks, Internet security mechanisms, spoofing, session hijacking, sniffers, scanners, logging and auditing techniques, and security in mobile environments. A project that requires security tools and software, and a paper based on a research topic in computer security is required. Prerequisite: COSC 645.

COSC 750 NEURAL NETWORKS (3)
Discussion of neural networks, architectures, algorithms and applications, including Hebbian, Hoffeld and competitive learning, ART and Back propagation neural nets. Prerequisite: COSC 600 or equivalent.

COSC 757 DATA MINING (3)
Designed to provide students with a broad background in data mining techniques and related topics. Real-world applications including Web mining will be emphasized. Current data mining tools will be used in student projects. Prerequisite: COSC 578 or equivalent.

COSC 760 BIG DATA ANALYTICS (3)
Study of big data analytics, including the management of various public and private datasets from business, health care, multimedia, cyber-physical systems (CPS), Internet of Things (IoTs), and social media. Hands-on experience with managing the collection, ingestion, storage, analytics, and interpretation of big data using various cloud-based big data frameworks and NoSQL databases such as Hadoop, MongoDB, CouchDB, Elasticsearch, and Spark. Introduction to various big data analytics methods using distributed machine learning libraries. Current research and future trends in big data analytics from the current literature will be explored. Prerequisite: COSC 578.

COSC 795 RESEARCH SEMINAR (1)
Students will be exposed to, and share, research findings in information technology. May be repeated for a maximum of 3 units. It is expected that all doctoral candidates will register for this course; all other graduate students are encouraged to register as well. Graded S/U.

COSC 880 COSC PROJECT/INTERNSHIP (3)
Enables students to conduct a study in an advanced computer-related topic or undertake the analysis, design and implementation of a real-world application. The application may be related to an industrial project sponsored by a company or it may be of mutual interest to the student and a supervising faculty member. Prerequisites: Completion of at least 18 graduate credits toward M.S. in Computer Science.

COSC 885 PROJECT CONTINUUM (1)
Continuing work on previously started project. Prerequisites: Previous registration for project work.

COSC 897 COMPUTER SCIENCE THESIS (6)
An original investigation using an acceptable research method and design. Prerequisites: Completion of at least 21 graduate credits toward an M.S. degree in Computer Science.

COSC 898 COMPUTER SCIENCE THESIS (3)
The previous course, COSC 897, taken over two consecutive semesters.

COSC 899 THESIS CONTINUUM (1)
Continuation of graduate thesis. Prerequisite: Previous registration for graduate thesis.

Criminal Justice (CRMJ)
Courses

CRMJ 553 THEORIES OF CRIME (3)
Evolution of criminological theory; crime rates and trends; social profile of criminal offenders and victims; societal responses. Prerequisites: SOCI 101, CRMJ 201, or CRMJ 254; and 9 additional units of CRMJ, SOCI, and/or ANTH.

CRMJ 555 DELINQUENCY AND JUVENILE JUSTICE (3)
Nature, distribution and causes of youth crime; youth gangs, the juvenile justice system. Prerequisites: CRMJ 2XX Introduction to Criminology.

CRMJ 556 PRISONS IN AMERICA (3)
Purposes of punishment, incarceration and death penalty; inmate subculture; administration and staff issues. Prerequisites: CRMJ 254 Introduction to Criminal Justice.

CRMJ 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 credits. Prerequisites: SOCI 101 Introduction to Sociology or CRMJ 2XX Introduction to Criminology.

CRMJ 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 570 SPECIAL TOPICS IN CRIMINOLOGY (3)
An examination of current topics in criminology. May be repeated for a maximum of 6 credits. Prerequisites: Consent of instructor.

CRMJ 585 SEMINAR IN CRIMINAL JUSTICE (3)
Capstone application of ideas, methods and facts learned in previous criminology and criminal justice courses. Prerequisites: CRMJ 254, Introduction to Criminal Justice; CRMJ 2xx, Introduction to Criminology; CRMJ or SOCI 353, Theories of Crimes; CRMJ 368 or SOCI 391, Research Methods; and senior standing or consent of instructor.

CRMJ 591 INTERNSHIP IN CRIMINAL JUSTICE I (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 (591) or two terms for 3 units each (591-592), 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 requirement and student needs make it appropriate. Prerequisites: SOAN majors only; CRMJ concentration; junior standing; and consent of instructor.

CRMJ 592 INTERNSHIP IN CRIMINAL JUSTICE II (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 (591) or two terms for 3 units each (591-592), 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 requirement and student needs make it appropriate. Prerequisites: SOAN majors only; CRMJ concentration; junior standing; and consent of instructor.

CRMJ 595 INDEPENDENT RESEARCH (3)
Supervised research in criminology and criminal justice involving library and/or field experiences, and culminating in a written report. May be repeated for a maximum of 6 credits. Prerequisites: CRMJ or SOCI 353 Theories of Crime; CRMJ 368 or SOCI 391 Research Methods; and consent of instructor.

Dance (DANC)

Courses

DANC 550 METHODS FOR TEACHING DANCE: POLICY AND ADVOCACY (3)
Examination of strategies for dance arts advocacy and dance education policies in public school contexts. Prerequisite: permission of Instructor by departmental consent.

DANC 570 SPECIAL TOPICS IN DANCE (1-3)
Workshops and courses designed for study of special topics in dance, not available in other existing courses; for example, principles and practices of auditioning, dance repertory, seminar in dance education. Will be offered depending on student and faculty interest and availability. May be repeated for credit provided a different topic is covered. Prerequisites: Consent of department chair.

DANC 585 SEMINAR IN CRIMINAL JUSTICE (3)
An overview and comparison of theoretical models of the lived body and the socially constructed body with dance applications.

DANC 700 PERSONAL PEDAGOGIES: EMBODIED PRACTICES (3)
Examination of seminal theories, frameworks, practices and exemplars of embodiment as it is applied to teaching and pedagogy. Prerequisite: DANC 600.

DANC 745 GLOBAL PEDAGOGY IN DANCE EDUCATION (3)
Examination of culturally relevant models of pedagogy in dance education with applied field practice. Prerequisite: DANC 745.

DANC 898 THESIS (3)
Designed to develop understandings, skills, and outlooks to conduct original, independent research in Dance Education. Prerequisite: DANC 845.

e-Business and Technology Management (EBTM)

Courses

EBTM 501 APPLIED BUSINESS STATISTICS (3)
Statistical data analysis for managerial decision making. Includes an examination of summary measures, probability, random variables and their distributions. Presents estimation and hypothesis testing, including z-test, t-test and chi-square test, correlation and linear regression analysis, and their applications to business problems. The use of statistical data analysis is an integral part of this course. Prerequisite: Graduate standing.

EBTM 602 INTRODUCTION TO 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. Topics include: supply chain strategy and planning, supply chain operations, procurement, supply chain risk management, supply chain coordination and integration, global SCM, supply chain revenue management, coordinated product design chain and SC, and supply chain information technologies. Prerequisites: EBTM 501 or successful completion of the Statistics Proficiency Exam; graduate standing.
EBTM 604 INTRODUCTION TO PROJECT MANAGEMENT (3)
Introduces students to the behavioral ad technical aspects of managing projects. Challenges of planning, monitoring and controlling complex projects to achieve the desired cost, quality and performance objectives will be discussed. Topics covered will also include cross-functional project teams, project integration, time management, time-cost trade-offs in project completion and resource allocation. Prerequisites: EBTM 501 or successful completion of the Statistics Proficiency Exam; graduate standing.

EBTM 610 OPERATIONS MANAGEMENT (3)
Demonstrates the significance of efficient and effective management of operations for competitiveness and success in manufacturing and service organizations. Topics include: Overview of the field, capacity management, facility location, Six-sigma quality, statistical quality control, sales and operations planning, inventory control, lean production. Prerequisites: EBTM 501 or successful completion of the Statistics Proficiency Exam; graduate standing.

EBTM 620 PROCUREMENT AND SOURCING (3)
Topics include purchasing decisions and strategy, the legal aspects of purchasing, negotiation product and service quality, lean purchasing, supplier selection and evaluation, supplier relationship management, and special purchasing applications such as health care purchasing, government purchasing, professional service purchasing, transportation service purchasing. Prerequisite: EBTM 501 or successful completion of the Statistics Proficiency exam; graduate standing.

EBTM 625 PROJECT LEADERSHIP AND COMMUNICATION (3)
Advanced project management topics necessary for implementation of, and excellence in, project management. Topics include human resource management, risk management, quality management, project office, conflicts, project leadership and communications management. Project management software will be used to support the course material. Prerequisite: EBTM 604.

EBTM 710 LOGISTICS AND DISTRIBUTION (3)
The study of logistics system and distribution network and related firm strategy in the context of supply chain management. Topics include inventory, logistics network, warehouse management, transportation infrastructure and management, packaging and material handling, outbound logistics, distribution management, reverse logistics, and international logistics. Prerequisite: EBTM 602.

EBTM 715 PROJECT COST ACCOUNTING AND FINANCE (3)
Information and exercises relating to project cost estimation, budgeting and scheduling, cost management, and cost control within several organizations’ frameworks and strategies. Course subjects include a review of accounting, financial analysis, and managerial accounting. Project specific topics include resource planning, cost estimating, cost bugetting, cost control, and business case preparation and analysis. Prerequisite: EBTM 604.

EBTM 720 SUPPLY CHAIN ANALYTICS (3)
Addresses analytics applied in different stages of supply chain and focuses on how technology is used to collect and analyze data to support decision making in the supply chain. Topics include supply chain decision support systems, supply chain optimization technologies, supply chain intelligence, supply chain visibility and collaborative technologies, and other emerging supply chain technologies. Prerequisite: EBTM 602.

EBTM 730 BUSINESS PROCESS MANAGEMENT (3)
Designing and monitoring processes today can involve designing and orchestrating massive systems. Business Process Management (BPM) is a discipline that helps managers and analysts to design, run, administer, and monitor enterprise business processes. Explains BPM concepts, architecture and specifications, introduces the student to process modeling / design tools used to design and optimize business processes as well as performance measuring approaches for evaluating business process performance. Hands-on experience in process modeling using Process modeling and/or workflow software is also provided. Prerequisite: graduate standing.

EBTM 735 SIX-SIGMA QUALITY (3)
Understanding of the processes involved with the implementation of projects involving quality management and six sigma methodologies. Topics will include quality improvement, quality management, process analysis, process redesign, root cause analysis, and continuous improvement. Software including spreadsheet modeling, project management, and flowcharting will be used to support the course material. Prerequisite: graduate standing.

EBTM 740 CUSTOMER RELATIONSHIP MANAGEMENT (3)
Theories and applications in customer relationship management which include analyzing customers to identify their needs and wants, satisfying customer needs and wants by developing customer-centric projects and services, building sustainable customer relationships, and ultimately achieving customer retention and loyalty. Provides students with knowledge and skills that are essential for consumer analyses and market strategies. Students will obtain hands-on experience and analytical CRM as well as data mining applications commonly used in business. Prerequisite: graduate standing.

EBTM 750 PROGRAM AND PORTFOLIO MANAGEMENT (3)
Managing portfolios and programs from a strategic firm perspective. Principle areas of focus within program management will be strategic alignment, benefits management, stakeholder and communication management, risk management and leadership. Principle topics within project portfolio management will include project portfolio methodology, establishing a governance process, project selection techniques, and application of methods to optimize and balance a project portfolio. Using a case study and software tools, students will explore the importance of using organizational strategies to align projects, and apply practices to create portfolio and programs to leverage organizational assets. Prerequisites: EBTM 604 and EBTM 625.

EBTM 790 SPECIAL TOPICS IN SUPPLY CHAIN MANAGEMENT (3)
Current topics in supply chain management covering contemporary and emerging issues. May be repeated for credit provided a different topic is covered. Prerequisites: Graduate Standing, EBTM 602, and completion of at least 12 units in the program.

EBTM 795 INDEPENDENT STUDY (3)
Independent research in specific areas of the field of the degree being pursued. A total of 3 units for any combination of directed readings or independent research is allowed in the area of study. Prerequisites: graduate standing, completion of all 600 and 700 level core requirements.

EBTM 797 INTERNSHIP IN SUPPLY CHAIN MANAGEMENT (3)
Supervised experience in a field setting which facilitates the application of supply chain knowledge. Prerequisites: consent of instructor, graduate standing, completion of all 600 and 700 level core requirements. Graded S/U.
EBTM 881 SUPPLY CHAIN MANAGEMENT CAPSTONE PROJECT (3)
Capstone course and an independent research or applied project in content areas related to supply chain management. Students work under the supervision of their faculty advisors to address a significant theoretical or applied problem in supply chain management. The completed project should clearly present the problem of the research subject investigated or applied project undertaken, its significance to theory and business practice, the research or project background, a well-defined method, results or findings, and their implications. Prerequisite: EBTM 602.

EBTM 882 SUPPLY CHAIN MANAGEMENT CAPSTONE PROJECT CONTINUUM (1)
Designed for students to continue their independent supply chain project in EBTM 881. Students work under the supervision of their faculty advisors to address a significant theoretical or applied problem in supply chain management. The completed project should clearly present the problem of the research subject investigated or applied project undertaken, its significance to theory and business practice, the research or project background, a well-defined method, results or findings, and their implications. Prerequisites: Graduate standing and major standing; EBTM 881.

Early Childhood Education (ECED)

Courses

ECED 603 TEACHER-LEARNER RELATIONSHIPS IN THE EARLY CHILDHOOD CLASSROOM (3)
Theory, philosophy and research on teacher-learner relationships with emphasis on developing corresponding learning classroom environments and interaction between teacher and learner in the early childhood classroom.

ECED 604 MATH/SCIENCE IN THE EARLY CHILDHOOD EDUCATION PROGRAM (3)
Theory, pedagogy and related research on developmentally appropriate practices in math and science for young children, with emphasis on a constructivist approach to learning.

ECED 605 THE ARTS AND YOUNG CHILDREN (3)
Explores the fundamental role of the arts in young children's lives and curricula, expands on teacher understanding of the arts for all individuals, provides references for low- or no-cost materials, as well as concrete, practical strategies for fine arts learning design and implementation. The course identifies how the arts build interest, motivation and learning in all areas of the curriculum.

ECED 607 LEARNER DIVERSITY, CULTURAL RESPONSIVENESS, AND INCLUSION IN EARLY CHILDHOOD EDUCATION (3)
Theory, pedagogy and related research on multiple aspects of learner diversity, with emphasis on developing appropriate culturally responsive and inclusive environments for young children.

ECED 608 INTEGRATED CURRICULUM AND AUTHENTIC LEARNING IN EARLY CHILDHOOD EDUCATION (3)
An integrated approach to learning in preschool and primary programs, with emphasis on social studies, the arts and technology through the Project Approach and inspirations from Reggio Emilia. Based on an understanding of young children's growth and development, and on appropriate curriculum practices with strategies for meaningful learning within various curriculum systems and settings. Addresses the skills, knowledge and attitudes that children need in a diverse, democratic society. Prerequisites: Graduate standing or permission of instructor.

ECED 609 GROWTH AND DEVELOPMENT OF YOUNG CHILDREN (3)
Current theory and research on the growth and development of young children, including both typical and atypical development; methods of studying behavior; implications for early childhood programs. To be completed during the fall or spring semesters within the first 6 credit hours of the program.

ECED 610 LEARNING ENVIRONMENTS: CURRICULUM AND TECHNOLOGY (3)
Research and practice on school transformations and new educational directions as a result of evolving technologies. Examine how emerging technologies can support curriculum and create new learning environments that are developmentally appropriate for young children.

ECED 611 TEACHER AS RESEARCHER: RESEARCH METHODS IN EDUCATION (3)
Development of skills, insights and understanding basic to planning and conducting research, with emphasis on interpretation and application of research results. Focus on research methods and literature applicable to early childhood education. To be completed during the fall or spring semesters within the first 6 credit hours of the program.

ECED 612 CONFLICT RESOLUTION AND MANAGEMENT IN PROGRAMS FOR YOUNG CHILDREN (3)
Examines the nature of young children's peer conflicts, the role of conflict in children's development and ways for practitioners and families to promote children's pro-social interaction, conflict resolution and early violence prevention. Also addresses adult conflict issues in early childhood settings.

ECED 613 PROGRAMS FOR INFANTS AND YOUNG CHILDREN (3)
Research, theory and best practice relating to the development and care of young children from 0 to 3. Examines the design, implementation and evaluation of programs for infants and toddlers. Emphasis on the needs of young children and their families in diverse and inclusive settings.

ECED 614 WORKING WITH LINGUISTICALLY DIVERSE YOUNG CHILDREN AND THEIR FAMILIES (3)
Examines research, theory and practice in educating linguistically diverse learners in the early childhood classroom. Designed to enhance understanding and implementation of instructional materials, methodologies, and assessment practices to support linguistically diverse learners and literacy development. Strategies to enhance collaboration with diverse families and cultures will also be emphasized in this course.

ECED 615 ADMINISTRATION AND SUPERVISION OF EARLY CHILDHOOD PROGRAMS (3)
Theory and practice of operating programs for young children, staff selection and mentoring; curriculum development; working with families; licensing and accreditation; budgeting; program and staff evaluation.

ECED 616 MATERIALS AND PRACTICE FOR MULTIMEDIA TECHNOLOGY AND LEARNING (3)
Research and practice on multimedia technology and early childhood education. Experience and evaluate resources for young children. Experiment and integrate technology in classrooms with young children, grades Pre-K to 3.

ECED 618 THINKING THROUGH THE PROCESSES AND ACQUISITION OF LITERACY (3)
Literacy acquisition, birth through age 8, through study of learning theories based on brain research, cognition, language acquisition. Strategies for integrating reading and writing processes across the curriculum. Bachelor's degree in ECE or related field, teaching experience or permission of instructor.
ECED 619 ASSESSMENT, OBSERVATION AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)
Forms, functions and roles of assessment for planning and implementing effective programs for young children from diverse cultures and home languages and with varied learning needs. Qualitative and quantitative approaches to assessment and evaluation and methods of observing children. Appropriate strategies for conducting, reporting and decision-making related to various procedures and instruments.

ECED 621 ASSESSMENT OF READING AND WRITING IN EARLY CHILDHOOD EDUCATION (3)
Assessment to Guide Instruction: Assessment of primary-grade children's reading and writing. Purposes and types of assessment tools available for use in the classroom, types of information provided by assessment tools and appropriate use of the information including communicating results and formulating specific instructional recommendations to enhance each child's growth in reading and writing.

ECED 623 STRATEGIES FOR TEACHING READING & WRITING: BALANCED LITERACY APPROACHES IN ECED CLASSROOM (3)
Reading and writing instruction with young children: development of comprehensive, effective programs, management of programs, evaluation of learning, use of strategies to develop comprehension, word skill and composition.

ECED 647 ADVANCED PROCESSES OF TEACHING AND LEARNING (3)
Systems of analyzing teaching behavior; models of teaching for achieving cognitive, social and personal learning objectives; and analysis of classroom application of teaching models.

ECED 665 CURRICULUM THEORY AND DEVELOPMENT (3)
History, theories, research and contemporary influences of curriculum development in early childhood education; objectives, content and evaluation; teacher as curriculum developers and implementers.

ECED 670 SPEC TOPICS ECED (1-3)
In-depth study of a selected topic in Early Childhood 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. Each topic may be taken as a separate course.

ECED 671 SPEC TOPICS ECED (1-3)
In-depth study of a selected topic in Early Childhood 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. Each topic may be taken as a separate course.

ECED 672 SPEC TOPICS ECED (1-3)
In-depth study of a selected topic in Early Childhood 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. Each topic may be taken as a separate course.

ECED 680 CELEBRATING THE ARTS WITH YOUNG CHILDREN: INTEGRATING THE ARTS IN CURRICULUM FOR YOUNG CHILDREN (6)
Understanding and integration of the arts in teaching and learning with all young children. Experiences in music, dance, drama, and visual arts, supported by computer technology, with focus on inclusion of children with special needs. Emphasis on developing creative and aesthetic expression. Exploring the potential of the arts in literacy learning and the value of the arts in diverse and inclusive settings. Prerequisite: Graduate standing or consent of the graduate program director.

ECED 692 GRADUATE INTERNSHIP: PREPRIMARY (3)
Integration of theory and practice in a public Pre-Kindergarten or Kindergarten setting with guidance from the classroom mentor teacher and university supervisor. Approximately eight weeks. Graded S/U. Prerequisites: Successful completion of all identified prerequisite coursework; completion of application with the Center for Professional Practice (CPP); consent of Graduate Program Director, Department Chair, and CPP Director.

ECED 693 GRADUATE INTERNSHIP PRIMARY (3)
Integration of theory and practice in a public 1st, 2nd, or 3rd grade setting with guidance from the classroom mentor teacher and university supervisor. Approximately eight weeks. Graded S/U. Prerequisites: Successful completion of all identified prerequisite coursework; completion of application with the Center for Professional Practice (CPP); consent of Graduate Program Director, Department Chair, and CPP Director.

ECED 694 INTERNSHIP IN EARLY CHILDHOOD EDUCATION PROGRAMS (3-6)
Experience relating theory and practice in early childhood education programs. Prerequisites: Early Childhood graduate student standing and consent of the Early Childhood Education graduate program director.

ECED 695 INDEPENDENT STUDY IN EARLY CHILDHOOD EDUCATION (3)
Independent study in selected areas of early childhood education. Prerequisites: Early Childhood graduate student standing and consent of Early Childhood Education graduate program director.

ECED 696 DIRECTED READING IN EARLY CHILDHOOD EDUCATION (3)
Independent readings in journals and professional books in selected areas of Early Childhood Education. Prerequisites: Early Childhood graduate student standing and consent of the Early Childhood Education graduate program director.

ECED 750 PROGRAM DEVELOPMENT AND EVALUATION IN EARLY CHILDHOOD EDUCATION (3)
The design, development and evaluation of programs in education and human services, including early childhood education. Theory, paradigms and models; policy in the program development process; grant writing; Bronfenbrenner's notions of the ecology of human development in the design of programs; budgeting; program evaluation and use of technology in program development.

ECED 752 FAMILIES, SCHOOLS, AND COMMUNITIES IN A CONTEMPORARY CONTEXT (3)
Family, community, and school as a focal point of professional practice for teachers and teacher educators; relationship between teachers and families in support of the education and development of children in the context of the community; addresses teacher/child/family interactions within diverse contemporary communities, including urban, rural, tribal, migrant, linguistic, ethnic and others. Within a bioecological systems framework, the course builds on knowledge base of research, theory and practice, addressing national standards and practical applications for teachers.

ECED 760 CRITICAL PERSPECTIVES IN EARLY CHILDHOOD (3)
In depth consideration of guiding theories and critical perspectives in the field of early childhood. Readings to include original works by Vygotsky, Bronfenbrenner, Piaget and others. Post-modern, feminist, post-colonial perspectives, activity and systems theories offer a critical examination of traditional theories in relation to current research and to the students' professional experiences. Prerequisites: No prerequisite courses. Open only to students in CAS in Early Childhood or with permission of the program director.
ECED 762 LEADERSHIP AND ADVOCACY IN EARLY EDUCATION AND CARE (3)
Theory, research and practice in early childhood as a foundation for leadership in the field and advocacy on behalf of young children, families, communities and the profession. An examination of current issues in the field and strategies for articulating positions and for working toward change. Leadership in teaching administration, policy-making and ethical decision-making. Prerequisites: Open only to students in CAS in Early Childhood Education or other graduate students with permission of the program director.

ECED 764 ETHICS AND SOCIAL JUSTICE IN EDUCATION AND RELATED HUMAN SERVICES (3)
An examination of the nature of ethics, social justice, and related critical social issues, addressing theoretical foundations and emphasis on implications for practice and advocacy among education and other professionals in early childhood education, elementary education, secondary education, special education, and other educational specializations as well as for those in administration and in related human services settings. Open only to students in CAS in Early Childhood Education or to other graduate students with permission of the program director.

ECED 773 SEMINAR IN EARLY CHILDHOOD EDUCATION (3)
The final course for students enrolled in the graduate program in Early Childhood Education. Focus of seminar discussions on issues and topics of importance in early childhood education. Exploration of theoretical, philosophical, historical and/or sociological foundations of topics (to be taken in the final semester of the program).

ECED 794 TRAVEL AND STUDY IN 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.

ECED 897 EARLY CHILDHOOD ED THESIS (6)
Original investigation using acceptable research method and design under the direction of one or more faculty members.

ECED 898 EARLY CHILDHOOD ED THESIS (3)
The previous course, ECED 897, taken over two consecutive semesters.

ECED 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Economics (ECON)

Courses

ECON 505 MICRO ECONOMICS (1.5)
Covers comparative advantage, supply and demand, elasticity, opportunity cost, competition and monopoly, and externalities. Emphasizes understanding concepts that are useful in making effective choices in a variety of economic and managerial situations. Prerequisite: Graduate standing.

ECON 506 MACRO ECONOMICS (1.5)
Covers economic growth, monetary and fiscal policy, inflation and unemployment. Emphasizes understanding concepts, such as Federal Reserve policy, that are useful for managerial decision-making. Prerequisite: Graduate standing.

ECON 540 PERSONNEL ECONOMICS (3)
Use of economics to solve practical personnel problems with specific issues in training, turnover, hiring and incentives. Fringe benefits, evaluation and legal constraints. Prerequisite: ECON 201.

ECON 541 LABOR ECONOMICS AND LABOR RELATIONS (3)

ECON 570 TOPICS IN ECONOMICS (3)
Workshop designed to investigate special topics of current interest 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 a maximum of 18 credits provided a different subject area is covered. Prerequisites: Consent of instructor.

ECON 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.

ECON 585 SEMINAR ON ECONOMIC ISSUES (3)
Research and writing of papers on an economic issue selected by the instructor. Prerequisites: ECON 309, ECON 313 and ECON 310.

ECON 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 instructor.

ECON 605 BUSINESS AND PUBLIC POLICY IN A GLOBAL ECONOMY (1.5)
Employs an economic framework to analyze and evaluate public policy issues affecting business, such as globalization, environmental and health-care matters, and corporate social responsibility. Integrates ethical and managerial implications. Prerequisites: ECON 505 and ECON 506 or permission of the MBA program director.

ECON 670 SPORTS ECONOMICS (3)
Study of sports and the sports industry using economic models. Loosely organized according to the fields of industrial organization, public finance, and labor economics to allow for an investigation of many of the issues that regularly come up in sports. Topics include league makeup, stadium financing, team location, competitive balance, and incentive structures. Prerequisites: ECON 504 or equivalent.

ECON 690 INDEPENDENT STUDY (1-3)
Individual and supervised study in selected areas of economics. Prerequisite: permission of instructor.

ECON 695 SEMINAR IN ECONOMICS (3)
Research and writing of papers on an economics issue selected by the instructor. Prerequisites: ECON 309, ECON 323 and ECON 335.

ECON 697 INTERNSHIP IN ECONOMICS (3)
Supervised work experience designed to provide an understanding of the economic system and the practical applications of economic principles. Prerequisite: Consent of internship coordinator.

Education (EDUC)
Courses

EDUC 506 RECENT TRENDS IN TEACHING (3)
Recent teaching strategies, organizational patterns and curricular innovations for levels PreK-12 are examined. Students may pursue individualized projects. Prerequisite: Student teaching or senior standing with consent of instructor.

EDUC 507 CONTEMPORARY ISSUES IN EDUCATION (3)
Seminar approach to current issues in education. Prerequisite: Student teaching or senior standing with consent of instructor (no prerequisite when offered during the day).

EDUC 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 and criteria for selection and importance in curricula. Prerequisite: Two English courses.

EDUC 553 SUPERVISORY PRACTICES IN TEACHER EDUCATION (3)
Experiences and study in developing particular skills and competencies for supervising quality laboratory/field experiences. Content is designed for supervising teachers, team leaders and resource personnel. Prerequisite: Teaching experience. Graduates count this as a workshop elective.

EDUC 555 TEACHING HISTORY OF ISRAEL (3)
Given Israel's rapidly changing society, U.S. students have questions about the Jewish State. Students will learn core information about Israel's history, politics and culture as well as methodologies to effectively communicate the complexities of these subjects to their own students. Prerequisites: None.

EDUC 570 SPECIAL TOPICS IN EDUCATION (1-3)
In-depth study of a selected topic in education. The specific requirements and prerequisite will vary with each topic and will be designated by the department each time there is an approval of the graduate program director. Each topic may be taken as a separate course.

EDUC 594 TRAVEL AND STUDY EDUCATION (1-6)
Study abroad of educational facilities, programs or practices or selected projects in educational topics. By specific arrangement with program chairperson and sponsoring instructors. Consent of graduate program director required for graduate degree credit.

EDUC 595 INDEPENDENT STUDY IN EDUCATION (1-4)
An opportunity for specially 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 chairperson. Graduate credit by consent of graduate program director only.

EDUC 601 CONCEPTS AND ISSUES IN EDUCATION (3)
Social, economic, historical, political and technological trends that shape educational policy and programs. Prerequisite: grade standing.

EDUC 605 INFORMING EDUCATIONAL PRACTICE TO AFFECT CHANGE (3)
Use of database networks for information retrieval; computer hardware and software application programs appropriate for research and curriculum planning; introduction to distance learning; interactive technologies and resource-based learning. Prerequisite: teaching experience or completion of student teaching.

EDUC 610 THEORY, RESEARCH AND PRACTICE IN TEACHING COMPOSITION (3)
Addresses the theory, research, and practice of teaching composition across all levels (prekindergarten to adult) and disciplines. Prepares participants to be Teacher Consultants of the Maryland Writing Project. Prerequisites: Bachelor's degree and teaching experience; consent of Maryland Writing Project director.

EDUC 611 MENTORING THE PRE-SERVICE CANDIDATE: EFFECTIVE PRACTICES (3)
An analysis of the roles of the cooperating teacher, college supervisor and student teacher; current practices, issues, trends and evaluation in laboratory experiences and current research. Prerequisite: teaching experience.

EDUC 613 MORAL QUESTIONS IN THE CLASSROOM (3)
Develop an understanding of competing models of moral education models that include: a virtues approach, cognitive developmentalism, and care ethics. Consider practical ways to teach texts in a variety of subjects to foster moral development as well as consider school-wide applications of moral education such as character education, discipline, and addressing bullying. Not open to students who have successfully completed LJEC 615.

EDUC 614 ASSESSMENT AND EVALUATION IN EDUCATION (3)

EDUC 615 APPLIED EDUCATIONAL STATISTICS (4)
Educational statistics used in fundamental quantitative research designs. Includes descriptive and inferential through ANOVA. Required laboratory includes current statistical applications software. Prerequisite: Permission of the instructor.

EDUC 645 THEORIES IN EDUCATIONAL ADMINISTRATION (3)
Theoretical bases for educational administration. Prerequisite: Teaching experience and teacher certification.

EDUC 646 HUMAN RELATIONS AND THE PROFESSIONAL (3)
Professional behavior in organizational work place, emphasizing leadership and communication. Prerequisite: Teaching experience or certification.

EDUC 650 SECOND LANGUAGE LITERACY (3)
Foundations of Second Language Literacy acquisition and learning, instructional practices used for differentiation and inclusion, relationships between language arts teacher/reading specialist and ESL specialist, modes of literacy instruction found in English as Second Language, Bilingual, Dual Immersion and content areas-focused settings. Prerequisites: REED 601.

EDUC 651 INSTRUCTION AND ASSESSMENT FOR SECOND LANGUAGE LEARNERS (3)
Course participants will be invited to critically examine approaches to second language development and assessment for children congruent with recent research in second language acquisition in children. Class members will read professional literature framing second language acquisition and discuss strategies for implementing sound theoretical practice within the classroom. How to provide appropriate instruction based on informal and formal assessment results for PreK-12 English Language Learners will be the major focus of this course. Prerequisites: None.
EDUC 652 INTRODUCTION TO LINGUISTICS FOR TEACHERS OF LANGUAGE AND LITERACY (3)
Introduction to the basic principles and concepts of the study of language and its relevancy to teachers of language and literacy. Students will develop foundational knowledge in the areas of grammatical competence (phonology, morphology, syntax, semantic, pragmaticas), spoken and written discourse, language variation, first and second language acquisition, and language processing. The course will equip students to use linguistic analysis to conduct inquiries that address issues or questions about the use, development, assessment and/or teaching of language and literacy in classrooms or other educational settings. Prerequisites: Admission to the M.A.T. program.

EDUC 660 MATTERS OF DIVERSITY, EQUITY, AND EMPOWERMENT IN LEARNING COMMUNITIES (3)
Past and current trends in equity and inclusive education, underlying theories and relationship to teaching in culturally diverse classrooms. Nature of bias and impact on learning environments. Evaluation and development of curriculum relevant to social justice. Prerequisite: Admission to M.A.T. program or permission of the graduate program director.

EDUC 661 RESPONDING TO AND EVALUATING WRITING (3)
Direct assessment using holistic, analytic, primary trait and T-unit analysis; indirect assessment of grammar, punctuation and usage, in-process response techniques. Prerequisite: SCED 603, SCED 605 or SCED 558 or consent of graduate program director.

EDUC 667 WRITING AS THINKING (3)
Research on the writing-thinking connection; self-analysis of thought processes used while writing; analysis of classroom methods for teaching writing and thinking. Prerequisite: SCED 603, SCED 605 or SCED 558 or consent of instructor.

EDUC 670 SPECIAL TOPICS IN EDUCATION (3)
In-depth study of a selected topic in education. The specific requirements and prerequisite will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the appropriate graduate program director is required. Each topic may be taken as a separate course. Prerequisite: varies with each topic.

EDUC 695 INDIVIDUALIZED STUDY (1-6)
Individually planned programs which will permit the student to engage in research and/or field experiences relative to the student’s professional growth. Admission by application to the graduate program director only.

EDUC 715 STATISTICAL PRINCIPLES OF RESEARCH DESIGN AND ANALYSIS (3)
An intermediate level statistics course focusing on the statistical principles and research designs in the field of education. Course covers from single factors through higher-order factorial experiment design, as well as multiple regression modeling. Advanced skills of statistical analysis, calculation, and uses of contemporary statistics software will be developed. Prerequisite: EDUC 615 or equivalent.

EDUC 717 CHILDREN’S LITERATURE AND OTHER MATERIALS FOR TEACHING READING (3)
An in-depth examination of a variety of texts for teaching reading, with particular emphasis on children’s literature and reading software; strategies for selecting and evaluating texts. Review of current research. Prerequisite: Admission to M.A.T. program or permission of the graduate director.

EDUC 730 PRINCIPLES OF LEARNING, DEVELOPMENT AND DIVERSITY (3)
Current theories and research on the nature of learning, development and diversity and its relationship to classroom practice. Prerequisite: Admission to the M.A.T. program.

EDUC 731 CURRICULUM AND ASSESSMENT (3)
Principles and practices of curriculum development, actual school practice and the teacher’s role as a curriculum developer. Prerequisite: Admission to the M.A.T. program.

EDUC 732 RESEARCH METHODOLOGY IN THE INFORMATION AGE (2)
Methods of conducting research using traditional research tools and modern technology. Prerequisite: Admission to the M.A.T. program.

EDUC 734 THE TEACHER AS RESEARCHER (1-3)
Theory and methodology for conducting classroom research with an emphasis on descriptive research approaches. Prerequisite: Admission to M.A.T. program.

EDUC 735 PROSEMINAR: PROBLEMS AND ISSUES (3)
Problems and issues that impact teachers and the education process. Prerequisite: Admission to the M.A.T. program.

EDUC 736 CLASSROOM MANAGEMENT (2)
Disciplinary theories, structuring classes, conflict resolution and coping with deviant behavior. Prerequisite: Admission to the M.A.T. program.

EDUC 737 TEACHING STUDENTS WITH DISABILITIES IN THE MAINSTREAM (2)
Legal bases and methods and materials appropriate for teaching mainstreamed handicapped students. Prerequisite: Admission to the M.A.T. program.

EDUC 738 THE TEACHER AS RESEARCHER - PART II (1)
Theory and methodology for conducting classroom research with an emphasis on descriptive research approaches. Students will evaluate and share results of action research projects. Prerequisite: requires admission to M.A.T. program and EDUC 734 (2 units) in the Fall semester.

EDUC 755 ADULT LEARNING THEORIES (3)
Focuses on theories of adult learning as well as the design and implementation of teaching in higher, adult, and work-based education settings. The overall goal of the course is to develop a critically reflective approach to the teaching of adults.

EDUC 761 INQUIRY FOR PRACTICE (3)
Theory and methodology of educational research. Prerequisite: EDUC 605.

EDUC 762 INTRODUCTION TO EDUCATIONAL EVALUATION (3)
Theory and methodology of education evaluation for systematic appraisal of process, program, staff or institution. Prerequisite: A course in statistics or tests and measurements.

EDUC 765 QUALITATIVE METHODS IN EDUCATION (3)
Qualitative research traditions, methods, theoretical and philosophical perspectives in education are included. Methods of conducting fieldwork, data collection and analysis required for original qualitative research studies are examined from an educational perspective. Prerequisites: students should have successfully completed EDUC 515 or its equivalent; admission is by permit only.

EDUC 770 SPECIAL TOPICS IN EDUCATION (1-3)
In-depth study of a selected topic in education. The specific requirements and prerequisite will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the appropriate graduate program director is required. Each topic may be taken as a separate course.
EDUC 776 INTERMEDIATE STATISTICS IN EDUCATIONAL RESEARCH (3)
This is an intermediate course in educational research and statistics, focusing on the selection and use of statistical analysis appropriate for quantitative research designs. An overview of experimental designs and controls to threats to internal and external threats to validity forms, the vantage point from which statistical analysis are examined. This course does not overlap with any existing course within the college of education. Prerequisites: EDUC 615 Applied Statistics in Education (or equivalent).

EDUC 787 INSTRUCTIONAL PRACTICES IN THE DEVELOPMENT OF LITERACY (3)
Research-based instructional strategies for teaching reading and language arts in the elementary classroom. Includes planning for effective instruction utilizing a balance of phonics, semantics, and syntactics; teaching reading as a strategic process; utilizing developmentally appropriate word recognition and comprehension strategies; and designing instruction on evidence of individual need. Corequisite: EDUC 797.

EDUC 789 RESEARCH METHODS, DESIGN, AND ANALYSIS (3)
Designed to provide an overview of the philosophical and epistemological underpinnings of research methods, as well as an introduction to the theory and practice of qualitative, quantitative, and mixed methods. Prepares students to complete more advanced coursework in qualitative and quantitative research methods and applications. Prerequisite: program admission.

EDUC 790 ADVANCED MEASUREMENTS AND STATISTICS IN EDUCATION (3)
An advanced statistics course for doctoral students focusing on using multivariate statistics in educational research designs. Course covers statistical analyses ranging from multiple regressions, canonical correlation through multivariate analysis of variance and covariance, as well as discriminate function analysis. Advanced skills of experimental and nonexperimental designs, and uses of contemporary statistics software will be developed. Prerequisites: EDUC 715 or EDUC 776.

EDUC 791 ADVANCED QUALITATIVE RESEARCH METHODS (3)
Focus on developing in-depth knowledge and skills in the use of qualitative methodology. Designed for doctoral students and includes philosophical foundations of qualitative inquiry, building the conceptual framework for a study, the methodological issues of research design, issues of validity and logic, as well as data analysis and representation. Through intense reading and writing, students will examine the advances and challenges presented by recent developments and new applications in qualitative research methodology. Prerequisite: EDUC 765.

EDUC 794 PRACTICUM SEMINAR: YEAR ONE (0.5)
This is the first year of a four-semester practicum seminar, required every term for two years, earning students one half unit each term. Prerequisites: None.

EDUC 795 PRACTICUM SEMINAR: YEAR TWO (0.5)
This is the second year of a four-semester practicum seminar, required every term for two years, earning students one unit each year. Prerequisites: None.

EDUC 797 INTERNSHIP I/SEMINAR (1-6)
Best practices for creating and maintaining a positive and productive learning environment will be explored. Participants analyze a variety of learner characteristics that influence student development and academic achievement, including gender, ethnicity, physiology, values, family, and geographic regions, as appropriate for age/grade level and professional specialization. Participants complete extended field experience (as determined by appropriate program director). May be repeated for a maximum of 6 units. Corequisite: Taken concurrently with EDUC 734 in the semester prior to the practicum (student teaching) semester. Prerequisite: Consent of graduate program director, who may require other prerequisites.

EDUC 798 INTERNSHIP II WITH SEMINAR (6)
Supervised teaching experience at the appropriate school level for students in M.A.T. program. Seminar will provide participants with theory-practice connections. Prerequisite: Approval of early childhood education, elementary education or secondary education departments and the graduate program director.

EDUC 897 MASTER OF EDUCATION THESIS (6)
Investigation of selected topics in education.

EDUC 898 THESIS (3)
The previous course, EDUC 897, taken over two consecutive semesters.

Electronic Media and Film (EMF)

Courses

EMF 530 THE MEDIA PRODUCER (3)
Management and administration of film and video projects. Prerequisites: MCOM 267, or MCOM 271, or MCOM 273.

EMF 573 FILM III: ADVANCED 16MM TECHNIQUES (3)
Seminar in professional filmmaking techniques leading to the completion of an original narrative film. Prerequisite: EMF 367.

EMF 575 FILM ANALYSIS (3)
Style of a director, studio or filmmaking method in terms of thematic and formal properties and their influences upon the art of film. Prerequisite: EMF 221.

EMF 587 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 275.

Elementary Education (ELED)

Courses

ELED 557 ENGLISH FOR THE NON-ENGLISH SPEAKING CHILD (3)
Methods of teaching English to elementary school children whose native tongue is another language. Prerequisite: Elementary language-arts methods course or elementary teaching experiences or consent of instructor.

ELED 594 TRAVEL AND STUDY: ELEMENTARY EDUCATION (1-6)
Study abroad for educational facilities, programs or practices or selected projects in elementary education topics. By special arrangement with program chairperson and sponsoring instructors. Consent of graduate program director required for graduate degree credit; may be repeated for a maximum of 6 credits.
ELED 601 CRITICAL AND CREATIVE THINKING (3)
Past and current research and practices in the development of creative and critical thinking potential in children and adults. Examination of cognitive, psychological, and cultural influences and thinking processes; analysis and evaluation of models for differentiated instruction to promote higher level thinking; application and evaluation of various approaches to enhance critical and creative thinking in classroom setting and in personal endeavors.

ELED 611 PRINCIPLES AND PRACTICES OF LANGUAGE AND LITERACY (3)
Study of the theoretical foundations of reading and language arts in an elementary school setting. Exploration of theories and research perspectives on language and literacy development, the nature of reading and writing processes and factors influencing the acquisition of literacy.

ELED 613 READING AND OTHER LANGUAGE ARTS IN THE ELEMENTARY SCHOOL (3)
Application of principles and processes of language and literacy development to reading and language arts instruction. Examination of instructional models, approaches and strategies for supporting literacy development in diverse classroom settings. Prerequisite: Once course in reading instruction.

ELED 621 LITERACY ASSESSMENT IN THE ELEMENTARY CLASSROOM (3)
Examination of theories and principle of classroom literacy assessment. Practice using a range of formal and informal techniques for assessing reading and writing, and using assessment data to plan instruction. Prerequisite: ELED 611.

ELED 628 DESIGN THINKING IN INSTRUCTION AND LEARNING (3)
Introduction to design thinking and its application in education settings, including principles of design thinking; the design process and use of makerspaces in schools; use of design thinking for improving teaching, learning, and schools; and teaching design thinking to P-12 students. Prerequisite: current classroom teacher.

ELED 629 RETHINKING EDUCATION (3)
Explores the history of curriculum policy and development in elementary schools, including basic ethical and philosophical considerations, social implications, and patterns of organization. This course also examines the sociopolitical objectives of school curricula in relation to social theory and historical conflict. The central theme of this course is guided by the following questions: What are the functions and effects of school curricula in American and/or global contexts? How is social theory used to understand contemporary society and schools within these societies? What are the benefits and/or limitations of various curricular philosophies or frameworks? As such, this course emphasizes the principles and processes of curriculum development, as well as the exploration of alternative approaches to learning and schooling. Prerequisites: program admission; certification and teaching experience or consent of instructor.

ELED 631 INTRODUCTION TO EDUCATING THE GIFTED STUDENTS (3)
An introductory course that surveys the history of gifted education, characteristics, and educational needs of gifted children; identification issues, procedures for diverse populations of gifted and talented; current trends in identification of gifted students at the national, state, local levels; overview of curricular and program options for the gifted. Prerequisite: Teaching experience or consent of instructor.

ELED 632 SEMINAR IN SOCIAL AND EMOTIONAL DEVELOPMENT OF GIFTED CHILDREN AND ADOLESCENTS (3)
Course examines unique social, emotional need, characteristics, and development of diverse populations of gifted children, adolescents. Focus on current theories, research related to asynchronous development, psychological response, and promising practices and resources. Prerequisites: Teaching experience.

ELED 640 DISCIPLINE AND MANAGEMENT IN THE ELEMENTARY SCHOOL (3)
Classroom discipline in the elementary school and development of ways and means of implementing appropriate classroom management techniques. Prerequisite: Student teaching, teaching experience or consent of instructor.

ELED 646 DIFFERENTIATED CURRICULUM FOR ADVANCED LEARNING (3)
Examines curriculum, programs designed to promote advanced learning. Focuses on current research, practices addressing learning needs of gifted student, including underserved gifted; acceleration, enrichment options for curriculum; program, curricular models for advanced learning; practices for development, implementation, management, evaluation of curriculum, programs. Prerequisite: Teaching Experience.

ELED 647 ADVANCED PROCESSES OF TEACHING AND LEARNING (3)
Systems for analyzing teaching behavior, models of teaching for achieving cognitive, social and personal learning objectives; and analysis of classroom application of teaching models. Prerequisite: Teaching experience (students enrolling for this class should be teaching).

ELED 648 DIFFERENTIATING INSTRUCTION FOR ADVANCED LEARNING (3)
Current research and practices for development and modification of curriculum and instruction to address learning characteristics of students in the heterogeneous classroom, especially diverse populations of gifted and talented students; approaches for modification of basic curriculum, alternative models for differentiating curriculum and instruction; classroom management, resources for gifted student in the regular classroom. Prerequisite: Teaching experience.

ELED 665 CURRICULUM THEORY AND DEVELOPMENT (3)
History of curriculum development in the elementary school: basic considerations affecting curriculum development, patterns of organization, objectives, practices and evaluation and problems in curriculum development. Prerequisite: Certification and teaching experience or consent of instructor.

ELED 670 SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3)
Study of a topic in elementary education. Requirements and prerequisites vary with each topic.

ELED 685 SEMINAR IN ELEMENTARY SCHOOL SOCIAL STUDIES (3)
Trends, content, issues and materials involved in the teaching of social studies. Students explore one aspect of the subject and present findings.

ELED 695 INDEPENDENT STUDY IN EDUCATION: ELEMENTARY (1-4)
Research problems or study projects relevant to student interest and training. Prerequisite: Consent of the graduate program director prior to registration.
ELED 712 CRITICAL CONVERSION: EARLY LITERACY RESEARCH, POLICY AND PRACTICE (3)
Critically examine current policies, research and instructional trends in early literacy instruction. Engage in personal and collaborative inquiry into important issues affecting all elementary teachers and reading professionals. Examine current professional literature, early literacy research, and key public policy documents representing a range of contrasting perspectives in the field. Prerequisites: Admission to a graduate program in education.

ELED 770 SPECIAL TOPICS IN ELEMENTARY EDUCATION (1-3)
Study of a selected topic in education. Requirements and prerequisites vary according to topic. May be repeated for a maximum of 12 units. Prerequisite: Consent of graduate program director.

ELED 775 INTEGRATED PROFESSIONAL PRACTICE SEMINAR (3)
Trends, issues, problems in education. Integrative investigations through quantitative/qualitative research, curriculum and instruction development, or policy and program development for selected aspects of elementary education. Prerequisites: 27 units of graduate work, EDUC 761 and permission of advisor.

ELED 897 ELEMENTARY EDUCATION THESIS (6)
Original investigation using an acceptable research method and design conducted under the direction of a faculty committee.

ELED 898 ELEMENTARY EDUCATION THESIS (3)
The previous course, ELED 897, taken over two consecutive semesters.

ELED 899 THESIS CONTINUUM (1)
Continuation of thesis research.

English (ENGL)

Courses

ENGL 501 HISTORICAL LINGUISTICS (3)
Introduction to language typology and Indo-European philology; historical development of linguistics up to the 20th century. Prerequisites: Two English courses (not open to students who have completed ENGL 351).

ENGL 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 English courses (not open to students who have completed ENGL 353).

ENGL 511 MEDIEVAL BRITISH LITERATURE (3)
Major British works of the Middle Ages, including Arthurian literature, the Pearl Poet, William Langland, and others. Prerequisites: 2 English courses.

ENGL 512 MEDIEVAL AND EARLY MODERN BRITISH DRAMA (3)
Development of early drama to 1642, excluding Shakespeare, including such authors as Marlowe, Kyd, Jonson, Ford, and Webster. Prerequisites: 2 English courses.

ENGL 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. Prerequisite: two ENGL courses.

ENGL 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. Prerequisites: 2 English courses.

ENGL 515 EIGHTEENTH-CENTURY BRITISH LITERATURE (3)
Social and intellectual backgrounds, literary trends and significant authors, such as Swift, Pope, Fielding, Johnson and Bowell, with emphasis on satire. Prerequisite: Two English courses (not open to students who have completed ENGL 325).

ENGL 516 LITERATURE OF THE BRITISH ROMANTIC PERIOD (3)
Major writers such as Blake, Wordsworth, Coleridge, Byron, Shelley and Keats, from 1790 to 1830 with emphasis on the philosophic and social backgrounds. Prerequisite: Two English courses (not open to students who have completed ENGL 326).

ENGL 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 English courses (not open to students who have completed ENGL 331).

ENGL 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 English courses (not open to students who have completed ENGL 341).

ENGL 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, Cooper, Carter, Yolen, and Sexton. Prerequisite: Two ENGL courses. Prerequisite: Two English courses (not open to students who have completed ENGL 342).

ENGL 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 English courses (not open to students who have completed ENGL 420).

ENGL 521 DEVELOPMENT OF THE BRITISH NOVEL: 19TH CENTURY (3)
Mainly Victorian fiction and its social background, especially works by Scott, the Brontes, Thackeray, Dickens, Eliot and Hardy. Prerequisite: Two English courses (not open to students who have completed ENGL 421).

ENGL 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 English courses (not open to students who have completed ENGL 422).

ENGL 523 MODERN BRITISH POETRY (3)
Emphasis on Hopkins, Hardy, Yeats, Auden, Spender, Sitwell, Thomas and Larkin. Prerequisite: Two English courses (not open to students who have completed ENGL 423).

ENGL 525 CHAUCER (3)
Major poems, especially "The Canterbury Tales" and "Troilus and Cressida." Prerequisite: Two English courses (not open to students who have completed ENGL 425).

ENGL 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 six units. Prerequisites: two ENGL courses.

ENGL 527 SHAKESPEAREAN COMEDY (3)
Shakespeare's development as a poet and dramatist in the comedies and romances. Prerequisites: Two English courses (not open to students who have completed ENGL 427).
ENGL 528 SHAKESPEAREAN TRAGEDY (3)
Shakespeare's development as a poet and dramatist in the histories and tragedies. Prerequisite: Two English courses (not open to students who have completed ENGL 428).

ENGL 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: 2 English courses.

ENGL 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 English courses (not open to students who have completed ENGL 431).

ENGL 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 English courses (not open to students who have completed ENGL 432).

ENGL 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 English courses (not open to students who have completed ENGL 433).

ENGL 535 DEVELOPMENT OF THE AMERICAN NOVEL: 19TH CENTURY (3)
Major novelists, such as Cooper, Melville, Hawthorne, Twain, Howells, James and Crane. Prerequisites: Two English courses (not open to students who have completed ENGL 435).

ENGL 536 DEVELOPMENT OF THE AMERICAN NOVEL: 20TH CENTURY (3)
Major novelists, such as Fitzgerald, Hemingway and Faulkner. Prerequisite: Two English courses (not open to students who have completed ENGL 436).

ENGL 537 AMERICAN POETRY THROUGH FROST (3)
Puritan beginnings through the early 20th century, with emphasis on Emerson, Poe, Whitman, Dickinson and Frost. Prerequisite: Two English courses (not open to students who have completed ENGL 437).

ENGL 538 MODERN AMERICAN POETRY (3)
Poetry and poetics of the Modern Period. Major authors including Eliot, Moore, Stevens, and movements studies include Imagism, Harlem, Renaissance, and Objectivism. Prerequisites: Two English courses.

ENGL 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: Two English courses.

ENGL 541 MODERN FICTION TO WORLD WAR II (3)
Works of the modern masters of fiction, with emphasis on Proust, Mann and Joyce. Prerequisite: Two English courses (not open to students who have completed ENGL 441).

ENGL 542 MODERN FICTION SINCE WORLD WAR II (3)
Works of the significant writers—English, American and Continental—of the past 30 years, including such figures as Grass, Robbe-Grillet, Solzhenitsyn and Burgess. Prerequisite: Two English courses (not open to students who have completed ENGL 442).

ENGL 543 MYTH AND LITERATURE (3)
Literary reinterpretations of themes and figures from Greek and Roman mythology. Prerequisite: Two English courses (not open to students who have completed ENGL 343).

ENGL 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 including fiction, poetry and drama. Not open to those who have successfully completed ENGL 347. Prerequisite: two ENGL courses.

ENGL 550 ANALYTICAL GRAMMAR (3)
The grammar of English through analysis of the constituent structure of words, phrases, and clauses. Prerequisite: Two English courses (not open to students who have completed ENGL 350).

ENGL 552 STRUCTURE OF THE ENGLISH LANGUAGE (3)
Study of the phonology, morphology, syntax, and semantics of present-day English. Prerequisites: two ENGL courses. Not open to students who have completed ENGL 452.

ENGL 557 HISTORY OF THE ENGLISH LANGUAGE TO 1500 (3)
Language change in English from its Indo-European origins through the Middle English period. Prerequisites: Two English courses. Not open to students who have completed ENGL 451).

ENGL 559 OLD ENGLISH (3)
Study of the literature, history, culture, and language of the Anglo-Saxons with a focus on acquiring a reading knowledge of Old English. Prerequisites: Two ENGL courses.

ENGL 561 HISTORY OF LITERARY CRITICISM (3)
Major statements in literary theory from Aristotle to the present, including Horace, Sidney, Johnson, Coleridge, Eliot and Frye. Prerequisite: Two English courses (not open to students who have completed ENGL 461).

ENGL 564 TOPICS IN LITERARY THEORY (3)
Intensive study of a particular theoretical approach to literature or literary study, including philosophical background and practical implications. May be repeated for a maximum of 6 units provided a different topic is covered. Prerequisite: ENGL 102 or ENGL 190.

ENGL 565 BRITISH AND AMERICAN PROSE (3)
Nonfictional prose, with emphasis on form and style. Prerequisite: Two English courses (not open to students who have completed ENGL 461).

ENGL 571 TOPICS IN WORLD LITERATURE (3)
Authors, periods, genres or conventions. Variation in content from year to year; may be reelected once. Prerequisite: Two English courses.

ENGL 572 TOPICS IN BRITISH LITERATURE (3)
Authors, periods, genres or conventions. Variation in content; may be reelected once. Prerequisite: Two English courses.

ENGL 573 TOPICS IN AMERICAN LITERATURE (3)
Authors, periods, genres or conventions; variation in content. Prerequisite: Two English courses.

ENGL 575 TOPICS IN LINGUISTICS (3)
Topics and issues in contemporary linguistics theory, with particular attention to recent interdisciplinary subspecialty developments: psycholinguistics, sociolinguistics, pedagogic linguistics, etc. Topics to vary. Prerequisite: One linguistics course or consent of the instructor. May be reelected once (not open to students who have completed ENGL 475).

ENGL 576 TOPICS IN MULTIETHNIC AMERICAN LITERATURE (3)
Possible topics include women in ethnic literature, Jewish writers and the Catholic novel. Variation in content; may be reelected once. Prerequisite: Two English courses (not open to students who have completed ENGL 476).
ENGL 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 English courses.

ENGL 580 VOICES OF MEDIEVAL WOMEN (3)
Examines the voices assumed by and assigned to women in European literature of the tenth to the fifteenth centuries. Emphasis on medieval women authors, including Hrotsvit von Gandersheim, Hildegard von Bingen, Heloise, Marie de France, Christine de Pizan, and Margery Kempe. Prerequisite: Two ENGL courses.

ENGL 585 SEMINAR IN ENGLISH STUDIES (3)
Intensive study of an area of English studies including English, American World literature, a particular period, school, genre, topic including linguistic, critical theory, rhetoric or creative writing. Prerequisite: Senior standing.

ENGL 586 SEMINAR IN ENGLISH STUDIES (3)
Intensive study of an area of English studies including English, American World literature, a particular period, school, genre, topic including linguistic, critical theory, rhetoric or creative writing. Prerequisite: Senior standing.

ENGL 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 only. Prerequisite: 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 chairperson and instructor (not open to students who have completed ENGL 490).

ENGL 594 TRAVEL AND STUDY (3-6)
Countries and topics to be selected by the department 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: Two English courses.

ENGL 595 THE CLASSICAL WORLD IN THE MODERN IMAGINATION (3)
Study abroad. Examination of the modern fascination with classical myth, culture, and history as it appears in artistic and intellectual productions of Europe and America.

ENGL 621 STUDIES IN ENGLISH LITERATURE (3)
Study of one major area of English literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

ENGL 623 STUDIES IN LITERARY CRITICISM (3)
Study of one major area of literary criticism (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

ENGL 625 STUDIES IN AMERICAN LITERATURE (3)
Study of one major area of American literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

ENGL 627 STUDIES IN WORLD LITERATURE (3)
Study of one major area of world literature (author, period, movement, etc.); areas vary from semester to semester. Prerequisite: Graduate standing or consent of department.

ENGL 631 STUDIES IN LINGUISTICS (3)
Topics in the technology and philosophy of language: descriptive grammar, psycholinguistics, sociolinguistics, etc. Topics vary from semester to semester. Prerequisite: Graduate standing or consent of department.

ENGL 750 MASTER AUTHORS (1)
Study of a classic author of history, fine arts, literature, philosophy, religion or rhetoric. May be repeated for a maximum of six credits. Prerequisite: Bachelor's degree.

Entrepreneurship (ENTR)

Courses

ENTR 605 CREATIVITY AND THE ENTREPRENEURIAL MINDSET (1.5)
Focuses on personal and organizational creativity and enables students to recognize and develop creative abilities in organizations. Includes a final team-based new product pitch that allows students to apply creativity in a business context. Prerequisite: Graduate standing.

ENTR 795 ENTREPRENEURSHIP PRACTICUM (3)
Provides students an opportunity to work with a new company or product/service division on a real-life entrepreneurship project. They will work in consulting teams composed of teammates with varying specializations and interests. Projects may deal with market analyses, feasibility studies, distribution analyses or a variety of other specific company needs.

Environmental Science/Studies (ENVS)

Courses

ENVS 601 TOPICS IN ENVIRONMENTAL GEOLOGY (4)
Geological concepts related to developed and developing areas; topics include earth materials, soils and soil formation, hydrological cycle, waste management; water management; geological issues in land-use decision making. Some field work might require weekend obligations. Prerequisite: admission into the graduate program in Environmental Science or consent of the instructor. Lab/Class fee will be assessed.

ENVS 602 ENVIRONMENTAL CHEMISTRY (4)
Principles of chemistry applied to environmental pollutants; physiochemical processes controlling pollutant transport, fate and distribution; partitioning of water, soil and air as they relate to biotic systems. Some field work might require weekend obligations. Prerequisite: admission into the graduate program in Environmental Science or consent of the instructor. Lab/Class fee will be assessed.

ENVS 603 ENVIRONMENTAL LAW AND REGULATIONS (3)
Operation of the American legal system as it functions to control and remediate environmental problems; emphasis on the law and legal processes which govern environmental disputes; function of legal institutions in these disputes; role of regulations in environmental protection. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.
ENVS 604 ECOSYSTEM ECOLOGY (4)
Principles of ecosystem ecology; factors controlling ecosystem structure and function; energy balance and biogeochemical cycles. Emphasis on ecological impacts of human alterations and urbanized ecosystems. Development of student capacity for "systems thinking" via modeling in field and laboratory based investigative projects. Implications for environmental management from local to global scale. Some field work might require weekend obligations. Prerequisite: admission into the graduate program in Environmental Science or consent of the instructor. Lab/Class fee will be assessed.

ENVS 630 CONCEPTS OF ENVIRONMENTAL ENGINEERING (3)
Introduction to the principles and concepts of environmental engineering for non-engineers; review and discuss methods of assessment and design; modeling methods used; critical assessment of design and different design paradigms; problem solving approaches.

ENVS 635 WETLANDS IDENTIFICATION, CONSERVATION AND DELINEATION (4)
The ecological, chemical and physical principles of wetlands biology; characterization, description and mapping of wetland habitats. Wetlands regulations and their ecological basis including hydric soil field indicators, interrelationship of landscape, vegetation and soils. Use of topographic maps, aerial photography, National Wetland Inventory maps and simple survey techniques. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 640 ECOTOXICOLOGY (3)
Fate, activity and dose-response relationships of organisms to environmental toxicants; their absorption, distribution, metabolism and excretion; evaluation of physical, chemical and biological factors that influence toxicity. Quantitative methods and models used in acute and chronic toxicity studies. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 645 FLUVIAL GEOMORPHOLOGY AND HYDROLOGY (4)
Hydrologic and morphologic characteristics of streams and valley floors; landscape evolution by stream erosion and deposition, rainfall runoff relationships. Field exercises include quantitative analysis of fluvial processes, channel forms, mapping, topographic surveying, report writing. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 650 AQUEOUS GEOCHEMISTRY (4)
Application of thermodynamics, mass balance, systems science, and kinetics to understanding mineral-water-contaminant interactions in natural and impacted aquatic systems on a variety of spatial and temporal scales. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 670 INDEPENDENT STUDY IN ENVIRONMENTAL SCIENCE (1-3)
Studies in selected content areas tailored to student needs. This course may be repeated for a total of 3 credits. Prerequisites: Consent of instructor and matriculation in the Environmental Science graduate program.

ENVS 680 SELECTED TOPICS IN ENVIRONMENTAL SCIENCE (1-4)
Topics in environmental science will be chosen. Course content and field exercises will be determined as to complement course offerings in environmental science. Some field work might require weekend obligations. Prerequisite: admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 682 SELECTED TOPICS IN ENVIRONMENTAL SCIENCE (1-4)
Topics in environmental science will be chosen. Course content and field exercises will be determined as to complement course offerings in environmental science. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 683 SELECTED TOPICS IN ENVIRONMENTAL SCIENCE (1-4)
Topics in environmental science will be chosen. Course content and field exercises will be determined as to complement course offerings in environmental science. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 686 SELECTED TOPICS IN ENVIRONMENTAL SCIENCE (1-4)
Topics in environmental science will be chosen. Course content and field exercises will be determined as to complement course offerings in environmental science. Some field work might require weekend obligations. Prerequisite: Admission into the graduate program in Environmental Science or consent of the instructor.

ENVS 798 RESEARCH PRACTICUM (3)
An analytical position paper on an approved topic written under faculty supervision. Students are expected to demonstrate scientific literacy, communication skills, critical thinking, and critical analysis in the research practicum. This course cannot be repeated. Prerequisite: Admission to the Graduate Program in Environmental Science, completion of four core courses. Permit required.

ENVS 896 THESIS (1-6)
Thesis research. Graded S/U. Prerequisites: Completion of two core courses in the graduate program in Environmental Science and endorsement by at least one member of the graduate faculty willing to serve as research adviser.

ENVS 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Family and Human Services (FMST)

Courses

FMST 505 PARENT CHILD RELATIONSHIPS ACROSS THE LIFESPAN (3)
Parent-child relationships from pregnancy and childbirth through the death of elderly parents using systems and life perspectives. Cultural and contextual factors shaping the parent-child relationship. Prerequisites: FMST 101 or consent of instructor.

FMST 515 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 201, FMST 301, FMST 302, FMST 303, ECED 201, and (FMST 305 OR EDUC 201) or consent of the instructor.

FMST 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 240, PSYC 101, SOCI 101, and PSYC 203.

FMST 545 INTRODUCTION TO ART THERAPY (3)
An overview of the art therapy field, presenting its history, major practitioners, and theoretical bases. Prerequisites: FMST 101, PSYC 101, and PSYC 203. Lab/Class fee will be assessed.
FMST 550 FUNDAMENTALS OF LEADERSHIP IN THE NON-PROFIT SECTOR (3)
Overview of non-profit organizations, roles and responsibilities of leaders in the non-profit sector, issues concerning nonprofits. Junior/Senior standing required. Prerequisites: PSYC 101, SOCI 101, ENGL 102, FMST 101, FMST 201, and consent of Chair.

FMST 555 FUNDRAISING, FUNDRAISING AND VOLUNTEER MANAGEMENT (3)
How nonprofit organizations generate and manage financial and human resources, including the theoretical, behavioral and pragmatic foundations of philanthropy, fund development, and volunteering. Prerequisites: FMST 350/ FMST 550 and MKTG 341.

FMST 570 SPECIAL TOPICS IN FAMILY STUDIES (3)
In-depth study of a selected topic in Family Studies. May be repeated for a maximum of nine units. Prerequisite: FMST 101.

FMST 601 APPLIED FAMILY RELATIONSHIPS (3)
Course explores the fundamental components of the development and maintenance of family relationships. Students will critically analyze various perspectives and techniques of interpersonal relationships and will apply knowledge through case analysis. Content will include topics such as conflict resolution, intimacy and distance in relationships, relationship enhancement and maintenance, and exploration of family stories through case analysis. Prerequisites: Graduate standing and consent of program director.

FMST 602 CHILD LIFE PROFESSIONAL SEMINAR (1)

FMST 603 THERAPEUTIC BENEFITS OF PLAY (3)
Examination of the history of hospital play programs, theoretical basis for play and how play techniques are used to promote healing, growth and development for children and adolescents as it relates to the profession of child life. Prerequisite: consent of department.

FMST 604 BEREAVEMENT, GRIEF AND LOSS: A CHILD LIFE PROSPECTIVE (3)
Investigation of bereavement, grief and loss in child life practice. Prerequisite: consent of department. Lab/Class fee will be assessed.

FMST 610 FAMILY-PROFESSIONAL COLLABORATION (3)
Problem-based learning from a multidisciplinary perspective to enhance professional and family collaboration. Prerequisites: Graduate standing and consent of instructor.

FMST 615 APPLIED RESEARCH METHODS IN FAMILY SCIENCE (3)
Program evaluation methodology for assessment of practice of human services. Prerequisites: Graduate standing.

FMST 620 PROJECT IN FAMILY FOCUSED PROGRAM DEVELOPMENT (3)
Exploration of complex relationships in family program development, and student involvement in a family focused service learning project. Students will conduct initial field exploration to identify a focus area that could benefit from creative family programming. Potential service areas are school communities, social service agencies, and non-profit programs. The project will require a comprehensive needs assessment to identify problems and a program plan designed to offer intervention. Prerequisites: Graduate standing and consent of Program Director.

FMST 640 MEDICAL ASPECTS OF ILLNESS: A CHILD LIFE PERSPECTIVE (3)
An overview of the childhood disease process and its possible impact on child and family. Prerequisites: FMST 340/540 and graduate standing.

FMST 670 SPECIAL TOPICS IN FAMILY STUDIES (3)
Study of selected topics in Family Studies. Topics will vary according to instructor. May be repeated for a maximum of 9 units. Prerequisites: graduate standing and consent of program director.

FMST 691 INDEPENDENT STUDY IN FAMILY STUDIES (1-6)
The independent study course provides student with the opportunity to explore an in-depth topic specified to the area of concentration under the direction of graduate program faculty member. This course may be repeated for a maximum of 6 units. Prerequisites: Graduate standing and consent of program director.

FMST 697 GRADUATE INTERNSHIP IN FAMILY STUDIES AND COMMUNITY DEVELOPMENT (4)
Graduate human service internship experience. Prerequisite: department permission [consent of program director].

FMST 880 GRADUATE PROJECT IN FAMILY STUDIES (3)
Implementation and documentation of a research project specific to child life or administration of child life programs or family involvement in a practice setting. Project examples: FMST 620 program implementation, graduate faculty research project, and research project in a child life setting such as a hospital (for students who have completed FMST 640). Prerequisites: FMST 615 or approved research methods course, FMST 601, FMST 610, and FMST 620; students must submit the project approval form and receive approval from instructor and department graduate committee, research projects may require the completion of an independent study prior to FMST 880.

FMST 897 FAMILY AND HUMAN SERVICE THESIS (6)
Original investigation using an acceptable research method and design conducted under the direction of a faculty member. Graded S/U. Prerequisites: completion of a minimum of 26 units toward the MS in CLAF/C including completion of FMST 615 and FMST 620; permission from Graduate Program Director and Department Chairperson.

FMST 898 FAMILY AND HUMAN SERVICE THESIS (3)
The previous course, FMST 897, taken over two semesters. Prerequisites: completion of a minimum of 26 units toward the MS in CLAF/C including completion of FMST 615 and FMST 620; permission from Graduate Program Director and Department Chairperson.

FMST 899 FAMILY AND HUMAN SERVICE THESIS CONTINUUM (1)
Continuation of graduate thesis. Prerequisite: previous registration for graduate thesis.

Finance (FIN)

Courses

FIN 505 ESSENTIALS OF FINANCE (1.5)
Provides students with knowledge and understanding of the basic concepts of financial management and how they can be applied to maximize the value of a corporate entity. Topics include financial statement analysis, time value of money, financial markets and interest-rate determination, security pricing and valuation, and decision tools. Prerequisites: ACCT 505 and ECON 505.

FIN 605 FINANCIAL MANAGEMENT (1.5)
Provides intermediate-level coverage of topics in financial statements and their analysis, financial forecasting, security risk and pricing, capital budgeting and nonpublic corporate finance. Prerequisites: FIN 505, OPRE 505, ECON 506 or permission of the MBA program director.
FIN 615 ENTREPRENEURIAL FINANCE (1.5)  
Provides intermediate-level coverage of topics in venture capital and private equity, asset allocation, security risk and pricing, decision-making and nonpublic corporate finance. Prerequisite: FIN 605.

FIN 625 CORPORATE FINANCE (1.5)  
Provides intermediate-level coverage of topics in financial statements and their analysis, financial forecasting, security risk and pricing, capital budgeting, capital structure and derivative instruments such as options and futures. Prerequisite: FIN 605.

FIN 700 FINANCIAL REPORTING (3)  
Integrates US GAAP and International Financial Reporting Standards (IFRS) to develop student understanding of financial accounting transactions, reporting standards, and financial statements. Case materials and financial statements of U.S. and international companies are incorporated. Topics include: financial reporting, financial statement presentation issues, cash flow analysis, measurement and assumption issues (including fair value accounting), and classification and recognition issues. Prerequisites: FIN 640, ACCT 504.

FIN 704 BANK MANAGEMENT (3)  
An in-depth examination of the theory and practice of financial decision-making for banks and other depository institutions using both a traditional and a case approach. Topics include bank performance analysis, strategic planning, interest-rate risk management, liquidity management, investment management, loan management, securitization and global bank activities. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 705 ADVANCED FINANCIAL ANALYSIS (3)  
Designed to extend the knowledge and skills acquired in FIN 640 by applying the tools of financial analysis and decision-making at the advanced level. A variety of case and other live problem applications include coverage of the areas of diagnostic financial statement analysis, complex time value of money applications, capital market theory and portfolio management, financial performance forecasting and valuation and development and management of financial policy. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 715 INVESTMENT ANALYSIS (3)  
A study of valuation and measurement of risk and return of financial instruments in the context of a modern portfolio theory. Coverage of securities includes a variety of stock and bond types, as well as futures and options contracts. Prerequisites: Graduate standing and FIN 640.

FIN 720 GLOBAL FINANCE (3)  
The unique issues faced by a corporation doing business in a global environment, especially regarding the efficient management of financial resources. Topics include economic, transaction and accounting exposure to currency price fluctuations. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 725 RISK MANAGEMENT (3)  
A comprehensive overview of concepts and tools of corporate risk management. Critical questions addressed include the motivation for risk management, identification and measurement of risk, and managing risk trade-offs and value added. Coverage of risk management tools begins with the classic Value-at-Risk measure and continues by developing and critiquing more sophisticated methods, including the application of options and futures contracts. Tools are then applied to problems of managing interest rate risk, credit risk and other forms of operating risk. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 730 FIXED-INCOME SECURITIES (3)  
An introduction to the analysis of fixed income securities, beginning with an overview of the bond market and its mechanisms. A detailed and rigorous examination of bond characteristics and the mathematics of bonds will be made. Analysis will extend to a range of fixed-income securities, such as treasury securities, corporate securities and mortgages. Broader strategies for fixed-income portfolio management will also be examined. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 735 FINANCIAL MODELING (3)  
Covers the standard financial models in both corporate finance and investments, including capital budgeting, capital asset pricing model, bond calculations and option models. These models will be implemented using Excel and/or MATLAB. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 745 DERIVATIVE INSTRUMENTS (3)  
Provides information relevant to a wide range of derivative instruments, including financial and agricultural options, equity options, futures options, currency options and index options. Emphasis is on pricing models, as well as on strategies to identify, price, hedge and transfer risk using derivative instruments. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 750 REAL ESTATE INVESTMENT (3)  
Advanced course in the analysis and valuation of real property, with an emphasis on income producing property. Topics include: cash flow analysis, internal rate of return calculations under uncertainty, basic appraisal techniques, alternative financing forms, market analysis and the securitization of real property and mortgages. Both theory and case analysis are used. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 760 SOCIAL ENTERPRISE AND ENTREPRENEURSHIP (3)  
Successful nonprofit organizations are constantly challenged to expand their impact, be socially responsible and fiscally accountable and find new sources of revenue. In response, more and more organizations are discovering innovative ways to generate both financial and social returns on their investments. Students and selected nonprofits learn about successful ventures and engage in lectures and hands-on work to determine the feasibility of entrepreneurial ideas, recognize and overcome financial obstacles and convert social venture ideas into reality. Prerequisites: MGMT 760 or MKTG 762, and FIN 640 University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.
FIN 770 ENTRPRENEURIAL FINANCE AND VENTURE CAPITAL (3)
Financing an entrepreneurial organization from start-up to initial public offering and beyond. Topic coverage includes identification and assessment of capital needs, financial planning, sources of capital and the role of venture capital and the capital markets in financing entrepreneurial organizations. Prerequisite: FIN 640 University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 780 BUSINESS VALUATION (3)
Building on the theory and techniques of cash flow analysis, valuation and investments, this course involves a study of the methods and motives for corporate restructuring. Topics include market discipline and incentive alignment, reinvestment and distribution of cash flows, managing capital structure and mergers, acquisitions and divestitures. Prerequisite: FIN 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 797 SPECIAL TOPICS IN FINANCIAL MANAGEMENT (3)
Specialized topics in finance, allowing flexibility for both the changing developments in finance and the educational needs of students. Topic areas may include entrepreneurial finance, cash and liquidity. Exact topics are posted in the university schedule of classes. May be repeated for credit as topics vary. Prerequisite: FIN 640 or area approval. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

FIN 799 INDIVIDUAL RESEARCH (1-3)
Individual research in an area of interest to the student. The expectation is that work equivalent to a regular graduate course will be completed. Formal paper(s) will be written under the supervision of a full-time faculty member. Prerequisite: approval of chair of Division of Economics, Finance and Management Science. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

Forensic Science (FRSC)

Courses

FRSC 600 FORENSIC SCIENCE AND LAW (3)
Study of the judicial response and requirements to uses of forensic science analysis of physical evidence in the investigation, prosecution, and defense of a crime with an emphasis on legal casework associated with rules of admissibility of evidence. A practicum involving mock trial courtroom testimony is essential part of the course. Professional ethics related to forensic science and courtroom testimony is a main component of this course.

FRSC 601 FORENSIC MOLECULAR BIOCHEMISTRY (3)
Overview of the principles of molecular biology and genetics as it applies to Forensic Science including: DNA metabolism, recombination and mapping, repeat of DNA sequences, statistics and significance of variation, Polymerase Chain Reaction, human identification through DNA technologies, population genetics, relationship analyses and databasing.

FRSC 602 FORENSIC CHEMISTRY (3)
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, explosives analysis, arson examination, firearms and tool marks, latent prints and trace evidence. Emphasis will be placed on the value of such examinations as presented by the expert witness in criminal trial. Four hours of lecture/laboratory per week. Lab/Class fee will be assessed.

FRSC 604 CRIME SCENE AND IMPRESSION EVIDENCE (3)
The interdisciplinary aspects of forensic science are taught through a variety of lectures and practical exercises including crime scene analysis, documentation and processing, evidence recovery procedures, latent print development and examination, firearms and tool marks examination, impression evidence examination, and trace and blood evidence recognition and collection. Ethical and legal requirements associated with crime scene processing will be taught from chain of custody through expert court testimony. Prerequisite: program admission.

FRSC 610 FORENSIC SEROLOGY (3)
Instruction and laboratory practice in identifying body fluids and body fluid stains using various biochemical, instrumental, microscopic and electrophoretic methods to determine their possible origin and species prior for forensic DNA analysis. Blood spatter pattern recognition will be described and used in determining the most probative samples for study at the crime scene and on evidence samples to undergo analysis. Core course to be taken first year in program. Intended for MSFS students only. Four lecture/lab hours per week. Prerequisites: FRSC 601 and department consent. Lab/Class fee will be assessed.

FRSC 620 DNA TECHNOLOGIES (3)
Instruction and laboratory practice in identifying body fluids and body fluid stains as to their source using state of the art DNA technology. Methods include extraction of DNA from forensic biological samples, quantification of the extracted DNA, molecular amplification of the extracted DNA and visualization of short segments known as short tandem repeats or STR’s. Four lecture/lab hours per week. Prerequisite: FRSC 610. Lab/Class fee will be assessed.

FRSC 621 ADVANCED DNA TECHNOLOGIES (3)
Instruction and laboratory practice in identifying body fluid stains as to their source using current state of the art DNA technology. Instrumental methods of analysis will be emphasized; interpretation of DNA data using appropriate software and the statistical analysis; report writing and oral presentations in a mock trial. Four lecture/laboratory hours per week. Prerequisite: FRSC 620. Lab/Class fee will be assessed.

FRSC 640 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 physicochemical 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/lab hours. Lab/Class fee will be assessed.

FRSC 650 FORENSIC MICROSCOPY (3)
Instruction and laboratory practice in the methods of collecting, handling, preparing, identifying and comparing items of trace and biological evidence and utilization of the stereomicroscope, microspectrophotometer, scanning electron microscope, polarizing microscope, compound microscope, fluorescent microscope, hot stage microscope and comparison microscope. Advanced elective intended for MSFS students. Open to MS Forensic Science students only. Prerequisite: department consent.

FRSC 660 DEATH ANALYSIS IN FORENSIC SCIENCE (3)
The forensic examination of the deceased through a multifaceted approach of different forensic specialties. Topics include identifying the deceased, determining the cause and manner of death, and establishing the post mortem interval. Advanced elective for MSFS students.
FRSC 670 FORENSIC ANALYTICAL METHODS (3)
Analytical instrumentation used for analysis of drugs, arson, explosives, and trace evidence. Laboratory work includes sample preparation, handling, analysis and data interpretation for samples from simulated crime scenes. Use and conformity to standard protocols, quality assurance, and quality control methods, statistical methods for calibration and analysis of data. Four laboratory/lecture hours. Lab/Class fee will be assessed.

FRSC 690 FORENSIC TOXICOLOGY (3)
Provides in-depth knowledge of forensic, analytical chemistry and toxicology principles as they pertain to the commonly encountered abused and toxic substances. Includes modules in various topics, i.e. alcohol and volatiles, legal and illegal drug effects on human performance and postmortem toxicology. A series of case studies will be used to reinforce concepts and to combine individual topics covered in each module. Prerequisite: FRSC 602 may be taken concurrently.

FRSC 695 SPECIAL TOPICS IN FORENSIC SCIENCE (3)
In-depth study in a selected area pertaining to forensic science. Can be taken up to four times for a total of 12 units provided a different topic is taken each time.

FRSC 787 GRADUATE INTERNSHIP IN FORENSIC SCIENCE (3)
Supervised laboratory experience relating forensic theory and practice. The internship will be carried out in a commercial, city, county or federal laboratory. May be repeated for a maximum of 6 credits. This course can only be taken by Forensic Science Masters students. Special permit required for this course.

FRSC 797 GRADUATE SEMINAR FOR FORENSIC SCIENCE (1)
Student reports and discussion dealing with forensic research. Students are also expected to attend seminars pertaining to forensic and other natural sciences given on the university campus throughout their program. This course is for students enrolled in MS Forensic Science Program. Prerequisites: enrollment in Forensic Science graduate program and Permission of the Program Director.

FRSC 880 RESEARCH PROJECT IN FORENSIC SCIENCE (3)
Laboratory research of a matter of forensic significance under the direction of a 3 member research committee headed by a faculty mentor at Towson University. Before beginning the research project, students must present their proposals for approval by the faculty mentor and research committee. The project can be carried out on campus, or at a cooperating forensic laboratory under the joint supervision of a faculty member and a cooperating forensic scientist. Substantial written report and oral presentation required. The oral presentation and defense of the project will be evaluated by the students research committee and graded by the faculty mentor. This course can only be taken by Forensic Science Masters students. A special permit is required to register for this course. Prerequisites: 18 units of graduate forensic science courses. Lab/Class fee will be assessed.

FRSC 897 FRSC THESIS (6)
Original investigation to be completed under the supervision of one or more faculty members. Credit is granted after thesis is accepted. Prerequisite: Permit from department.

FRSC 898 FRSC THESIS (3)
The previous course, FRSC 897, taken over two consecutive semesters.

FRSC 899 THESIS CONTINUUM (1)
Continuum of graduate thesis research project for students who did not complete the project work during the regular project course registration. Prerequisite: FRSC 897.

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Geography and Environmental Planning (GEOG)

Courses

GEOG 502 ENERGY RESOURCE (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 credits of geography or consent of instructor.

GEOG 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. Prerequisite: GEOG 101 and one of the following: CHEM 101, BIOL 110, BIOL 200/ BIOL 200L (BIOL 201) or BIOL 205.

GEOG 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 505 CARTOGRAPHY AND GRAPHICS I (3)
Study in design, construction and effective application of maps and charts for analysis and publication; practical exercises in the use of cartographic tools, materials and techniques. Prerequisite: GEOG 232 or consent of instructor.

GEOG 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 man-made environment. Prerequisite: 6 units of geography or consent of instructor.

GEOG 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 512 ECONOMIC GEOGRAPHY (3)
Designed to explain the location of economic activities through a series of principles and theories. Emphasis on the various sectors of the economy, transportation and economic development. Prerequisite: 6 credits of geography or consent of instructor (not open to students who have completed GEOG 231).

GEOG 515 CLIMATOLOGY (3)
Character, causes and distribution of climatic types. Emphasis upon world pattern. Students may be required to do fieldwork. Prerequisite: 6 credits of geography or consent of instructor.

GEOG 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, aerial association and regionalization. Prerequisite: 6 units of geography, MATH 119 or consent of instructor.

GEOG 517 METEOROLOGY (3)
Examines the composition and structure of the atmosphere, thermodynamic processes, forces and related small and large scale motions, air masses, fronts, tropical cyclones, solar and terrestrial radiation, general circulation and weather forecasting. Field work may be required. Prerequisites: 6 units of natural science or geography or the equivalent.
GEOG 519 POLITICAL GEOGRAPHY (3)
Effect of political groupings upon human's use of the world and the influence of the geographic base upon political power. Prerequisite: 6 units of geography or consent of instructor.

GEOG 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 credits of geography or consent of instructor.

GEOG 522 URBAN SYSTEMS I (3)
Survey of the structure, functions, forms and development of urban units. Emphasis upon the locational features of social, economic and cultural phenomena; fieldwork required. Prerequisite: 6 credits of geography or consent of instructor.

GEOG 523 GIS APPLICATIONS (3)
Geographic information systems for solving real-world problems; vector-based GIS software, microcomputers for development of a GIS application. Prerequisite: Introduction to GIS or consent of instructor.

GEOG 527 OUTDOOR REC PLAN/MNGT (3)
A study of outdoor recreation in terms of relationships between people, land, and leisure. Emphasis on the principles of planning, designing and maintaining outdoor recreation areas and facilities.

GEOG 551 GROWTH OF GEOGRAPHIC THOUGHT (3)
History, nature and methodology of geography as a discipline. Analysis of schools of geographic thought and critical evaluation of important geographic work. Prerequisite: 6 units of geography or consent of instructor.

GEOG 552 SEVERE AND HAZARDOUS WEATHER (3)
Examines the complexities and power of severe and hazardous weather, providing an understanding of the way events, such as thunderstorms, tornadoes, and hurricanes, develop and evolve within the atmosphere. Topics include the descriptions and physical explanations of the types of severe and hazardous weather along their societal and political implications. Prerequisite: GEOG 101, GEOL 357, or GEOG 377.

GEOG 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. Fieldwork may be required. Prerequisites: GEOG 391 and GEOG 392 or equivalent and consent of instructor.

GEOG 554 RETHINKING BRAZIL (3)
Regional analysis of Brazil: human and physical geography, historical perspectives, humanities, cultural geography, and critical thinking of Brazil in its role as regional and global participant. Perspectives on the problematization of national, racial, and regional identities, and of historical legacies upon Brazil today. Prerequisite: GEOG 102 or GEOG 105 or GEOG 109.

GEOG 555 STUDIES IN NATURAL HAZARDS (3)
The nature, frequency of occurrence and distribution of environmental hazards and their impact on humans. Prerequisite: 6 units of geography or consent of instructor.

GEOG 556 THE SILK ROAD: THE GEOGRAPHIES OF CENTRAL EURASIA (3)
Central Asian geographies and histories in the contest of the extended Silk Road Region; its cultural identities. Political economies, and ideological struggles; the bonds and interactions of the emerging nations of Central Asia with Russia, the U.S., China, Turkey, and Iran. Prerequisites: Instructor permission.

GEOG 557 THE RUSSIAN COLOSSUS: HISTORICAL AND CONTEMPORARY GEOGRAPHIES OF RUSSIA (3)
Regional analysis and appraisal of the human geography and natural resources of each region as important background for the understanding of current African affairs. Prerequisite: 6 units of geography or consent of instructor.

GEOG 558 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 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 560 GEOGRAPHY OF THE UNITED STATES AND CANADA (3)
Physical and cultural landscapes of the United State 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 561 GEOGRAPHY OF MARYLAND (3)
A geographical study of the Middle Atlantic region emphasizing Maryland in its megapolitan setting. Much attention will be given to the human and physical elements which have led to the prominence of this region. A supervised research paper will be an important part of this course. Prerequisite: 6 credits of geography or consent of instructor.

GEOG 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 563 THE SILK ROAD: THE GEOGRAPHIES OF CENTRAL EURASIA (3)
Central Asian geographies and histories in the contest of the extended Silk Road Region; its cultural identities. Political economies, and ideological struggles; the bonds and interactions of the emerging nations of Central Asia with Russia, the U.S., China, Turkey, and Iran. Prerequisites: Instructor permission.

GEOG 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 566 GEOGRAPHY OF EUROPE (3)
Regional analysis and appraisal of the human geography and natural resources of each region as important background for the understanding of current African affairs. Problems of nationality, economic development and cultural conflicts. Prerequisite: 6 units of geography or consent of instructor.

GEOG 567 THE RUSSIAN COLOSSUS: HISTORICAL AND CONTEMPORARY GEOGRAPHIES OF RUSSIA (3)
Regional analysis and appraisal of the human geography and natural resources of each region as important background for the understanding of current African affairs. Problems of nationality, economic development and cultural conflicts. Prerequisite: 6 units of geography or consent of instructor.

GEOG 568 GEOGRAPHY OF LATIN AMERICA (3)
Analysis of Latin America will be focusing on the interrelationships between physical and cultural elements which provide a diversity of human habitats throughout the region. Prerequisite: 6 units of geography or consent of instructor; may be repeated for a maximum of 6 units.
GEOG 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 background of these countries' present landscapes. Prerequisites: 6 units of geography or permission of the instructor.

GEOG 570 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 571 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 572 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 573 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 574 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 575 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 576 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 577 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 578 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 579 SEMINAR: SELECTED TOPICS IN GEOGRAPHY (3)
Reading and research in selected topics in the field of geography. Seminar topics will be announced. Prerequisite: 6 units of geography or consent of instructor.

GEOG 580 ENVIRONMENTAL PLANNING INTERNSHIP (1-6)
Supervised placement and research in selected public and private agencies at appropriate institutions. Prerequisite: Consent of chairperson and 6 units in geography. May be repeated for a maximum of 6 units (not open to students who have completed 6 credits in GEOG 479).

GEOG 581 SEMINAR IN APPLIED-PHYSICAL GEOGRAPHY (3)
Focus on obtaining, interpreting and using population data for applied purposes. Prerequisite: Consent of instructor.

GEOG 582 GEOGRAPHY/ENVIRONMENTAL PLANNING INTERNSHIP (1-6)
Supervised placement and research in selected public and private agencies at appropriate institutions. Prerequisite: Consent of chairperson and 6 units in geography. May be repeated for a maximum of 6 units (not open to students who have completed 6 credits in GEOG 479).

GEOG 583 FIELD GEOGRAPHY (2-6)
Practical laboratory experience in techniques in the collection and analysis of data by observations, measurement, mapping and photographic records. Such techniques are to be applied to selected geographic problems. Prerequisite: 6 units of geography or consent of instructor.

GEOG 584 TRAVEL AND STUDY (3-6)
Countries and topics to be selected by departments and instructors sponsoring the program. For complete information contact the chairperson of the department. Prerequisite: Consent of instructor; may be repeated for a maximum of 6 units.

GEOG 585 DIRECTED READING IN GEOGRAPHY (3)
Independent reading in selected areas of geography. Open by invitation from the geography department to students taking a major or minor in geography. Prerequisite: 15 credits in geography and a minimum average of 3.00 in geography. May be repeated for a maximum of 6 units.

GEOG 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 investigation on aspects of geography which are of special interest or not covered in other courses. Registration arranged with department chairperson. Prerequisite: Advanced undergraduate standing with at least 18 credits in geography or graduate standing. May be repeated for a maximum of 6 credits.

GEOG 587 ENVIRONMENTAL IMPACT ANALYSIS (3)
The collection and analysis of physical, social, biological and economic information for the preparation of environmental impact statements (EIS). Prerequisite: 6 hours of geography or consent of instructor.

GEOG 601 SEMINAR ON GEOGRAPHICAL PERSPECTIVES (3)
Study of major subfields of geography as they have emerged in the 20th century and their differing viewpoints. Prerequisite: Graduate standing.

GEOG 621 RESEARCH TECHNIQUES (3)
Investigating the primary sources of information in geography and learning the nature of original investigation. Prerequisite: Graduate standing.

GEOG 622 PROBLEMS AND ANALYSIS IN GEOGRAPHY (3)
Application of research methods to the analysis of geographic problems. Prerequisite: GEOG 621 or equivalent graduate research methods course.

GEOG 625 PLANNING FOR A SUSTAINABLE REGION (3)
The theory and practice of comprehensive regional planning as well as methods for assurance sustainability. Prerequisite: Graduate standing.

GEOG 626 GIS DATABASE DESIGN (3)
Introduction to Geographic Information Science (GIS) database design. Prerequisites: GEOG 221 and GEOG 232, or consent of instructor.

GEOG 631 REMOTE SENSING (3)
Remote-sensing systems. Interpretation and use of the data products, with emphasis on Land Satellite Imagery (Landsat). Prerequisite: Consent of department.

GEOG 641 APPLIED PHYSICAL GEOGRAPHY (3)
Physical environment as it influences and is altered by human activities. Prerequisite: GEOG 101 (or equivalent).

GEOG 651 SEMINAR IN APPLIED-PHYSICAL GEOGRAPHY (3)
Focus on obtaining, interpreting and using population data for applied purposes. Prerequisite: Consent of instructor.
GEOG 652 SEMINAR IN MEDICAL GEOGRAPHY (3)
Medical geographic principles and techniques applied to the study of health issues in contemporary society. Emphasis on tools, methodology and problem-solving situations. Prerequisite: GEOG 375 or consent of instructor.

GEOG 653 ADVANCED TOPICS ON ENVIRONMENTAL HAZARDS (3)
Selected advanced topics on the human dimensions of environmental hazards and disasters. Topics may include social vulnerability, hazard assessment, mitigation planning and emergency management, hazards and development, gender issues, and GIS applications. May be repeated under a different subtitle for a maximum of 9 units. No more than 9 units may be applied toward the degree. Prerequisites: Graduate standing and consent of the instructor.

GEOG 654 CLIMATE CHANGE: SCIENCE TO POLICY (3)
A survey of past, current, and future climate change. Emphasis on Earth's radiation balance, causes of climate change, observed and predicted signals of climate change, and impacts and mitigation of climate change. Prerequisites: 6 units of geography or consent of the instructor.

GEOG 661 STUDIES IN ECONOMIC GEOGRAPHY (3)
The study of selected geographical topics dealing with spatial distributions of economic activities. Topics will be announced. Prerequisite: Consent of department (no more than 6 credits may be applied toward a degree).

GEOG 665 ADVANCED TECHNIQUES IN GIS (3)
Project-based learning within the spatial framework of GIS. Emphasis on advanced GIS techniques for spatial analysis and on quantifying geographic patterns and relationships. Prerequisite: GEOG 232 or consent of instructor.

GEOG 671 STUDIES IN PHYSICAL GEOGRAPHY (3)
Selected geographical topics dealing with physical landscape phenomena, especially with regard to distribution, relationships and significance to mankind. Topics will be announced. Prerequisite: consent of department (no more than 6 units may be applied toward a degree).

GEOG 672 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 673 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 674 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 675 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 676 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 677 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 678 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Topics vary each semester. Prerequisite: consent of department.

GEOG 679 SPECIAL TOPICS IN GEOGRAPHY AND ENVIRONMENTAL PLANNING (3)
Topics in geography or environmental planning. Varies each semester. Prerequisite: Consent of department.

GEOG 681 SEMINAR IN POLITICAL GEOGRAPHY (2-6)
Special subjects dealing with geography of international politics, e.g., boundary problems, global strategy, space, sovereignty. Topics to be announced. No more than 6 units may be applied toward a degree. Prerequisite: Consent of department.

GEOG 683 SEMINAR: ENVIRONMENTAL PROBLEMS IN MARYLAND (3)
Individual research on a selected environmental problem in Maryland. Prerequisite: Consent of department.

GEOG 685 DIRECTED READING IN GEOGRAPHY (3)
Independent reading in geography or related disciplines. Students must meet with a faculty advisor to draft a syllabus that outlines the purpose of the course, a plan of study, and specific learning outcomes of the course. The plan of study must require a minimum of 45 hours of work for each credit hour and regularly scheduled meetings to report progress, review work, and engage in reflective analysis about the course topic. The syllabus also must include a timeline for completion of learning assignments, criteria for grading them, and a bibliography or other relevant sources for investigating the topic. Prerequisite: consent of instructor.

GEOG 691 URBAN GEOGRAPHY STUDIES (2-6)
Selected topics dealing with the application of geography to planning, retail and industrial location, and trade analysis; topics to be announced. No more than 6 units may be applied toward a degree. Prerequisite: consent of department.

GEOG 701 LAND USE STUDIES (2-6)
Selected problems of urban, rural and rural-urban landscapes, which consider and account for geographic differences in land utilization; topics to be announced. Prerequisite: Consent of department (no more than 6 units may be applied toward a degree).

GEOG 771 SEMINAR IN REGIONAL GEOGRAPHY (2-6)
Description, analysis and interpretation of natural and cultural phenomena in certain significant geographic regions; seminar topics will be announced. Prerequisite: Consent of department (no more than 6 units may be applied toward a degree).

GEOG 796 INTERNSHIP IN GLOBAL SKILLS (3-6)
Internship with government or non-governmental organization, work to be concerned with issues of international scope. Prerequisite: admission to Global Skills accelerated MA program. GEOG 621 S/U grading.

GEOG 797 RESEARCH (3)
Investigation of problem or problems based upon field and library study, which will contribute to geographical knowledge. Graded S/U. Prerequisite: consent of department.

GEOG 799 RESEARCH PROJECT CONTINUUM (1)
One unit taken to maintain enrollment while completing research project begun in GEOG 797. Graded S/U. Prerequisites: previous enrollment in GEOG 797; department consent required.

GEOG 897 GEOGRAPHY THESIS (6)
Thesis credit while working on an approved thesis. Six units taken over two semesters.
GEOG 898 GEOGRAPHY THESIS (3)
The previous course, GEOG 897, taken over two consecutive semesters.

GEOG 899 THESIS CONTINUUM (1)
One unit taken to maintain enrollment while completing thesis.

Geology (GEOL)

Courses
GEOL 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 515 HYDROGEOLOGY (4)
Geologic aspects of ground water; origin, occurrence and movement. Field trips required. Prerequisites: CHEM 132/ CHEM 132L (CHEM 111), PHYS 211 or 241. Recommended: GEOL 321 and GEOL 443. Lab/Class fee will be assessed.

GEOL 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 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, by chemical analysis, and by X-ray diffraction analysis. Three lecture hours and 3 laboratory hours. Prerequisites: GEOL 121 and CHEM 131/ CHEM 131L (CHEM 110).

GEOL 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. Prerequisite: GEOL 331.

GEOL 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 records. Prerequisite: GEOL 121 and CHEM 131/ CHEM 131L (CHEM 110). Not open to students who have successfully completed PHSC 443.

GEOL 551 PETROLOGY OF SEDIMENTARY ROCKS (3)
Macro- and microscopic analysis of sedimentary rocks. Classifications and diagentic processes. Prerequisite: GEOL 443. Offered spring semester alternate years.

GEOL 555 PHYSICAL OCEANOGRAPHY (3)
Physical, chemical and geologic characteristics of ocean basins, boundaries and sea water including origin and behavior of waves and currents. Prerequisite: PHYS 211 or PHYS 241 and CHEM 131/CHEM131L (CHEM 110), or consent of instructor.

GEOL 570 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 for a maximum of 6 units provided a different topic is covered. Special permit required.

GEOL 595 REGIONAL GEOLOGY (2)
Design and successful completion of a geological research project based on a problem of regional significance. Project results will be presented in a public forum. Field trips required. Prerequisites: GEOL 121, 123, 489, and two additional upper-level geology courses.

Gerontology (GERO)

Courses
GERO 550 DIRECTED READINGS IN GERONTOLOGY (3)
Systematic inquiry into a topic of the student's choice. Prerequisite: Graduate standing and consent of adviser.

GERO 567 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 558. Prerequisite: SOCI 101.

GERO 601 SEMINAR IN PROFESSIONAL GERONTOLOGICAL ISSUES (3)
Issues related to demographic changes, community services and standards for specific service areas.

GERO 610 APPLIED RESEARCH METHODS (3)
Research methods for applied practice settings. Prerequisite: PSYC 212 or consent or instructor.

GERO 620 LEGAL ISSUES IN GERONTOLOGICAL PRACTICE (3)
Legal and regulatory issues in gerontological practice.

GERO 625 GERIATRIC CARE MANAGEMENT (3)
Fundamental principals and practice standards of professional geriatric care management. Graduate Students only.

GERO 684 GERONTOLOGICAL PRACTICUM (3)
Supervised practicum in community agency or organization. Prerequisites: Substantial completion of M.S. program and permission of faculty advisor.

GERO 685 INDEPENDENT STUDY IN GERONTOLOGICAL PRACTICE (3)
Independent research in gerontological practice area. Prerequisite: Substantial completion of M.S. program and permission of faculty advisor.

Health Care Management (HCMN)

Courses
HCMN 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. Prerequisites: HLTH 207 or instructor's permission.

HCMN 519 LONG-TERM CARE ADMINISTRATION (3)
An introduction to institutional and community-based long-term care facility administration. Examines law, 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 instructor's permission.

HCMN 535 HEALTH INFORMATION AND QUALITY MANAGEMENT (3)
Principles and practices of information systems and quality management for health care organizations. Prerequisites: HLTH 207, HCMN 305.
HCMN 541 LEGAL AND ETHICAL ISSUES IN HEALTH ADMINISTRATION (3)
Examines legal and ethical issues in the administration of health programs. Emphasis is placed on the impact of cost-containment efforts, quality and malpractice concerns, efforts, quality and malpractice concerns, profit seeking in health, biomedical advances and new delivery mechanisms. Not open to students who successfully completed HLTH 541.

Health Science (HLTH)

Courses

HLTH 501 TEACHING ABOUT DRUGS AND SEX (3)
Examination of content, procedures, and methods for presenting sensitive topics, including human sexuality and drugs. Prerequisites: HLTH 222 and BIOL 191/BIOL 191L (BIOL 190) or consent of instructor.

HLTH 502 HEALTH COMMUNICATION (3)
Application of program planning, evaluation and communication theory to the development and evaluation of health promotion efforts.

HLTH 505 DRUGS IN OUR CULTURE (3)
Examination of psychoactive substances from physiological, psychological and sociological perspectives. Prerequisite: None.

HLTH 551 INTRODUCTION TO ENVIRONMENTAL HEALTH (3)
Examination of the interrelationships between humans and their environment. Emphasis is placed upon health aspects of pollution, housing, sanitation, radiation, behavioral disorders and epidemiology. Prerequisite: BIOL 191/BIOL 191L (BIOL 190) or BIOL 200/BIOL 200L (BIOL 201) or BIOL 202.

HLTH 570 HEALTH WORKSHOPS (1-3)
Study of contemporary health concerns as they influence health of the individual and the community.

HLTH 571 HEALTH WORKSHOP (3)
Study of contemporary health concerns as they influence health of the individual and the community. Prerequisites: none.

HLTH 572 HEALTH WORKSHOPS (3)
Study of contemporary health concerns as they influence health of the individual and the community. Prerequisites: none.

HLTH 591 HEALTH-DIRECTED READINGS (1-3)
Independent study of health or related disciplines. Prerequisite: Permit only.

HLTH 594 HEALTH TRAVEL AND STUDY (3)
Examination of health care delivery in other countries compared with that of the United States. Prerequisite: Permit only.

HLTH 595 INDEPENDENT STUDY (3)
Directed study of specific problems in health and related fields. Prerequisite: Permit only.

HLTH 601 CONTEMPORARY ISSUES IN SCHOOL HEALTH (3)
Exploration of structure, organization, scope, content and practices in school health education. Prerequisites: none.

HLTH 603 EMERGING ISSUES IN THE HEALTH OF THE NATION (3)
Study of social, political and health issues as they impact the nation’s health, including strategies and programs in response to such concerns. Prerequisites: None.

HLTH 615 QUALITATIVE AND QUANTITATIVE PRINCIPLES (3)
Study of qualitative and quantitative data analysis techniques applied to health disciplines. Prerequisite: HLTH Masters program.

HLTH 617 HEALTH ADMINISTRATION (3)
Exploration of the health industry, including concepts of management and administration.

HLTH 618 INTRODUCTION TO PUBLIC HEALTH (3)
Study of disease prevention and health promotion with a focus on community efforts to improve the public’s health. Prerequisites: none.

HLTH 619 ORGANIZING SYSTEMS OF CARE FOR CHRONICALLY ILL AND PHYSICALLY DEPENDENT POPULATIONS (3)
Examination of the long-term care industry, including relevant political and regulatory structures, issues of access, availability and other managerial challenges of working with special needs populations. Prerequisite: none.

HLTH 625 RESEARCH METHODS IN HEALTH (3)
Study of research and statistical designs in health science and allied health disciplines. Prerequisite: HLTH 615 with grade of C or better.

HLTH 627 HEALTH AND WORKER PERFORMANCE (3)
Analysis of health issues affecting worker performance from the employee perspective, with particular attention to worksite problems. Prerequisites: none.

HLTH 630 EPIDEMIOLOGY IN PUBLIC HEALTH PRACTICE (3)
Examine how the basic epidemiological concepts such as disease transmission, measurement, study design, data analysis, screening and risk assessment are used in public health practice. Will also examine how data sources and data management systems can be used to improve population health.

HLTH 631 PROGRAM PLANNING IN HEALTH EDUCATION (3)
Exploration of planning models with application to program planning and proposal writing for health information and promotion. Prerequisites: none.

HLTH 633 HEALTH CARE SYSTEMS (3)
Development of the American health care system and trends in organization, administration, funding and legislation. Prerequisite: Permission of instructor.

HLTH 635 EDUCATIONAL STRATEGIES FOR HEALTH (3)
Analysis of health education standards applied to health promotion and health education strategies.

HLTH 636 INTERMEDIATE STATISTICS FOR THE HEALTH SCIENCES (3)
Study of statistical methodologies and research designs in public health. Prerequisites: none.

HLTH 637 SKILL DEVELOPMENT: LEADERSHIP IN THE HEALTH CARE SETTING (3)
Examination of effective leadership skills, with in-class experiential activities for skill development. Prerequisites: none.

HLTH 639 INTRODUCTION TO HEALTH BEHAVIOR AND HEALTH PROMOTION (3)
Analysis of health promotion and health behavior incorporating organization, marketing, implementation and evaluation of health promotion program. Prerequisites: none.

HLTH 643 HEALTH EDUCATION: CURRICULUM DEVELOPMENT AND SUPERVISION (3)
Study of methods and techniques for designing and implementing school health education. Prerequisites: none.

HLTH 645 HEALTH CARE POLICY (3)
Examination of public and private health care policy making and implementation.
HLTH 647 HEALTH CARE FINANCIAL MANAGEMENT (3)
Examination of the financial aspects of health care, with attention to health services' production, distribution and organization from financial and economic perspectives. Also listed as IDHP 647. Prerequisites: none.

HLTH 649 PROGRAM EVALUATION (3)
Study of the purpose, applications, and role of evaluation in health promotion programs. Prerequisite: none.

HLTH 651 PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY (3)
Study of strategic planning of health promotion and delivery in the profit and not-for-profit sectors, with application to various healthcare settings. Also listed as IDHP 651. Prerequisites: none.

HLTH 652 HEALTHCARE INFORMATION DESIGN AND MANAGEMENT (3)
Provides students with an interdisciplinary introduction to design, implementation and use of IT systems in public health and healthcare environments. Students are introduced to foundation concepts, tools and techniques for needs assessment, data management strategies and IT architecture for modern healthcare systems. Also covers the role of clinical information management specialists in public health and healthcare domains.

HLTH 653 RESPONSIBLE CONDUCT OF RESEARCH (3)
Interdisciplinary exploration of the ethical conduct of research including diverse impacts, values, and evaluation regarding research integrity. Prerequisites: none.

HLTH 655 MANAGING CONFLICT, VIOLENCE, ABUSE IN HEALTH SERVICE SETTINGS (3)
Examination of knowledge and skills necessary to effective resolution of conflict, violence and abuse in diverse health service settings. Prerequisites: None.

HLTH 656 MANAGING VOLUNTEERS IN HEALTH SERVICE SETTINGS (3)
Analysis of knowledge, skills and influences related to effective recruitment, management and leadership of volunteers in diverse health service programs. Prerequisites: None.

HLTH 657 HEALTH ADVOCACY ACROSS SERVICE SETTINGS (3)
Study of skills and knowledge to advocate for vulnerable populations, including experience in the investigation of complaints and relevant interview processes. Prerequisites: None.

HLTH 670 SPECIAL TOPICS (3)
Study of contemporary health aspects as they influence health of the individual and the community. Prerequisite: none.

HLTH 691 DIRECTED READINGS IN HEALTH (3)
Independent study of health related disciplines. Prerequisite: Permit only.

HLTH 695 INDEPENDENT STUDY: HEALTH (3)
Directed study of specific problems in health and related fields. Prerequisite: Permit only.

HLTH 785 GRADUATE SEMINAR IN HEALTH (3)
Analysis of research design, methods, professional literature and related issues in the health sciences. Prerequisite: HLTH 625 with grade of C or better.

HLTH 880 GRADUATE PROJECT IN HEALTH SCIENCE (3)
Individual study and preparation of a project which is oriented toward the application of specific techniques in health education. Prerequisite: HLTH 785.

HLTH 885 PROJECT CONTINUUM (1)
Continuation of graduate project. Prerequisite: Previous registration for project work.

HLTH 897 HEALTH SCIENCE THESIS (6)
Original investigation of a health science problem using acceptable research method and design, under the direction of one or more faculty members. Prerequisites: HLTH 785 and permit only.

HLTH 898 HEALTH SCIENCE THESIS (3)
HLTH 897 taken over two consecutive terms.

History (HIST)

Courses

HIST 502 HISTORY OF SOUTHERN AFRICA (3)
Social and cultural change in South Africa from early times to present. Prerequisite: HIST 135 or consent of instructor.

HIST 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 504 ANCIENT GREEK CIVILIZATION (3)
The civilization of classical Greece, including the Minoan and Mycenean bronze age antecedents, to 362 B.C. Prerequisite: HIST 101 or consent of instructor.

HIST 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 506 WOMEN IN 20TH-CENTURY U.S. HISTORY (3)
A multicultural perspective on politics, work, family and sexuality in women's lives in the United States from 1900 to present. Prerequisites: HIST 145, and either HIST 146 or HIST 148.

HIST 507 DEMOCRATIZATION IN LATIN AMERICA (3)
Analysis of the failure and successes in building democratic political institutions in Latin America; emphasis on 1930s to present. Prerequisite: HIST 122 or permission of instructor.

HIST 508 LIFE HISTORIES OF AFRICAN WOMEN (3)
Methodological analysis of lives of selected African women from diverse African cultures compared with the lives of women throughout the world. Prerequisite: 6 units from history and/or women's studies.

HIST 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 510 HISTORY OF MODERN INDIA (3)
The 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 511 HISTORY OF MODERN SOUTHEAST ASIA (3)
The development of Burma, Thailand, Malaysia, Indonesia, Cambodia, Vietnam and the Philippines since 1500, with emphasis on the colonial experience and the development of modern nationhood. Prerequisite: 6 credits in history or consent of instructor.

HIST 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: HIST 111 or 6 units of history.
HIST 513 REVOLUTIONARY CHINA (3)
The ongoing Chinese revolution from the overthrow of the imperial
government through the Nationalist and Communist periods.
Prerequisite: HIST 111 or 6 units in history.

HIST 514 THE ANDEAN REPUBLICS (3)
Social, economic and political developments in Peru, Bolivia and Ecuador
from independence to the present.

HIST 516 WOMEN IN ANTIQUITY (3)
A survey of the social, economic and cultural roles of women from the
third millennium BCE to the Middle Ages. Prerequisite: HIST 101 or HIST
160.

HIST 519 JAPAN, 1830-1930 (3)
Japan’s transition from feudalism and national seclusion to emergence
as a modern nation-state with an overseas empire and a parliamentary
form of government. Prerequisite: HIST 111 or consent of instructor.

HIST 520 JAPAN, 1930-PRESENT (3)
Japan’s transition from militarism and foreign aggression in the 1930s
to postwar pacifism, democracy and dynamic economic growth.
Prerequisite: HIST 111 or consent of instructor.

HIST 522 HISTORY OF MEXICO: NATIONAL PERIOD (3)
The political, economic, social and cultural developments from
independence to the present. Prerequisite: 6 units in lower-division
history.

HIST 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. Prerequisites: Three units
of non-Western history or the consent of the instructor.

HIST 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 instructor.

HIST 527 EUROPEAN MILITARY HISTORY 1871-1925 (3)
Minor wards of 1871-1913, the buildup to World War I, the war and its
aftermath seen in the context of diplomatic, political and socioeconomic
history. Prerequisite: HIST 103 or HIST 108 or consent of the instructor
(not open to students who have completed HIST 413).

HIST 528 THE UNITED STATES AND VIET NAM 1945-1996 (3)
U.S. 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 (148) or consent of instructor.

HIST 529 EUROPEAN MILITARY HISTORY 1925-1945 (3)
Military institutions of the interwar period, the buildup to World War II
and the European War, seen in the context of diplomatic, political and
soecioeconomic history. Prerequisite: HIST 103 or HIST 108 or consent of
the instructor (not open to students who have completed HIST 413).

HIST 530 NATIONALISM IN 20TH CENTURY EAST AND SOUTHEAST ASIA
(3)
Introduction to the contentious issue of nationalism and state-building
through belief case studies of China, Japan, Vietnam and Indonesia.
Prerequisites: 6 credits hours of history.

HIST 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.

HIST 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
Korea and Vietnam. Prerequisite: HIST 146.

HIST 533 THE AMERICAN COLONIES: 1492-1763 (3)
Founding and the political, economic and social development of the
American colonies. Prerequisite: HIST 145 or consent of instructor.

HIST 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 consent of instructor.

HIST 535 THE EARLY NATIONAL PERIOD (3)
The United States from the Constitutional Convention to the election of
1820; the Federalist Decade and the Jeffersonian Era. Prerequisite: HIST
145.

HIST 536 JACKSONIAN ERA (3)
The United States from 1815 to 1845; political, social, and economic
currents of the period.

HIST 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 538 THE CIVIL WAR TO THE PRESENT (3)
Interpretation of the Bill of Rights before and after the Warren Court.
Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 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.
Prerequisites: HIST 145, and either HIST 146 or HIST 148.

HIST 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. Prerequisites: HIST 145, and
either HIST 146 or HIST 148.

HIST 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.
Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 542 RECENT AMERICAN HISTORY: 1945-1975 (3)
History of the United States from World War II through the mid 1970's,
including political, social, economic, and diplomatic developments.

HIST 547 CONSTITUTIONAL HISTORY OF THE UNITED STATES TO 1863
(3)
Development of American constitutionalism in theory and practice to
1868. Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 548 THE BILL OF RIGHTS AND THE CONSTITUTION: 1941 TO THE
PRESENT (3)
Interpretation of the Bill of Rights before and after the Warren Court.
Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 550 DIPLOMATIC HISTORY OF THE UNITED STATES SINCE 1900 (3)
Continuation of HIST 369 to the present with added interest in the
emergence of the United States as a major world power. 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 crises. Prerequisites: HIST 145 and
either HIST 146 or HIST 148.
HIST 552 THE FAR WESTERN FRONTIER (3)
The expansion into the trans-Mississippi West and the impact of the frontier process on the attitudes of the American people and on the social, economic and political institutions of the United States in the 19th and 20th centuries. Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 553 THE CITY IN AMERICAN HISTORY (3)
The development of the city and its impact on American social, cultural, intellectual, political and economic life. Prerequisites: HIST 145, HIST 146 or HIST 148 or two of the following: GEOG 391, SOCI 327, POSC 305 or consent of instructor.

HIST 555 HISTORY OF NATIVE AMERICAN: THE EAST (3)
Topical and regional ethnohistory of the native peoples of Eastern America and their relations with non-native peoples and governments, precontacts to the present. Prerequisite: 3 units in American history.

HIST 556 HISTORY OF NATIVE AMERICANS: THE WEST (3)
Topical and regional ethnohistory of the native peoples of Western America and their relations with non-native peoples and governments, precontacts to the present. Prerequisite: 3 units of American history (not open to those who have completed Indian-White Relations in American History).

HIST 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. Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 559 HISTORY OF ZANZIBAR 1500-1964 (3)
History of Zanzibar from 1500 to 1964 covering the Portuguese, Omanis, Americans, and Africans with subject matter ranging from economics, the slave trade and slavery, family history, colonialism, and the revolution that occurred in 1964. Prerequisites: HIST 135 and HIST 102.

HIST 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.

HIST 562 ASIAN AMERICAN HISTORY (3)
Political, social, and cultural history of Asian Americans from 1850 to the present. Prerequisite: 3 units in History or consent of the instructor.

HIST 563 AFRICAN-AMERICAN HISTORY TO MID-19TH CENTURY (3)
Political, economic and social history of African Americans from their African origins through the antebellum period. Prerequisite: HIST 145.

HIST 564 AFRICAN-AMERICAN HISTORY FROM MID-19TH CENTURY (3)
Political, economic and social history of African Americans from the Civil War through the civil rights era. Prerequisites: HIST 145 and either HIST 146 or HIST 148.

HIST 565 IMMIGRANTS & IMMIGRATION IN THE U.S. (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 United States history or consent of the instructor.

HIST 566 COMPARATIVE HISTORY OF THE MODERN FAMILY (3)
Impact of economic, social and reproductive changes on family life and structure. Prerequisite: 3 units of history, sociology or women’s studies.

HIST 567 THE EARLY MIDDLE AGES: 1300-1500 (3)
The rebuilding of Europe after the collapse of the Roman Empire. Emphasis on the Church Fathers, the Germanic tribes, Carolinian culture, feudalism and the Vikings. Prerequisite: HIST 102 or consent of instructor.

HIST 568 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.

HIST 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 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 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.

HIST 577 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 579 EUROPEAN IDEAS:FRENCH REVOLUTION TO 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. Prerequisites: HIST 103 or consent of instructor.

HIST 581 FRANCE: 1763-1871 (3)
Old Regime and the impact of successive revolutions upon French society. Emphasis upon the role of France in the growth of European liberalism and nationalism. Prerequisite: HIST 103.

HIST 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. Prerequisites: HIST 103.

HIST 584 RUSSIA/SOVET UNION:1894-1953 (3)
Political, ideological, economic and cultural factors influencing the fall of the monarch, the Bolshevik Revolution, Leninism and Stalinism. Prerequisite: HIST 231 or HIST 103 or consent of instructor.

HIST 585 HISTORY OF SOVIET RUSSIA SINCE STALIN: 1953 TO PRESENT (3)
Topical analysis of political history and theory, economic development, foreign affairs, social change, and cultural and literary trends. Prerequisite: HIST 103 or HIST 231 or consent of instructor.

HIST 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. Prerequisites: 6 units in modern European history including HIST 103.

HIST 590 INTERPRETIVE PROBLEMS IN HISTORY (3)
An in-depth study of historical interpretations of selected topics. May be repeated provided a different topic is taken each time.
HIST 591 PROFILES IN LEADERSHIP (3)
A study of selected leaders and the strategies they pursued to shape the past. Figures selected by the instructor. May be repeated in different historical figures for a total of 6 units.

HIST 592 HISTORICAL THEMES (1-3)
A study through lectures and discussions of a historical topic selected by the instructor. May be repeated provided a different topic is taken each time.

HIST 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 total of 6 units. Prerequisites: 15 units in history and a minimum average of 3.00 in history and consent of instructor and department chairperson.

HIST 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 chairperson of the department early in the fall of the academic year preceding the semester of intended study; may be repeated in different countries and topics for a total of 6 units. Prerequisites: Upper-division status and consent of instructor.

HIST 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 in a different topic for a total of 6 units. Prerequisites: Consent of instructor and 15 units in history or 9 units in history and 6 units in the related discipline.

HIST 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 total of 6 units. Prerequisites: 15 units in history or 9 units in history and 6 units in the related discipline and a minimum average of 3.00 in history and the related discipline and consent of department chairperson.

HIST 599 MAKING OF THE MODERN MIDDLE EAST (3)
Ethnic, political, religious and economic factors that have shaped the Middle East since 1798. Prerequisite: 6 units in history or consent of instructor.

HIST 607 LATIN AMERICA & THE UNITED STATES (3)
Graduate seminar on Latin American/U.S. relations. Emphasis on the social and cultural implications of U.S. power and influence in Latin America. Comparative analysis of Latin American responses to U.S. actions. Prerequisite: Admission to graduate program.

HIST 609 MODERN THEORIES OF WAR (3)
Theories of the meaning and conduct of war since the Enlightenment; emphasis on European and American thought and practice with some attention to non-Western contributions. Prerequisite: Admission to graduate program.

HIST 617 HISTORY INTERNSHIP (3)
Practical experiences within the historical profession. Prerequisite: Approval of the department chairperson.

HIST 683 DIRECTED INDIVIDUAL RESEARCH (2-4)
Research and reading with a historical topic to be selected by the instructor and student. Prerequisite: Graduate standing and 18 units of history and consent of the instructor and department chairperson.

HIST 684 DISEASE AND HISTORY (3)
Exploration of the ways in which human diseases have affected history with major developments in the history of epidemiology.

HIST 697 DIRECTED READINGS IN HISTORY (2-4)
Reading in areas of history selected by the instructor and the student. Prerequisites: Graduate standing and 18 units of history and consent of the instructor and department chairperson.

Human Resource Development (HRD)

Courses

HRD 601 INTRODUCTION TO HUMAN RESOURCES (3)
Overview of the human resource profession, including emerging trends, professional roles and professional competencies. Prerequisite: Graduate standing in HRD or consent of instructor.

HRD 605 APPLIED RESEARCH IN HRD (3)
Description, analysis and application of research methods for HRD professionals, studied in the context of key business and organizational decision-making processes. Prerequisite: Graduate standing in the HRD program, completion of 6 units in HRD coursework or consent of instructor.

HRD 606 ORGANIZATIONAL BEHAVIOR (3)
Theoretical and applied aspects of organizational behavior through the use of psychological concepts. Individual, group, technological and structural theory are examined in the context of organizational effectiveness. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

HRD 607 MANAGING ORGANIZATIONAL CHANGE (3)
An interdisciplinary study of workplace changes. Topics to be covered are: international competition, work force demographics, information technology, changing nature of work and the learning organization. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

HRD 619 STAFFING, RECRUITMENT AND SELECTION (3)
Study of research and application of personnel planning, recruiting and selection practices within organizations. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 627 TRAINING AND DEVELOPMENT (3)
Study of current trends in training and human resource development applied to various types of organizational environments. Prerequisite: Graduate standing in the Human Resource Development Program or consent of instructor.

HRD 630 COMPENSATION AND BENEFITS MANAGEMENT FOR THE HRD PROFESSIONAL (3)
Designed to acquaint the HRD professional with the fundamental concepts, issues and techniques associated with designing, managing and evaluating compensation and benefits programs so that the HRD professional can contribute more effectively to improving organizational performance. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.
HRD 635 MANAGING EMPLOYEE RELATIONS (3)
Review of critical U.S. employment laws that define the employment relationship and how to apply those laws to everyday employee relations issues. Covers best practices in the policy development & implementations, investigations, documentations, and managing risk. Emphasizes use of case studies to lean application of law and techniques to "real" employee relation issues. Prerequisites: Admission into the HRD program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 639 HUMAN RESOURCE INFORMATION SYSTEMS (3)
Assessment, selection, development, implementation, and use of HRIS solutions at the workplace. How to analyze, select, and administer HR software applications. Prepares HR professionals as subject matters resources in HR systems analysis, design, implementation, operation, and use. Does not cover computer programming or software design. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 640 LEADERSHIP THEORY AND PRACTICE (3)
Theoretical and applied foundation of leadership concepts, principles, practices and competencies; integration of theory and practice to apply various conceptual models of leadership to support management and leadership development within their organizations as well as create and implement their personal development plan. Prerequisites: Graduate standing in Human Resource Development Program or consent of the instructor.

HRD 643 BUSINESS MANAGEMENT FUNDAMENTALS FOR THE HRD PROFESSIONAL (3)
Focuses on the theories, principles, practices and effects of administrative design and theory on organizational performance. Emphasis on integrating classical organizational theories with contemporary issues in organizations as they relate to management and HR. Prerequisites: Graduate Standing in HRD Graduate Program or consent of the instructor.

HRD 644 GROUP DYNAMICS AND TEAM BUILDING (3)
Psychological and organizational aspects of group dynamics and work teams. Application of theory to actual terms in workplace. Pre-requisite: Graduate standing in the Human Resource Development Program or consent of the instructor.

HRD 646 ADVANCED TOPICS IN ORGANIZATION DEVELOPMENT: CONFLICT MANAGEMENT AND RESOLUTION (3)
The nature and effects of conflict in organizations and relationships at the workplace. Making conflict and negotiation productive and constructive. Theories supporting effective conflict management. Strategies and tactics for use and resolution. Practice of conflict resolution, negotiation and mediation methods. Prerequisites: Graduate standing in HRD graduate program or consent of the instructor.

HRD 650 EMPLOYEE WELLNESS AND HEALTHY WORKFORCE MANAGEMENT (3)
Focuses on the theories, principles, practices and effect of wellness programs in the workplace. Emphasizes developing a solid understanding of the concepts and theories related to workplace health, wellness and safety issues in the context of Human Resource Development practices as well as methods for assessing and developing employee wellness programs. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 655 TALENT MANAGEMENT AND HUMAN CAPITAL (3)
Theories and principles of managing key organizational talent in the form of human capital. Emphasizes practices and procedures for assessing, developing and administering human capital talent in organizations. Topics include approaches to strategic human capital management as well as measuring or accounting for organizational talent. Considers roles of human resource management in this process and future directions in talent management. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 658 MANAGING WORKPLACE DIVERSITY (3)
Models and methods of managing diversity in the workplace. Issues of managing diversity centering on privilege, oppression, difference, and power. Models for managing diversity and inclusion at non-profit and for-profit organizations. Emphasis on student leadership skills through increasing knowledge and understanding of diversity in the workplace and methods for managing diversity. Prerequisites: Graduate standing in HRD graduate program; HRD 605 and completion of 6 additional units in HRD coursework or consent of the instructor.

HRD 660 HUMAN RESOURCES RISK MANAGEMENT AND REVENUE GENERATION (3)
How the HR function can use entrepreneurial and risk management practitioners to increase revenue and strengthen an organization's performance. Analysis tools for reducing the chances of loss from hazardous conditions. Ways to create new ventures using various HR assets, to find ways to improve the yield on existing programs and services, and how to reduce needless expenses within the HR function. Prerequisites: Graduate standing in HRD graduate program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 665 INTERNATIONAL HUMAN RESOURCES: ISSUES AND APPLICATIONS (3)
The impact of national and regional culture and globalization on international human resources programs and practices. Models and conceptual frameworks of culture to understand their effects on human resource management and development, organization change, and leadership. Preparation for working in intercultural and global human resources roles. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor. Trip abroad mandatory.

HRD 679 SPECIAL TOPICS IN HUMAN RESOURCE DEVELOPMENT (3)
Topics vary, according to the instructor. Students may earn no more than 6 units credit. Prerequisites: Graduate standing in the HRD general track program; HRD 605 and completion of 6 additional units in HRD coursework or consent of instructor.

HRD 695 INDEPENDENT STUDY (3)
Individual and supervised study or project development in selected areas of human resource development. Students may earn no more than 6 units credit. Prerequisites: Graduate standing in the HRD program, 21 units completed HRD course work, or consent of instructor.

HRD 696 INTERNSHIP IN HUMAN RESOURCE DEVELOPMENT (3)
Technical and professional level work experience on an internship basis with private or public organization, work to be concerned with issues central to the practice of human resources. May be repeated for a maximum of 6 credits. Prerequisites: Admission to HRD graduate program, 27 units completed HRD course work, or consent of program director.
HRD 697 PRACTICUM IN HRD (3)
Supervised field experience in professional and technical human resource projects. For students working full-time in non-HR positions. Prerequisites: Admission to HRD Graduate Program and 27 units completed HRD course work, or consent of program director.

HRD 699 CAPSTONE IN HUMAN RESOURCE DEVELOPMENT (3)
Applies previous learning to a wide variety of projects and case studies of problems and issues found in the real of human resource development practice. Emphasizes analysis and interventions to improve and change organizational performance. Prerequisites: Graduate standing in HRD Graduate Program and completion of 27 units in HRD course work.

Humanities (HUMA)

Courses

HUMA 600 INTRODUCTION TO GRADUATE STUDIES IN GLOBAL HUMANITIES (3)
Graduate Seminar introducing students to the methods of inquiry relevant to the study of human arts and culture.

HUMA 602 LITERATURE OF EMPIRE (3)
Analysis of imperial literature in classical, medieval, Renaissance and modern times. Prerequisite: Bachelor’s degree.

HUMA 604 LOVE IN LITERATURE (3)
Study of love in Western literature in classical, medieval, Renaissance, and modern texts. Prerequisites: Bachelor’s Degree.

HUMA 606 LIT: THE SYMPOSIUM (3)
Analysis of texts of the ancient, medieval, Renaissance and modern eras, which explore issues through fictionalized, civil conversation. Prerequisite: Bachelor’s degree.

HUMA 610 WAR (3)
Graduate Seminar examining various manifestations and effects of war upon human life, human rights, and human culture.

HUMA 612 ENVIROHUMANITIES (3)
Graduate seminar addressing the intersection of the humanities and the environment in a range of disciplines, including geographic, literary, artistic, architectural, and historic perspectives.

HUMA 613 DISEASE, LIFE, AND DEATH (3)
Graduate seminar discussing global views and perceptions of disease, life, and death.

HUMA 614 TRANSLATION (3)
Study of the theory and practice of translation; survey of the history of translation; comparison of translations of World Literature texts. No foreign language proficiency required.

HUMA 615 POWER (3)
Graduate seminar interrogating global perceptions, views, instances, implications, and implementations of power.

HUMA 616 THE HUMAN (3)
Analysis of changing concepts on the nature of being human through a reading of classical, medieval, Renaissance and modern text. Prerequisite: bachelor’s degree.

HUMA 631 HISTORY OF HISTORICAL THOUGHT (3)
Philosophies of History from ancient to modern. Prerequisite: Bachelor’s degree.

HUMA 633 COMPARATIVE BIOGRAPHY: THE PURSUIT OF HUMAN PERFECTION (3)
How does human life strive for perfection - whether spiritual, military, political, aesthetic or intellectual - and how do historians strive to shape those human lives into perfect biographies. Texts will include readings from the classical through the modern periods. Prerequisite: bachelor’s degree.

HUMA 634 THE TRAVELER IN HISTORY (3)
Analysis of travel accounts and their role in Western intellectual debates about natural and cultural diversity. Prerequisites: Bachelor’s degree.

HUMA 750 MASTER AUTHORS (3)
Study of a classic author of history, fine arts, literature, philosophy, religion or rhetoric. May be repeated for a maximum of six credits.

HUMA 751 MASTERWORKS SEMINAR (3)
Intensive study of a classic book of history, fine arts, literature, philosophy, politics, religion or rhetoric. May be repeated for a maximum of six credits. Prerequisite: Bachelor’s degree.

HUMA 752 MASTER THEMES SEMINAR (3)
Study of a major theme of Western Civilization in fine arts, history, literature, philosophy, religion, or rhetoric. May be repeated under a different subtitle. May be repeated for a maximum of 6 units. Prerequisites: bachelor’s degree.

HUMA 897 HUMANITIES THESIS (6)
Mentored and defended monograph in one of the following disciplines: art history, history, literature, philosophy, religion, or rhetoric. Prerequisites: Bachelor’s degree, approval of the director, and successful proposal review. Open only to enrolled graduate students in Humanities.

HUMA 898 HUMANITIES THESIS (3)
Mentored and defended monograph in one of the following disciplines: art history, history, literature, philosophy, religion, or rhetoric. Prerequisites: Bachelors degree, approval of the director, and successful proposal review.

HUMA 899 THESIS CONTINUUM (1)
Thesis Continuum.

Information Systems (INSS)

Courses

INSS 605 IT FOR BUSINESS TRANSFORMATION (3)
Examines the key roles that information systems and technologies play in the current business environment as well as the disruptive and innovative nature of information systems in promoting the fundamental transformation of industries, businesses, and society. Covers current major issues in the field of management of information systems, such as social computing, cybersecurity, big data and mobile technologies. Prerequisites: graduate standing, computer literacy.
INSS 641 LEADERSHIP OF THE IT FUNCTION (3)
Focuses on the role of the chief information officer. Today's CIO proactively assesses and balances the organization's technological and business environment in a partnership with the CEO. Topics include structure of the IT function, planning and measuring IT-business alignment, enterprise architecture, systems integration, applications portfolio, project planning and management, systems development and implementation, change management, insourcing, outsourcing, vendor management, operations and control management, IT human resource management and legal and ethical issues. Various facets of the CIO's role are explored through published case studies of real organizations. Background readings will be assigned as preparatory work for class-based case discussions. Prerequisite: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 650 NETWORKING AND TELECOMMUNICATIONS (3)
Provides a solid understanding of fundamentals as well as the state-of-the-art of networks and telecommunications used in business. Topics include communications layers and architectures, physical and data link layer, network and transport layer, local area networks (LANs), local internets, wireless LANs, backbone networks, virtual LANs, collapsed backbones, telephone service, voice-over-IP, wide area networks, packet switching concepts, frame relay, ATM, VPN, Internet infrastructure (NAPs, MAEs and backbone), network management and infrastructure security. This course focuses on the TCP/IP architecture, but the OSI model is presented and discussed. It also covers Microsoft Windows networking TCP/IP concepts including architecture, fixed and dynamic IP addresses, subnet mask calculation, NetBIOS Resolution, IP routing and resolution, and DHCP and DNS services. Prerequisite: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 651 DATABASE MANAGEMENT SYSTEMS (3)
Examines the theories and concepts employed in database management systems (DBMS) and the efficiencies and economics of such systems. The course specifically addresses steps in the database cycle including normalization, database design, implementation, and developing queries using SQL. The functions of various types of DBMS are described, including their purpose, advantages, disadvantages and applications in business. Data administration, data requirements for ERP systems and data security issues are also covered. Prerequisite: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 671 SYSTEMS ANALYSIS (3)
Introduces students to key principles and techniques used to develop or modify information systems to support business undertakings. The emphasis is on the determination and modeling of the requirements of information systems and software. Topics include business process reengineering and the modeling of business processes, data modeling, data gathering and requirements specification, interface design and the development of systems prototypes, including electronic forms and reports. Students will gain experience with leading industry development tools such as those from Oracle and PeopleSoft. Prerequisite: computer literacy and word processing, spreadsheet and database competencies. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 701 INTERNET DEVELOPMENT IN BUSINESS (3)
Covers the issues involved with managing an organization's web site. Issues include content management, scalability, security, reliability and usability. Topics will include tools and techniques for developing and managing large-scale web sites, such as Dreamweaver, Cold Fusion and SML. Prerequisites: Graduate Status and computer browser and network literacy. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 737 STRATEGIC MANAGEMENT OF INFORMATION TECHNOLOGY (3)
Information systems strategy and management from a top management perspective. Information technology is an integral part of most products and services of the post-industrial society of the 21st century and has changed the top management job. Topics include business models and organization forms in the information age, IT as a business enabler, IT and competitive strategy, information for management control, analysis and redesign of business structure and processes, knowledge management and information networks, inter-organizational networks, sourcing strategies, interfacing with the IT function, reliability and security, and ethical and policy issues. The course relies extensively on the case method and students will supplement their analyses with current information obtained from the Web or directly from the firms under study in the cases. Prerequisite: INSS 605. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 738 ADVANCED DATABASE SYSTEMS (3)
Examines current trends and major issues in databases, including data warehousing, data mining, data quality, data stewardship, Web-based systems and object-oriented, distributed and Enterprise-wide systems. This course will use software systems like Oracle and PeopleSoft to demonstrate some of these concepts. Prerequisite: INSS 651. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 739 SYSTEMS ARCHITECTURE (3)
Covers the process and techniques used in the design and implementation of information systems. The emphasis is on systems architecture and the integration of new systems into an existing infrastructure. Topics include types of system architecture, large-scale system design including middleware and software components, database design and integration. Prerequisite: INSS 671. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 740 INTRODUCTION TO SECURITY MANAGEMENT (3)
An overview of principles and issues in business and organizational security management. Student examine the challenges embodied in various aspects of security such as personnel, facility and information. Principles of loss prevention and the protection of assets are examined. Students employ the use of situational analyses, case studies, and other research oriented approaches. Prerequisite: Graduate Standing. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 741 INFORMATION SECURITY MANAGEMENT (3)
Managerial view of information security. It provides brief hands on experience with technical aspects of security, but it concentrates on planning, risk management, development, specification, informal, cultural and legal aspects of information security management. Prerequisites: Graduate standing and INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.
INSS 742 DATA MINING FOR STRATEGIC ADVANTAGE (3)
An overview of date mining and how these techniques can be used to predict behavior pattern. It emphasizes both theoretical and practical understanding related to pattern recognitions, trends, predictions, categorization and exploration used in data mining. Understanding of security, ethical and legal issues related to date mining are examined. Applications of data mining tools in business security, marketing and government are presented. Students employ the use of situational analyses, case studies, and other research oriented approaches. Prerequisites: Graduate standing. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 751 OPERATING SYSTEMS (3)
Provides a solid understanding of modern operating systems (OS) concepts and trends—distributed computing, parallel architecture and open systems. Topics include kernel, process and threads, concurrency and deadlock, scheduling, memory management, storage area network (SAN), network attached storage (NAT), disk performance, redundant array of independent disks (RAID), file systems, symmetric multiprocessing (SMP), clusters, middleware, distributed processing and client/server and OS security. Microsoft Windows and Linux basic concepts including overview at both the graphical user interface and command prompt levels, basic tools to manage applications and processes, devices, services, users, drives and partitions, virtual memory (swap files), networking and security. This is a project-oriented course, offering hands-on experience in both Windows and Linux. Prerequisite: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 752 WEB SERVER MANAGEMENT AND CGI PROGRAMMING (3)
Provides an Understanding of Web server installation, setup and management (particularly Apache and IIS); developing interactive, server-based, applications with the Web Common Gateway Interface (CGI), Active Server Pages (ASP) or PHP; and applications manipulating databases on the Web (particularly MySQL). Topics include HTML and forms review, Apache and IIS Web Server, CGI specifications, Practical Extraction and Report Language (Perl) scripts syntax, commands and CGI libraries, creating and porting CGI scripts, installation and use of MySQL database server, Perl DBI and MySQL, integrating Apache and MySQL, ASP and PHP concepts. Prerequisites: INSS 651 and INSS 701. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 753 INTERNET AND NETWORK SECURITY (3)
Familiarizes students with basic security threats on networks connected to the Internet, basic tools to provide user and system security and security resources available on the Internet. The main focus is on digital and infrastructure security. Topics include security framework overview, footprinting, scanning, enumeration, hacking framework, backdoor servers and Trojans, rootkits, Windows (98/NT, 2000/XP) and Linux vulnerabilities, dial-up, VPN and network devices vulnerabilities, firewalls, Intrusion Detection System (IDS), Denial of Service (DoS) and DDoS, buffer overflows, spyware, phishing, social engineering and protecting the Web end-user. This is a project-oriented course using a restricted-access UB lab to practice the use of hacking and security tools. Prerequisites: INSS 650 and INSS 751 or permission of instructor. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 761 DECISION SUPPORT SYSTEMS (3)
Covers human resource management issues including legal considerations, recruiting, selection, performance appraisal, development and health and safety. It will also cover strategic compensation issues including job evaluation, benefits administration and pay determination strategies. Additional emphasis will be placed on workforce diversity, international dimensions and ethical consideration. Prerequisite: Graduate standing. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 765 E-COMMERCE TECHNOLOGIES AND APPLICATIONS (3)
Provides a managerial and technical perspective on e-commerce applications. The emphasis is on the operational, tactical and strategic applications of ecommerce and the major technologies involved in their development. Covers the different types of e-commerce, the technologies and techniques involved and the major issues facing organizations conducting electronic commerce. Managerial topics include mobile commerce; business, consumer and government ecommerce uses; and legal and regulatory issues. Technical topics explored include network infrastructure, ecommerce security and data representation, transformation, and exchange technologies such as XML. Prerequisite: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 784 PROJECT MANAGEMENT (3)
Strong project management is key to a successful IT project. This course examines the principal elements in effective project management as well as tools and techniques for managing the process. Topics include stakeholder analysis, project design and organization, estimating and budgeting, scheduling, identifying and managing risk, project communications and project metrics and control. Prerequisites: INSS 640. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 789 INFORMATION SYSTEMS CAPSTONE PROJECT (3)
A field-study project capstone course. Student teams undertake an information systems project in the public or private sector with little supervision by faculty advisers. Project management by each team is an integral part of the course experience. A project proposal-including scope, milestones and deliverables—is developed at the beginning of the course. Progress reports and a final oral and written presentation complete the project management experience. Projects focus on one aspect of IS, such as systems analysis and design, database systems, telecommunications, electronic commerce, security or management. Students are evaluated by the team deliverables and by the individual contribution to the final project deliverables. Prerequisite: All required MIS core courses or permission of instructor. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 797 ADVANCED TOPICS IN INFORMATION SYSTEMS (3)
Exploration of advanced topics in information systems of interest to faculty and students. Prerequisites and topics are selected and printed in the schedule of classes. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

INSS 799 INDIVIDUAL RESEARCH: INFORMATION SYSTEMS (1-3)
Prerequisite: approvals of instructor and chair of Department of Management Information Systems. University of Baltimore course provided as part of the joint Accounting and Business Advisory Program.

Instructional Leadership and Professional Development (ILPD)
Courses

ILPD 603 LEGAL AND ETHICAL ISSUES IN EDUCATION (3)
Highlights major legal and ethical issues in education affecting teachers, administrators, students, and parents. Emphasis is placed on gaining a solid foundation of the framework of our U.S. legal system and demonstrating adeptness at applying this legal knowledge through the lens of ethical decision making. Students will study U.S. Supreme Court cases impacting education and propose leadership action plans that model principles of self-awareness, reflective practice, and transparency to resolve common legal and ethical dilemmas that arise during the operation of a school. Prerequisite: program admission.

ILPD 605 MANAGEMENT PF JI, AM SERVICES: LEADERSHIP AND SUPERVISION (3)
Assists students in developing management expertise for working in nonprofit Jewish organizations. Focuses on leadership style, interpersonal relations, mission statements, shared vision, executive roles, and working with committees, communities, and colleagues.

ILPD 606 STRATEGIC MANAGEMENT OF JEWISH ORGANIZATIONS (3)
Survey of organizational theory and management skills for nonprofit Jewish institutions. Course focuses on financial management, policy formation, strategic planning, marketing and fundraising, and critical issues in philanthropy.

ILPD 614 CLASSROOM ASSESSMENT FOR INSTRUCTIONAL LEADERS (3)
Focuses on understanding and applying current research-based principles of assessment design, and strategically using formative and summative assessment results to support student and teacher growth. The instructional approach that is used models best practices in professional learning community development.

ILPD 650 EXPLORATION OF HOLOCAUST EDUCATION (3)
Critical exploration of various topics of the Holocaust through art, literature, life stories, and film. Core information about the history of the Holocaust and the context and implications of that history. Examines effective teaching methodologies and challenges each student to prepare and present curricular units utilizing different teaching models.

ILPD 667 CURRICULUM & ASSESSMENT FOR INSTRUCTIONAL DEVELOPMENT (3)
Curriculum & Assessment examines the historical, philosophical, and psychological foundations of the school curriculum from an administrative/supervisory perspective. Students will determine some of the basic forces affecting curriculum development, examine its patterns of organization, and identify school practices in curricular development and assessment. Students will formulate and articulate their own curricular theories (orientations) and views related to current trends. The course addresses several sets of state and national standards. Prerequisites: graduate standing.

ILPD 668 LEADERSHIP & GROUP DYNAMICS (3)
Leadership practices governing organizational behaviors in schools and other professional settings, emphasizing adult development and professional growth, group participation, effective communication, etc. Prerequisite: graduate standing.

ILPD 670 SPECIAL TOPICS IN INSTRUCTIONAL LEADERSHIP (3)
In-depth study of a selected topic in Instructional Leadership. The specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the program director is required. Each topic may be taken as a separate course. May be repeated for up to 9 units provided a different topic is covered. Prerequisites: graduate standing.

ILPD 675 LEADERSHIP AND ACTION RESEARCH (3)
Applications of principles and processes for identifying a school issue and determining an appropriate solution to the problem at the school level. Field-testing of proposed solutions and examination of effectiveness of chosen strategies through data analysis. Prerequisite: graduate standing.

ILPD 716 LEADERSHIP OF THE SCHOOLS (3)
Principles of school leadership, roles and responsibilities, change management, curriculum improvement, and organization of the school unit. Aligned with approved state and national leadership standards. Students who have taken ELED 716 or SCED 643 are not eligible to take this course. Prerequisites: three years of teaching experience and teacher certification.

ILPD 739 LEADERSHIP THEORY & PRACTICE FOR EDUCATIONAL LEADERS (3)
Focus on the theoretical and applied foundations of leadership concepts, principles, practices, and competencies; integration of theory and practice to apply these conceptual models of leadership in the education context; and the concept of the school as a learning organization and its implications for the practice of educational leadership. This course is aligned with approved state and national leadership and technology standards.

ILPD 740 EVIDENCE-BASED DECISION MAKING FOR CURRICULUM AND INSTRUCTION (3)
Considers how to collect, analyze, and use a variety of classroom, school-based, state, and national trend data to measure program effectiveness and guide curricular revisions. Students who have taken EDUC 740 are not eligible to take this course. Prerequisites: graduate courses in curriculum and teaching experience.

ILPD 742 TRANSFORMATIONAL LEADERSHIP AND PROFESSIONAL DEVELOPMENT (3)
Addresses the basic considerations affecting professional development at the school and district level, examines patterns of organization, and identifies successful school practices. Students formulate and articulate their own beliefs in relation to current trends and make correlations to approved state and national leadership and professional development standards. Students who have taken EDUC 742 are not eligible to take this course. Prerequisites: one or more courses in educational leadership.

ILPD 743 LEARNING COMMUNITIES AND ORGANIZATIONAL CHANGE (3)
Theoretical underpinnings of individual and organizational learning in an era of rapid change, with emphasis on leaders' roles in shaping schools and districts into learning communities, based on shared values, norms, and ongoing reflective dialogue. Students who have taken EDUC 743 are not eligible to take this course. Prerequisites: 27 graduate credits and advanced standing in graduate programs.

ILPD 744 INTERPERSONAL RELATIONS AND GROUP DYNAMICS: THEORY, RESEARCH, AND APPLICATION (3)
Addresses theoretical and applied foundation of concepts, principles, practices, and competencies related to understanding group dynamics and interpersonal relations; integration of theory and practice to apply various conceptual models of group behavior to educational and organizational settings; self-awareness and developmental activities to improve interpersonal relations. Students who have taken EDUC 744 are not eligible to take this course. Prerequisites: 27 graduate credits and advanced standing in graduate programs.
ILPD 745 SCHOOL BUDGETING AND FISCAL PLANNING (3)
Development of a budget on departmental, local school, system-wide and state levels; implementation and evaluation of budgets; long- and short-term fiscal planning. Students who have taken EDUC 745 are not eligible to take this course. Prerequisite: Once course in school leadership.

ILPD 781 SEMINAR IN SUPERVISION (3)
Roles of the instructional supervisor, supervisory practices and techniques aligned with approved state and national leadership standards. Students who have taken ELED 781 or SCED 683 are not eligible to take this course. Prerequisites: Three years of teaching experience and 9 graduate units.

ILPD 797 INTERNSHIP IN INSTRUCTIONAL LEADERSHIP (1-3)
Designed as a 300 hours collaborative experience involving the school system, the university, and the candidates in practical applications of the knowledge, skills, and dispositions needed to be successful as emerging instructional leaders. In the internship, candidates enrolled in a formal program for Administrator I Certification are required to interact in multiple educational settings and situations and demonstrate understanding of instructional leadership acquired throughout the professional program. The internship addresses approved state and national leadership standards. Prerequisites: candidates must have completed a minimum of 30 units of graduate course work, passed the comprehensive examination, and have consent of the program adviser.

**Instructional Technology (ISTC)**

**Courses**

**ISTC 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. Must be taken for 2 units if student has taken ISTC 269. Prerequisite: Junior standing or departmental approval. Lab/Class fee will be assessed.

**ISTC 541 FOUNDATIONS IN INSTRUCTIONAL TECHNOLOGY (3)**
This introductory course provides an overview of the field of instructional technology. This course focuses on helping students to develop an awareness and understanding of the theories and philosophies driving the field. In addition, this course will explore common computer-related technologies used within most learning environments. Prerequisite: Acceptance into the Graduate School.

**ISTC 553 INSTRUCTIONAL PHOTOGRAPHY (3)**
Explores the use of film-based and digital-based photography for education and training. Application of visual theory, principles, review of basic photographic techniques, photo editing in a digital environment and instructional design competencies will be emphasized.

**ISTC 601 SCHOOL LIBRARY MEDIA ADMINISTRATION (3)**
The evaluation, planning, and policy development for the school library media center. Prerequisites: Graduate standing and completion of all level one and two school library media courses.

**ISTC 605 WEB-BASED INSTRUCTION IN EDUCATION (3)**
Principles of Web-based instruction in creating learning environments. Pedagogical, technological, organizational, institutional and ethical issues related to design, development and delivery. Prerequisite: ISTC 541 or equivalent.

**ISTC 615 COLLECTION DEVELOPMENT (3)**
Concepts, processes, guidelines and resources for the development of a high quality school library media center collection. Prerequisite: Graduate standing.

**ISTC 633 INSTRUCTIONAL VIDEO (3)**
Explores the design and production of video for education training. The emphasis on the instructional systems design process is supported by laboratory tasks that lead students through the process of producing instructional video. Computer-based editing is used. Prerequisite: Bachelor’s degree.

**ISTC 651 INFORMATION LITERACY AND ACCESS (3)**
Access and evaluation of information sources relevant to school library media centers. Prerequisites: Graduate standing and completion of level one school library media courses.

**ISTC 653 THE ORGANIZATION OF KNOWLEDGE (3)**
The organization of knowledge in all formats including cataloging, subject analysis and bibliographic control. Prerequisite: Graduate standing.

**ISTC 655 MULTIMEDIA DESIGN (3)**
Introduction and overview to digital media (multimedia) in instructional settings. A laboratory task enables students to develop original media, gather and edit digital media assets, integrate their products into a computer presentation program and output their results in a variety of digital and analog media formats.

**ISTC 663 APPLIED PSYCHOLOGY OF LEARNING (3)**
Behaviorist, cognitivist and constructivist learning theories are discussed. Emphasis is on the application of those theories to instruction.

**ISTC 667 INSTRUCTIONAL DEVELOPMENT (3)**
Overview and application of the instruction systems approach for problem solving and the design of instruction. Media selection, needs assessment, prototyping, implementation and evaluation of instructional systems.

**ISTC 671 ADVANCED REFERENCE (3)**
Bibliographic research for the retrieval of information using manual and automated information delivery system techniques. Prerequisite: ISTC 471 or equivalent.

**ISTC 673 INSTRUCTIONAL FACILITIES DESIGN (3)**
A systems approach to the integration of media and facilities into a unit to fulfill instructional training goals. Time and sequential phasing relationships. Prerequisites: Three ISTC courses above the 500 level.

**ISTC 674 SPECIAL TOPICS IN INSTRUCTIONAL TECHNOLOGIES (3-6)**
Topics selected from the instructional technology field which are innovative and of immediate concern to existing instructional needs. May be repeated to a maximum of 6 units with no topic repeated. Prerequisite: bachelor’s degree.

**ISTC 685 RESEARCH IN INSTRUCTIONAL TECHNOLOGY (3)**
Students write a research proposal and concentrate on elements of a research study, inferential statistics and research in the field of instructional technology. Prerequisites: 12 units of ISTC courses at 600-700 level.

**ISTC 687 COMPUTER-BASED INSTRUCTION (3)**
The relationship between programmed instruction and computer-assisted instruction is examined. Students are required to demonstrate competencies in the design and production of computer-assisted instruction. Prerequisite: ISTC 541 or equivalent.
ISTC 689 THRY & DESIGN/COMP-BASED (3)
This advanced course investigates several theoretical strategies appropriate to the development of CBI. A variety of educational and training environments are explored in the context of the Instructional Systems Design process. A laboratory task enables students to use the more complex functions of an authoring system. Prerequisite: ISTC 687.

ISTC 690 DATABASE APPLICATIONS FOR SCHOOL LIBRARY MEDIA CENTERS (3)
Theories and applications of educational information system development, including database design and implementation and basis of graphical-user-interface (GUI) programming, with emphasis upon database applications for school library systems and administrative management. Prerequisite: ISTC 541/ISTC 441 or ISTC 301/ISTC 501 or equivalent.

ISTC 691 DIRECT READINGS IN INSTRUCTIONAL TECHNOLOGY (1-4)
Independent readings and research in selected areas of instructional technology. Prerequisite: consent of program director.

ISTC 692 DIRECTED READINGS IN INSTRUCTIONAL TECHNOLOGY (1-4)
Independent readings and research in selected areas of instructional technology. May be repeated for a maximum of 4 units. Prerequisite: consent of program director.

ISTC 693 DIRECTED READINGS IN INSTRUCTIONAL TECHNOLOGY (1-4)
Independent readings and research in selected areas of instructional technology. May be repeated for a maximum of 4 units. Prerequisite: consent of program director.

ISTC 694 DIRECTED READINGS IN INSTRUCTIONAL TECHNOLOGY (1-4)
Independent readings and research in selected areas of instructional technology. May be repeated for a maximum of 4 units. Prerequisites: Consent of program director.

ISTC 695 INDEPENDENT STUDY IN INSTRUCTIONAL TECHNOLOGY (1-4)
Independent readings and research in selected areas of instructional technology. Prerequisite: Consent of chairperson or program director.

ISTC 700 ASSESSMENT IN INSTRUCTIONAL TECHNOLOGY (3)
Contemporary theories and methodologies of assessment in instructional technology, including terminology and concepts, measurement principles and assessment instruments, with emphasis upon assessment of technology learning, technology integration, technology attitudes, performance, educational software designs and management of technology resource. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 702 EDUCATIONAL LEADERSHIP AND TECHNOLOGY (3)
Explores current research and theory related to technology policy, planning and leadership in education settings. Focus will include development of technology plans at the school district and state levels. Prerequisite: Admission to doctoral program or completion of level I: core sequence.

ISTC 705 ADVANCED WEB APPLICATIONS IN EDUCATION (3)
Includes contemporary theories, methodologies and advanced techniques of using Web applications in the field of education and related disciplines. Course covers application of using scripting language to produce dynamic Web pages for educational purposes. Current Web design software and graphing tools will be used. An online learning environment using course management tools will be developed. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 707 LEARNING ENVIRONMENTS IN A DIGITAL AGE (3)
Contemporary learning theory will be used to design and evaluate interactive learning environments that reflect the qualities of active, constructive, collaborative, intentional, complex, contextual, conversational and reflective learning. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 709 LEGAL AND ETHICAL ISSUES IN INSTRUCTIONAL TECHNOLOGY (3)
Legal, ethical and intellectual property issues related to the use of technology in education. Analysis of case studies related to technology use policies for education and human resource organizations. Prerequisites: Successful completion of 15 credits of graduate courses in instructional technology or education. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 711 INNOVATION, CHANGE AND ORGANIZATIONAL STRUCTURES (3)
Study of the interconnected and diverse forces of technological innovation that impact learning organizations and the change process. Departmental permit required. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 717 DISTANCE EDUCATION IN THEORY AND PRACTICE (3)
Teaching strategies, technologies, learning styles and instructional design principles with relation to distance-based and online learning are introduced and discussed. Contemporary research, theories, practices, and critical issues relevant to the field are addressed through an online learning environment. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 718 CRITICAL PERSPECTIVES OF TECHNOLOGY IN EDUCATION (3)
A reflective view of the moral, historical, social, and political views of technology in education. Students will examine technology's broader impact on society. The content to be covered by this course will not overlap with any other courses currently offered by the College of Education. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 720 SOCIAL, POLITICAL AND ETHICAL ISSUES IN DIGITAL LEARNING (3)
An examination of the legal, ethical, and social issues that affect the use of technology in education. Topics include the nature of privacy, intellectual property rights, and the role of technology in society. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 721 LEARNING ENVIRONMENTS IN A DIGITAL AGE (3)
An introduction to digital game based learning. Topics include the theories, possibilities, and practices related to educational game design, as well as the use of learning and commercial entertainment games for educational purposes. Prerequisites: Six units of graduate coursework.

ISTC 722 PRACTICE FOR INTEGRATING DIGITAL RESOURCES INTO LEARNING AND TEACHING (3)
Focuses on current theoretical perspectives on learning that underlies decisions about technology integration in diverse educational settings. Students will examine recent technological innovations surrounding technology integration for teaching and learning; analyze effective design of computer-based instructional materials; create and evaluate case studies relating to technology integration, and critically examine their own personal and professional values as an aspect of their work as educator and instructional designer. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 731 THEORY AND PRACTICE FOR INTEGRATING DIGITAL RESOURCES INTO LEARNING AND TEACHING (3)
Focuses on current theoretical perspectives on learning that underlies decisions about technology integration in diverse educational settings. Students will examine recent technological innovations surrounding technology integration for teaching and learning; analyze effective design of computer-based instructional materials; create and evaluate case studies relating to technology integration, and critically examine their own personal and professional values as an aspect of their work as educator and instructional designer. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 741 RESEARCH FOUNDATIONS OF INSTRUCTIONAL TECHNOLOGY (3)
This seminar course will focus on examining philosophies and discourse upon which the field of instructional technology is built. This course will examine historical research, organizational and governmental standards, alternative and critical theories, and paradigms and philosophies of learning, design and technology. Prerequisite: Admission to doctoral program or completion of level I: core sequence.
ISTC 767 ADVANCED THEORY AND INSTRUCTIONAL DESIGN (3)
Designed to extend the student's understanding of instructional design, to include advanced models, non-linear models, advanced assessment and evaluation techniques, and to provide a glimpse of instructional design in the years to come. A comprehensive course project will be completed using such techniques and theories. Does not overlap with any existing course. Prerequisites: Admission to doctoral program or completion of level I: core sequence.

ISTC 780 SEMINAR I: INVESTIGATING AND EVALUATING RESEARCH IN INSTRUCTIONAL TECHNOLOGY (3)
This seminar course will focus on a critical review and evaluation of current research findings and methodology. The emphasis is upon the development of a critical perspective of ongoing research in the field of instructional technology and related specialization areas. The intent of the course is that doctoral students will develop a review of literature related to their dissertation proposal. Open only to students who have completed the required doctoral core courses and have been admitted to the ISTC doctoral program.

ISTC 782 INVESTIGATING AND EVALUATING RESEARCH IN ISTC II (3)
This seminar course will focus on a critical review and evaluation of current research findings and methodology. The emphasis is upon the development of critical perspective of ongoing research in the field of instructional technology and related specialization areas. The intent of this course is that doctoral student will develop products related to their dissertation proposal. This course may be repeated for a maximum of 6 credits. Prerequisites: ISTC 780.

ISTC 787 INSTRUCTIONAL TECHNOLOGY CAPSTONE (3)
Provides students the opportunity to demonstrate mastery of required coursework in the Instructional Technology Program. Proposal and completion of a comprehensive technology-intensive project. Prerequisites: Completed 21 units in ISTC program.

ISTC 789 PRACTICUM AND PORTFOLIO IN SCHOOL LIBRARY MEDIA (3-6)
Students serve under the supervision of a school library media center director. Students present graduate portfolios to level one students and faculty in school library media. Prerequisite: Completion of all level one and level two school library media courses.

ISTC 797 GRADUATE INTERNSHIP IN INSTRUCTIONAL TECHNOLOGY (3)
Project under the direction of a faculty adviser. The course may be taken twice for credit. Prerequisites: 12 units of ISTC courses at 600-700 level and consent of program director.

ISTC 897 INSTRUCTIONAL TECHNOLOGY THESIS (6)
An original investigation, using research method and design, of a research problem. Credit granted after thesis accepted. Prerequisite: Consent of chairperson.

ISTC 898 INSTRUCTIONAL TECHNOLOGY THESIS (3)
An original investigation, using research method and design, of a research problem. Taken over two consecutive semesters. Credit granted after thesis accepted. Prerequisite: The previous course, ISTC 897, taken over two consecutive terms.

ISTC 899 THESIS CONTINUUM (1)
Continuation of thesis research. Prerequisite: ISTC 898.

ISTC 998 INSTRUCTIONAL TECHNOLOGY DISSERTATION (1-9)
An original research investigation using research literature, methods, analysis, and design. Prerequisite: consent of advisor.

ISTC 999 DISSERTATION CONTINUUM (1)
Continuing work on dissertation after completion of basic dissertation credits. May be repeated as necessary.

Interdisciplinary Studies/Fine Arts & Communication (IDFA)

Courses

IDFA 571 SPECIAL TOPICS IN SOCIAL ACTION (3)
A multidisciplinary and collaborative service-learning seminar that explores complex problems of the Baltimore metropolitan region. Includes creative projects and fieldwork with civic, community, and/or non-profit organizations. Topics vary and could include homelessness, domestic violence, drug abuse, disabilities, housing, education, health issues, and welfare. May be repeated for a maximum of 6 units when a different topic is covered. Prerequisite: junior/senior standing or consent of instructor.

IDFA 601 ENHANCING READING THROUGH THE ARTS (3)
Arts experience to facilitate skills, comprehension, analysis and synthesis of text-based learning materials. Includes pre-reading skills, readiness activities, vocabulary building, critical analysis and creative writing. Prerequisite: approval of program director.

IDFA 602 ARTS ACROSS THE CURRICULUM (3)
Explores the interdisciplinary planning and teaching strategies integrating the arts (Dance, Music, Theatre and Visual Arts) with academic subjects in the PreK-12 curriculum. Prerequisite: approval of program director.

IDFA 603 DRAMA IN THE CLASSROOM (3)
Provides a practical and philosophical framework for integrating drama across the curriculum. Participants will explore the importance of creative play in fostering and extending a child’s natural ability to talk and imagine. Through classroom activities and independent research, the participants will identify the significance and implications of drama both as an art form (product) and as a cross-curricular tool (process). Lessons and units will be designed in alignment with Maryland State Curriculum for Fine Arts and include planning, progression, continuity and assessment. Uses drama in the classroom as a tool for stimulating and deepening learning in areas of the curriculum represented by course participants. Prerequisite: approval of program director.

IDFA 604 INTERDISCIPLINARY SEMINAR IN THE CONTEMPORARY ARTS (3)
An interdisciplinary graduate seminar in the contemporary arts and media; topics may vary by semester. Prerequisite: approval of program director.

IDFA 605 CREATING AN ELECTRONIC PORTFOLIO (3)
Design and development of an electronic portfolio. Includes exploration of theories and processes of E-Portfolio in the context of teaching and learning, with hands-on activities using technology and new media to maximize effectiveness. Prerequisite: approval of program director.

IDFA 606 ART FORMS (3)
Interdisciplinary course focusing on two of the four art forms of Dance, Music, Theatre and Visual Art through participation in the creative process. Course may be repeated provided the two art forms are different. Prerequisite: approval of program director.

IDFA 607 TEACHING THINKING THROUGH ARTS (3)
An exploration of interdisciplinary planning, thinking and teaching strategies, integrating art appreciation and cognition with core curriculum in the PreK-12 classroom. Prerequisite: approval of program director.
IDFA 608 ARTS INTEGRATION CAPSTONE SEMINAR (3)
Introduction to action research project in arts integration. Includes the writing of a proposal, outline of project and research in selected areas. Graded S/U. Prerequisite: approval of program director.

IDFA 609 ARTS INTEGRATION CAPSTONE PROJECT (3)
Implementation of action research project. Includes analysis, reflection and evaluation of project. Graded S/U. Prerequisite: IDFA 608 and approval of program director.

IDFA 610 COLLABORATIVE SYMPOSIUM: THE POWER OF ARTS IN PRACTICE (3)
An overview of theories, principles, and practices of arts infusion focused on applications for educational enterprises.

IDFA 690 INTERDISCIPLINARY FINE ARTS INDEPENDENT STUDY (1-6)
Directed graduate study through research, readings, projects, papers, and/or seminars. May be repeated for a total of no more than 6 units. Prerequisite: approval of program director.

IDFA 703 INTERDISCIPLINARY RESEARCH METHODS (3)
Introduction to action research methodologies and students drawing on their creative practice. This program-required course will explore theoretical frameworks and practical applications for action research in education. Prerequisite: approval of program director.

IDFA 710 CAPSTONE IN THE COMMUNITY (3)
An extension of the Post-Baccalaureate Certificate in Arts Integration capstone experience with/through community partnerships. Graded S/U. Prerequisites: Post-Baccalaureate Certificate in Arts Integration and IDFA 703.

Interdisciplinary Studies/Health Professions (IDHP)

Courses

IDHP 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 forMaryland State Certification as HIV testing counselors. Prerequisites: HLTH 101 or NURS 406, PSYC 101, SOCI 101 and one of the following: BIOL 221/BIOL 221L (BIOL 213), BIOL 215, HLTH 207 or NURS 204 or consent of instructor.

IDHP 560 MENTORING AND AUTISM (3)
Classroom instruction on mentoring models and self-advocacy principles, and out-of-class mentoring experiences with adults on the autism spectrum. Prerequisites: HONR 370; IDHP 300; or permission from instructor.

IDHP 570 SPECIAL TOPICS IN INTERDISCIPLINARY HEALTH PROFESSIONS (1-3)
The study of special topics in interdisciplinary health professions. May be repeated for a maximum of 6 credits. Prerequisites: None.

IDHP 600 TRANSITIONS: HEALTHCARE PROFESSIONALS IN A CHANGING ENVIRONMENT (3)
Introductory course in CAT program, focused primarily on context and stakeholders of health delivery system, along with leadership and teamwork.

IDHP 602 CLINICAL PROGRAM PLANNING, IMPLEMENTATION AND EVALUATION (3)
Planning clinical programs for health care environments and business planning. Course includes practical skill development in the design of a program proposal, including elements of reimbursement and regulatory requirements. Students will apply tracking systems to evaluate program effectiveness.

IDHP 605 MANAGING HEALTH CARE PROFESSIONALS (3)
Overview of issues and skills involved in effectively managing the health professional. Focuses on the application of the entire range of supervisory skills and personnel management practices to the tasks of administering a health care operation. Also listed as OCTH 605.

IDHP 610 ADMINISTRATION OF HEALTH CARE ORGANIZATIONS (3)
Capstone course in the interdisciplinary Clinician to Administrator Transition (CAT) certificate program. Integration and application of knowledge and skills related to program planning, financial management and management of human resources. Prerequisites: Completion of the first five courses in the CAT program.

IDHP 621 CONTEMPORARY ISSUES FOR INFANTS AND CHILDREN ON THE AUTISM SPECTRUM (3)
Theoretical and applied perspectives of current issues related to infants and children on the autism spectrum; family concerns; and considerations of educational, community, and home contexts. No prerequisites.

IDHP 623 CONTEMPORARY ISSUES FOR ADOLESCENTS AND ADULTS ON THE AUTISM SPECTRUM (3)
Overview of theoretical and applied perspectives of current issues related to adolescents and adults on the autism spectrum with a primary focus on person-centered strategies and evidence-based practice. Prerequisites: None.

IDHP 636 INTERMEDIATE STATISTICS FOR THE HEALTH SCIENCES (3)
The focus of this course is on the statistical methodologies and research designs in public health. The course content ranges from Single Factor to Multiple Factor analyses. Advanced statistical analytical techniques will be addressed using hand-held calculators (TI83 or equivalent), as well as statistical software available in Excel and SPSS. Topics, such as, effect size, confidence intervals, standard error of the mean, Type I error, Type II errors and power will be continuously emphasized throughout the course. May be repeated for a maximum of 6 units.

IDHP 641 COMMUNICATION, BEHAVIOR, AND PARTICIPATION LINKAGES FOR PEOPLE ON THE AUTISM SPECTRUM (3)
An analysis and application of positive communication and behavioral management strategies to promote social participation and inclusion of people on the autism spectrum. Prerequisite: IDHP 621.

IDHP 642 PROGRAM DESIGN AND IMPLEMENTATION IN AUTISM (3)
Program needs assessment, design, and evaluation for people on the autism spectrum to support participation in educational, work, home, and community settings. Prerequisite: IDHP 621.

IDHP 647 HEALTH CARE FINANCIAL MANAGEMENT (3)
Examination of financial aspects of health care, including accounting and budgeting. Aspects of production, distribution and organization and health services are reviewed from financial and economic perspectives. Also listed as HLTH 647.

IDHP 651 PLANNING AND MARKETING HEALTH IN BUSINESS AND INDUSTRY (3)
Health promotion and delivery in the profit and not-for-profit sectors. Concepts and application of planning and marketing health in various settings. Also listed as HLTH 651.
IDHP 653 RESPONSIBLE CONDUCT OF RESEARCH (3)
An interdisciplinary exploration of issues in the ethical conduct of research, and in the process of moving from graduate school into a career. Includes: societal, political, and institutional environment and values surrounding research and research misconduct; ways to encourage research integrity; and ways to evaluate it. Also covers the regulation of human and animal research; data management; informed consent and confidentiality; conflicts of interest; mentoring & collaboration; resume-building; grantsmanship; authorship & publication (including plagiarism); peer review; whistle-blowing; and seeking employment in research or academic settings. May be repeated for a maximum of 6 credits.

IDHP 681 SEMINAR IN AUTISM SPECTRUM ISSUES (1)
Interdisciplinary analysis of issues and integration of services for people on the autism spectrum, their families and communities. Prerequisites: IDHP 6xx, IDHP 6yy and FMS T 610 or SPED 605, must be taken final semester of program.

IDHP 705 CULTURE AND HEALTH (3)
Provides a theoretical framework for culture and health. Students will analyze cultural understandings on healthcare and synthesize this knowledge for application into their professional practice.

IDHP 712 THE ADULT LEARNER (3)
Introduction to learning in adulthood, including context, development, process and practice. Prerequisite: Consent of instructor.

IDHP 741 ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE (3)
Provides an interdisciplinary exploration of legal and ethical issues in clinical practice, research, administration and teaching. It includes emphases on cultural diversity, truth-telling, informed consent, confidentiality, accountability, reimbursement pressures, new technologies and treatments, end-of-life care, licensure concerns, practice in varied settings and organizational ethics. Prerequisite: Admission into the graduate school.

IDHP 770 SPECIAL TOPICS IN THE FIELD OF AUTISM (1-3)
Study of selected topics in the field of autism. Student may repeat up to 6 units. Prerequisites: Vary with each topic; consent of program chair.

IDHP 791 DIRECTED READINGS IN THE FIELD OF AUTISM (3)
Guided review of literature to explore in depth subjects related to field of autism. Course may be repeated for a maximum of 6 credits. Prerequisite: Consent of program chair.

IDHP 792 INDEPENDENT STUDY IN THE FIELD OF AUTISM (3)
In-depth investigation specific to areas of interest related to the field of autism. May be repeated for a maximum of 6 credits. Prerequisites: Consent of program chair.

Integrated Homeland Security Management (IHSM)

Courses

IHSM 611 CRITICAL NATIONAL INFRASTRUCTURES (3)
Examines America’s critical infrastructures and their relationships to one-another, and issues pertaining to safeguarding and managing these infrastructures under serious threat. Analyzes key asset identification, threat and vulnerability, and studies technologies for their ability to support planning, mitigation, response, recovery, and prediction. Enrollment: Admission to the Integrated Homeland Security management program or approval of program director.

IHSM 612 PLANNING, PREVENTION AND RISK MANAGEMENT (3)
Explores technology and management of holistic information security and risk with respect to U.S. Homeland Security and specific technologies and techniques used by terrorists, hackers, crackers, spies, and thieves. Enrollment: Admission to the Integrated Homeland Security Management program or approval of program director.

IHSM 613 EMERGENCY COMMUNICATION AND MANAGEMENT (3)
Issues in communication in times of emergency, including communication within and between infrastructures, communication with the public, urgent message communication, and communication hierarchy and protocols in emergency situations. On-line course. Prerequisites: Admission to Integrated Homeland Security Management Program or approval of instructor.

IHSM 614 TEAM BUILDING AND LEADERSHIP SKILLS (3)
Psychological and organizational aspects of group dynamics and work teams. Application of theory to actual teams in the workplace with respect to U.S. Homeland Security and specific case analysis/team solutions. Prerequisite: Admission to Integrated Homeland Security Management program or approval of instructor.

IHSM 615 STRATEGIC AND TACTICAL PLANNING (3)
Deals with broad strategy and tactical planning at the national level as also to the level of each critical infrastructure. Strategies discussed include the Homeland Security Strategy, strategy for combating terrorism, strategy for aviation, strategy for pandemic/influenza, strategy for maritime defense, cyberspace strategy. Tactical aspects include the national response plan and the national incident management system. Prerequisites: Graduate Standing and Major Standing.

IHSM 620 INTRODUCTION TO INFORMATION ASSURANCE (3)
Principles, mechanisms, and implementation of information assurance. Emphasis is placed on human and technological aspects of information assurance and issues relevant to the risks in which information systems are exposed and methods of dealing with such risks. Not open to students who have taken COSC 644. Prerequisite: Graduate Standing.

IHSM 621 INFORMATION SYSTEMS VULNERABILITY AND RISK ANALYSIS (3)
The identification of vulnerabilities and risks inherent in the operation of information systems will be explored. Countermeasures will be discussed and documented in an effort to counter identified vulnerabilities.

IHSM 622 INTRODUCTION TO SOFTWARE SECURITY (3)
A study of security concepts in software. Discussion of design principles for secure software development, and some of the security issues in current applications, database systems, and web systems. It provides the foundation for identifying vulnerabilities, their impact, and solutions to securing them. Not open to students who have successfully completed COSC 647. Prerequisite: Open to IHSM-MS students only or by department consent.

IHSM 623 NETWORK SECURITY (3)
Network security, hacker attacks, Web security, e-mail security, e-commerce security, systems and operation environment security, database security, algorithms for making data communications secure, encryption and coding techniques and IP security.

IHSM 630 HEALTH SYSTEM PREPAREDNESS (3)
Examines the health related capacities and needs of homeland security infrastructures and systems, health response teams and communities at the local, regional, and national levels. Prerequisites: Open to IHSM-MS majors only or department consent.
IHSM 631 MENTAL HEALTH EMERGENCY PREPAREDNESS AND RESPONSE (3)
Incorporating emergency mental health principles, strategies, and concepts into overall emergency management planning; basic concepts of disaster and terrorism mental health response, at the individual, group, organizational, and community level. Case studies and course projects will be used to show practical applications. Prerequisites: Graduate standing and major standing.

IHSM 632 BIOTERROR PUBLIC HEALTH PREPAREDNESS (3)
Covers core and specific discipline competencies for health, public health and other workers with emphasis on bioterrorism and public health emergency preparedness that is related to a potential biological, chemical, radiation, nuclear or other public health emergency. Prerequisites: Graduate standing and major standing.

IHSM 633 DISASTER RESPONSE AND COMMUNITY HEALTH (3)
Addresses the need for professionals to incorporate an all hazards approach for disaster management and community health. Students will identify key international and national policies and their impact upon community health and national security. Students will be engaged in field work with the community of their choice to plan, implement, and evaluate a project designed to actively involve community members in some aspect of disaster preparedness. Prerequisites: Graduate standing, major standing.

IHSM 640 U.S. HOMELAND SECURITY POLICY (3)
U.S. homeland security policy examines the concept of U.S. homeland security in the context of recent history. It provides an overview of the nature of threats and major vulnerabilities that are the focus of homeland security efforts. The course surveys the principal actors engaged in the homeland security enterprise. It describes the evaluation of institutions, network, and organizational relationships that are emerging in the homeland security enterprise. The course analyzes current homeland security policy issues and discusses the future of the homeland security enterprise. Prerequisites: Graduate standing, major standing.

IHSM 641 TERRORISM AND POLITICAL VIOLENCE (3)
Analysis of the role of violence in the political process and of the threat posed to localities, states, and nations from groups willing to employ political violence. Review of current political and terrorist groups and examination of efforts to address threats of political violence. Prerequisite: Graduate Standing.

IHSM 642 INTELLIGENCE AND HOMELAND SECURITY (3)
Examination of the role of intelligence in homeland security and national security policy, strategic and tactical warning, support for military operations, and covert action. Emphasis on problems in conduction intelligence in a democracy and on ethical considerations.

IHSM 643 HOMELAND SECURITY AND CONSTITUTIONAL RIGHTS (3)
A comprehensive investigation and analysis of the relationship between national security and civil liberties in the war on terrorism and other threats to American security. Prerequisites: Completion of IHSM core courses or permission of instructor.

IHSM 660 GIS APPLICATIONS: HOMELAND SECURITY AND EMERGENCY MANAGEMENT (3)
Study and use of selected computer hardware and software for the storage, retrieval, manipulation, analysis, and display of geographic data. Emphasis is placed on the application of geographic information systems (GIS) for homeland security and emergency management. The course is not intended to provide students with extensive training in particular GIS software. However, laboratory projects involving student use of Windows-based GIS software on desktop computers, and internet-based GIS applications using Web browsers, are required and will reinforce important concepts. Prerequisites: Graduate standing, major standing.

IHSM 670 SPECIAL TOPICS IN HOMELAND SECURITY (3)
Selected topics in the Homeland Security area. Emphasis on new and emerging issues in Homeland Security. May be repeated for a maximum of 6 credits. Prerequisites: Completion of all core courses in the IHSM Program and consent of instructor.

IHSM 695 INDEPENDENT STUDY IN HOMELAND SECURITY (1-6)
Selected topics in the Homeland Security area. Emphasis on new and emerging issues in homeland security. May be repeated for a maximum of 6 credits. Prerequisites: Completion of all core core courses in the IHSM Program and consent of instructor.

IHSM 881 CAPSTONE PROJECT I (3)
An original investigation of a problem to be pursued in cooperation with a federal, state, city or county agency on a homeland security related topic under the direction of an agency supervisor and a member of the IHSM faculty. The faculty advisor will in conjunction with the agency supervisor guide the student throughout different phases of completing the project. Permit required, only IHSM graduate students. Prerequisites: Completion of at least 12 credits toward the MS degree Integrated Homeland Security Management and consent of program director.

IHSM 882 CAPSTONE PROJECT II (3)
An original investigation of a problem to be pursued in cooperation with a federal, state, city or county agency on a homeland security related topic under the direction of an agency supervisor and a member of the IHSM faculty. The faculty advisor will in conjunction with the agency supervisor guide the student throughout different phases of completing the project. Permit required, only IHSM graduate students. Prerequisites: Completion of at least 12 credits toward the MS degree Integrated Homeland Security Management and consent of program director.

IHSM 885 CAPSTONE PROJECT CONTINUUM (1)
Continuation of graduate project. May be repeated for a maximum of 3 credits. Graded S/U. Prerequisites: Graduate Standing and major standing; previous registration for project work.

Jewish Studies (JDST)

Courses

JDST 544 BIBLICAL HEBREW I (3)
Introduction to Hebrew with emphasis on the 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. Prerequisites: None.

JDST 545 BIBLICAL HEBREW II (3)
Introduction to the fundamentals of Hebrew language; foundation for continued studies of the classical Hebrew contain in the Hebrew Bible and rabbinic texts as well as the Hebrew of the contemporary idiom. Prerequisites: JDST 544 Biblical Hebrew I or consent of instructor.
JDST 546 BIBLICAL HEBREW III (3)
Continued study of Biblical Hebrew tests with concentration on more complicated structures of Hebrew grammar, morphology, syntax, and vocabulary. Prerequisites: Six units of Biblical Hebrew or consent of instructor.

JDST 547 BIBLICAL HEBREW IV (3)
Reinforcement and expansion of existing knowledge of Biblical Hebrew; use of classical Hebrew texts to review Biblical Hebrew grammar and to build vocabulary; introduction of literary features in Biblical Hebrew narrative. Prerequisites: JDST 546 or consent of instructor.

JDST 585 JEWISH LAW AND ETHICS (3)
Cutting edge issues of ethical and legal concern as understood by traditional Jewish legal and ethical sources and by contemporary Jewish thinkers. Basic structure and methodology of Jewish law. Understanding of the system through examination of different issues. Prerequisites: None.

JDST 600 BIBLICAL LITERATURE AND CIVILIZATION (3)
The Bible as the primary vehicle for the understanding of Israelite civilization. Critical examination of the Bible and its literature. Insights on literary form, style and function in ancient Israel; Israel's culture and history during the first millennium BCE; and Israel's religious ideas, institutions and theology. Prerequisites: None.

JDST 607 II SAMUEL - THE RISE AND FALL OF DAVID, THE KING (3)
Critical historical and literary analysis of the text of II Samuel, the narrative of the rise of the Davidic Kingdom centered in Jerusalem. Dramatic rise and tragic decline of David himself. Read and analyzed from a variety of exegetical perspectives. Exploration of viewpoints of author and audience and of the historical reality of the formative epoch of the ancient Israelite Kingdom. Prerequisite: None.

JDST 608 I KINGS: REFLECTIONS OF A GOLDEN AGE (3)
Careful reading and study of I Kings from a variety of exegetical perspectives. Prerequisites: None.

JDST 609 II KINGS; SOCIO-LITERARY PERSPECTIVES (3)
Survey of II Kings; the literary portrayal of ideological, historiographic, literary, theological and overarching cultural issues; nature of literary genres in II Kings. Prerequisites: None.

JDST 610 DIASPORA JEWISH COMMUNITIES (3)
Survey of Jewish world following World War II, examining Jewish communities in Israel, North America, Western, Central and Eastern Europe, South America, South Africa and Australia. Jewish life in each region, diverse challenges to maintaining Jewish distinctiveness; Diaspora Jewish communities' changing relationship to Israel and Zionism; shifting role of Israeli Jewry and American Jewry on the world stage in the late 20th and early 21st centuries. Prerequisites: None.

JDST 611 AMERICAN JEWISH HISTORY (3)
Comprehensive introduction to the 350-year history of the American Jewish community. The colonial and revolutionary periods: Jewish immigration to the U.S. from Central Europe (1840-1880) and Eastern Europe (1881-1924); life in the United Stated during the first half of the 20th century, including the impact of World War I, the depression, the Holocaust and the founding of Israel on American Jewish life; post-World War II developments including the crisis in Jewish liberalism, and complicated relations between Blacks and Jews; ethnic revival following the Six-Day War in 1967; debates over affirmative action; contemporary Jewish issues.

JDST 617 JEWISH STUDIES INTERNSHIP (3)
Practical experiences within the historical profession. Special Permit required. Prerequisites: Approval of the program director.

JDST 625 RACE, GENDER, SEXUALITY, AND JUDAISM (3)
In-depth look at critical social issues in contemporary Judaism. Significant primary and secondary source analysis. Focus on Jewish law, tradition, practice, and identity.

JDST 630 MEDIEVAL JEWISH HISTORY (3)
Jewish history from the seventh century through the expulsion of the Jews from Spain in 1492.

JDST 631 JEWS IN THE MODERN WORLD (3)
Major transformations in Jewish history from the enlightenment through the conclusion of the twentieth century. Topics include: Jewish emancipation in Europe, religious transformations, the rise of modern anti-Semitism, East European Jewry and the emergence of Jewish politics and secular Jewish ideologies, the Zionist movement, the Holocaust, the founding and impact of the state of Israel, and the emergence of a vibrant American Jewish community. Prerequisites: None.

JDST 641 CLASSICAL HEBREW LANGUAGE AND LITERATURE II: SECOND SAMUEL (3)
Advanced Hebrew course that surveys the biblical book of 2 Samuel. Prerequisites: 12 units of college-level Biblical Hebrew or consent of instructor.

JDST 650 SPECIAL TOPICS IN JUDAIC STUDIES (3)
Diverse topics in the study of Judaism. May be repeated for a maximum of 6 credits provided a different topic is selected.

JDST 661 THE TANYA: THE MAGNUM OPUS OF HASCIDIC LITERATURE (3)
Themes from the Tanya: the religious stature of the righteous; the influence of evil on the soul; the praxis of human attachment to divine reality; Hasidic gates of repentance and forgiveness; communion with the divine through spiritual happiness; letters of and words as diving ontology; the religious process of speech, thought, and action; and spiritual living in a state of nothingness. Prerequisites: None.

JDST 662 MYSTERIES OF THE HOLY ZOHAR (3)
Exploration of some of the focal Zoharic of the Holy Zohar, the most influential Kabbalistic composition, important to core beliefs of Jewish spirituality. Zoharic language symbolism, the mystery of Ein-Sof and the Ten Sefirot, and other esoteric doctrines in the Zohar. Attention to basic Zoharic terminology in Hebrew and Aramaic. Prerequisites: None.

JDST 663 CONTEMPORARY JEWISH ETHICS: RESHAPING THE JEWISH IDENTITY IN OUR GENERATION (3)
Innovative trends of Jewish ethics and spirituality in the new modern Jewish world. Contemporary ideologies of both secular and religious Judaism since the rise of Haskalah and Zionism. Reflections on the Jewish community in America, and on the Jewish people in Israel. Influential authors including Rosenzweig, Buber, Heschel, Kaplan, Soloveitchik, Agnon, Scholem, and Leibowitz. Jewish authenticity and individuality; existential freedom and ethical responsibility; assimilation and secularism; contemporary spirituality and creativity. Prerequisites: None.

JDST 666 INTRODUCTION TO JEWISH THOUGHT (3)
Examination of the religious ideas and the historical developments of Jewish thought over the last two thousand years. Prerequisites: None.

JDST 680 INTRODUCTION TO RABBINIC LITERATURE AND HISTORY (3)
Exploration of the history, literature and major personalities of the period from the return of the Jews from the Babylonian exile (516 BCE) until the Arab conquest of Palestine (c. 634 CE). Prerequisites: None.
JDST 683 DIRECTED INDIVIDUAL RESEARCH (1-4)
Research and reading with a topic to be selected by the instructor and student. May be repeated for a maximum of 6 credits. Special Permit required. Prerequisites: Graduate standing, 18 units of graduate work, and consent of program director.

JDST 697 DIRECTED READING IN JEWISH STUDIES (2-4)
Reading in areas with a topic to be selected by the instructor and the student. No more than 6 units of 697 and 797 may be applied toward a degree. Course may be repeated for a maximum of 6 credits. Special Permit required. Prerequisites: Graduate Standing, 18 units of graduate work, and consent of instructor and program director.

JDST 719 JEWISH STUDIES SEMINAR (0.5)
The seminar will be held three evenings each semester and be a combination of scheduled lecturers and faculty and student presentations. Register for this course every semester. Required of all Master’s students.

JDST 781 FOR THE SAKE OF THE BOUND WOMAN, THE RABBIS WERE LENIENT (3)
Applications and adaptations of Jewish law regarding the issue of a man's disappearance: due to war, persecution or tragedy, that left his wife legally bound to a husband who was possibly dead; historical examples where this situation was prevalent including the Hadrianic Persecutions, the Crusades, the Holocaust and 9/11. Prerequisites: None.

JDST 783 HISTORY OF JEWISH BIBLICAL EXEGESIS I: FROM THE BIBLE TO THE CLOSE OF THE TALMUD (3)
Exploration of different ways the Bible was read and interpreted in ancient Jewish History Analysis of early history of different tools and approaches. Ways in which the Bible was understood within the Bible itself. Discussion of mechanisms such as trope and conscious preservation of variant readings. Examination of Bible interpretation in Philo, the Dead Sea Scrolls and the Apocrypha. Rabbinic literature from the 2nd through the 7th centuries C.E. and the Bible. Prerequisites: None.

JDST 784 HISTORY OF JEWISH BIBLICAL EXEGESIS II: FROM THE CLOSE OF THE TALMUD TO THE MODERN PERIOD (3)
Course will analyzes the history of different approaches to understanding the Biblical text used by Jewish scholars from the 8th Century to contemporary times. Prerequisites: None.

JDST 797 DIRECTED INDIVIDUAL RESEARCH IN JEWISH STUDIES (3)
Research and reading with a topic to be selected by the instructor and student. Special Permit required. Prerequisites: Graduate standing and 18 units of JDST core courses.

JDST 890 JDST DOCTORAL SEMINAR (0.5)
The seminar will be held three evenings each semester and be a combination of scheduled lecturers and faculty and student presentations. Register for the course in the second term. Required of all doctoral students. Prerequisites: None.

Kinesiology (KNES)

Courses

KNES 505 BEHAVIOR MANAGEMENT TECHNIQUES IN THE CLASSROOM (3)
Causes of misbehavior in pre-schools, elementary and secondary schools. Crisis prevention. Preventive, supportive and directive strategies and their practical application. Class rules, reinforcing, assessment and legal issues. Prerequisites: PSYC 201 or equivalent Restrictions: Junior standing; students may not take this course if they have already taken SPED 429.

KNES 596 INDEPENDENT STUDY (0.5-3)
Course is designed to permit students to take courses which they cannot arrange within the regular semester 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 the department chairperson is obtained.

KNES 610 PSYCHOLOGICAL AND SOCIAL DETERMINANTS OF PHYSICAL ACTIVITY BEHAVIORS (3)
Practical applications of psychological and sociological issues and theories influencing physical activity behavior. Prerequisites: Admission to Graduate Program; permission of the program director.

KNES 612 DATA ANALYSIS IN KINESIOLOGY (3)
Review of conducting and interpreting statistical procedures as applied to kinesiology. Students will conduct analyses and interpret the results using statistical software programs. Prerequisite: Admission to KNES graduate program or approval from the department.

KNES 631 ANALYSIS OF MOVEMENT IN SPORT AND PHYSICAL ACTIVITY (3)
Analyzing movement skills and processes to improve teaching and learning of motor skills. Prerequisites: Admission to Graduate Program; permission of the program director.
KNES 642 ASSESSMENT IN PHYSICAL EDUCATION (3)
Measurement and evaluation of the psychomotor, cognitive, and affective domains for use when teaching PreK-12 physical education. Prerequisites: Admission to the M.S. in Kinesiology program.

KNES 648 CONCEPTS IN NUTRITION, EXERCISE, AND LIFELONG ACTIVITY (3)
Focuses on the interaction between nutrition, exercise, and lifelong activity with emphasis on current guidelines and programming for PreK-12 populations. Prerequisite: Admission to KNES graduate program or approval of the department.

KNES 654 CURRICULUM AND PROGRAM DEVELOPMENT IN PHYSICAL EDUCATION (3)
Critical examination of current trends and issues related to the sequencing and selection of programs and curricula to develop quality physical education programming. Prerequisites: Admission to Graduate Program or permission of instructor.

KNES 670 SELECTED TOPICS IN PHEC (1-3)
Course will focus on an in-depth study of selected topics in sport and physical education. Content will vary and will focus on current research and/or relevant sport and physical education concerns. The specific requirements will vary with each topic. Prerequisite: Approval by the graduate program director.

KNES 696 INDEP STUDY IN PHYSICAL EDUCATION (3)
Supervised study of research problems and special projects in specified areas of physical education. Prerequisites: KNES 639 or KNES 641 and consent of graduate program director.

KNES 712 RISK MANAGEMENT, LEGAL ISSUES, AND LIABILITY IN PHYSICAL EDUCATION (3)
The risks, legal, and liability issues involved in the delivery of physical education and sport content. Historical and current cases will be explored in an effort to decrease risk. Policy and risk management plans will be developed. Prerequisite: Admission to KNES graduate program or approval from the department.

KNES 723 ADAPTING PHYSICAL EDUCATION FOR ALL LEARNERS (3)
Focus on the practical applications of curricular and instructional design, behavior modification strategies, assessments, adapted equipment, and assistive technology influencing physical activity behavior of diverse learners. Prerequisites: Admission to graduate program of permission of instructor and completion of undergraduate adapted physical education course.

KNES 731 IMPROVEMENT OF TEACHER AND PROGRAM EFFECTIVENESS IN PHYSICAL EDUCATION (3)
Self-assessment of teaching, selecting authentic assessment strategies to determine the effectiveness of instruction, and researching teaching leading to best practice in physical activity instruction. Prerequisites: Admission to Graduate Program of permission of instructor.

KNES 734 RESEARCH DESIGN FOR PHYSICAL EDUCATION (3)
Introduction to and application of methods and techniques used in executing research with a particular focus on issues pertaining to the theory in practice of teaching physical education. Prerequisites: Admission to program or approval of KNES Graduate Program Director.

KNES 787 KNES CAPSTONE IN PHYSICAL EDUCATION PEDAGOGY (3)
Analysis and application of theoretical knowledge and experience in contemporary best practices in the discipline of physical education including, but not limited to, methodology/instructional strategies, curriculum development, and program assessment. A substantial reflective component is required. Prerequisite: admission to graduate program; completion of all other coursework for M.S. in Kinesiology.

KNES 897 KNES THESIS (6)
Preparation and submission of thesis proposal. Proposal will be presented to a thesis committee in written and oral formats. Following approval of committee, execution of the proposed study, analysis of data, report of results, and discussion of findings / conclusions can be initiated. Prerequisite: Department Consent.

KNES 898 KNES THESIS (3)
Preparation and submission of thesis proposal. Proposal will be presented to a thesis committee in written and oral formats. Following approval of committee, execution of the proposed study, analysis of data, report of results, and discussion of findings / conclusions can be initiated. Prerequisites: Dept Consent.

KNES 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Leadership in Jewish Education and Communal Service (LJEC)

Courses

LJEC 557 HEBREW LANGUAGE INSTRUCTIONS FOR EDUCATORS (3)
Hebrew is fundamental to any Jewish learning experience. This course will explore Hebrew from the vantage point of common language patterns, both written and spoken, that should be routinely incorporated into Jewish teaching. Students will address issues of language acquisition and develop skills for teaching Hebrew as a second language.

LJEC 600 LEADERSHIP IN JEWISH EDUCATION AND COMMUNITIES (3)
Discusses theoretical concepts, practical insights and their application to leadership within Jewish communal institutions. Focuses on inspiring and developing effective leadership by addressing topics such as building a vision, encouraging collaboration, overcoming obstacles, recognizing community values and institutional opportunities, and improving communication. Students create a personal growth plan to apply to their career path in order to understand and improve their leadership performance. Prerequisite: graduate standing.

LJEC 602 FOUNDATIONS JEWISH EDUCATION (3)
Explores the historical and theoretical foundations of Jewish education. Issues include: How did the Jewish day school, Hebrew school, and summer camp begin in the United States? What major problems do Jewish educators face and how have experts addressed these problems?

LJEC 604 CURRICULUM PLANNING AND DECISION MAKING FOR THE JEWISH SCHOOL (3)
Provides the theoretical and practical sources for the design implementation of curricula in congregational, communal, or day school settings. Drawing from Jewish and general education sources, the course will examine primary dimensions of curriculum planning and decision making.

LJEC 606 FROM VISION TO PRACTICE IN JEWISH EDUCATION (3)
Explores the significance of school vision by learning different Jewish educational visions from multiple perspectives. Acting as social scientists, students will compare the espoused philosophy of schools to their practices in “real time” in order to develop an agenda for school change.
LJEC 610 PRINCIPLES OF JEWISH COMMUNAL SERVICE (3)
A comprehensive overview of the American Jewish community today, and a survey of specific challenges facing professionals in the field of Jewish Communal Service. Topics include major themes of American Jewish history; an introduction to the organization of the American Jewish community in the 21st century, including current day communal structures and institutional functions; an in-depth look at the most pressing issues confronting the American Jewish community today, as well as some of the newest solutions that have been raised by lay and professional leaders; and practical training in leadership skills.

LJEC 611 MANAGEMENT OF HUMAN SERVICES: LEADERSHIP AND SUPERVISION (3)
Introduces broad foundations and current theories of leadership and challenges participants to consider how to implement successful leadership in 21st-century community organizations. This course guides students in considering how to apply leadership in real-life personal and institutional settings. Practical training in leadership development.

LJEC 612 STRATEGIC MANAGEMENT OF JEWISH ORGANIZATIONS: MATERIAL RESOURCES (3)
Unique internal dynamics and external relationships of non-profit organizations and especially Jewish non-profits. Material resource issues such as; fiscal management, policy formation, strategic planning, marketing and fund-raising, advocacy, philanthropy and priority planning.

LJEC 614 JEWISH COMMUNAL SERVICE PRACTICUM SEMINAR (0.5)
The monthly practicum seminar provides an opportunity for Master of Arts in Jewish Communal Service students to study with their peers and professional leaders. Theoretical and practical aspects of contemporary issues are discussed as well as relations with lay leaders; and community visionaries. This seminar integrates the studies and professional development to enable students to be confident as they embark on their careers. Register for the course in the second term. Participation in the seminar is mandatory for a minimum of two years.

LJEC 615 MORAL QUESTIONS IN THE CLASSROOM (3)
Develop an understanding of competing models of moral education models that include: a virtues approach, cognitive developmentalism, and care ethics. Consider practical ways to teach texts in a variety of subjects to foster moral development as well as consider school-wide applications of moral education such as character education, discipline, and addressing bullying. Not open to students who have successfully completed EDUC 613.

LJEC 618 SUPERVISED JEWISH COMMUNAL SERVICE INTERNSHIP (1-3)
Students enrolled in the MAJCS program are required to complete a supervised field internship. This internship is carefully designed to develop leadership skills necessary to become a Jewish Communal Professional. The internship will enable students to develop the skills necessary for professional growth and adhere to the individual goals. Students must complete a minimum of two full days per week in a Jewish institution or organization. Special permit is required. Prerequisites: Consult with program director prior to registration.

LJEC 620 MODELS AND METHODS OF TEACHING LAW, CUSTOMS AND PRACTICE (3)
Provides a framework to understand Jewish religious practices. Students will learn a selection of laws, customs and rituals and will be provided with creative strategies, techniques and activities relevant to both informal and formal Jewish educational settings.

LJEC 621 MODELS AND METHODS OF TEACHING JEWISH HOLIDAYS (3)
Focuses on the processes of teaching and learning Jewish holidays. Combines effective pedagogy with content knowledge of Jewish holidays. Hand-on approach and innovative techniques to teaching holidays will be examined.

LJEC 647 TEACHING CLASSICAL JEWISH TEXTS (3)
his course focuses on different approaches to teaching Bible including the psychological, literary, and historical. Emphasizing a teaching approach of conduction good interpretive discussions, student will learn how to better engage learner of all ages.

LJEC 648 TEACHING CLASSICAL JEWISH TEXTS: A DEVELOPMENT APPROACH (3)
Students will explore stage theories of intellectual and moral development and build on the theories to develop age-appropriate lessons for teaching classical Jewish texts. Particular attention is paid to how children in PreK-12 settings understand stories.

LJEC 650 EXPLORATION OF HOLOCAUST EDUCATION (3)
Critical exploration of various topics of the Holocaust through art, literature, life stories, and film. Core information about the history of the Holocaust and the context and implications of that history. Examine effective teaching methodologies and challenge each student to prepare and present curricular units utilizing different teaching models. Not open to students who have successfully completed ILPD 650.

LJEC 655 TEACHING THE HISTORY, POLITICS AND CULTURE OF ISRAEL (3)
Given Israel's rapidly changing society, U.S. students have questions about the Jewish State. Students will learn more information about Israel's history, politics and cultural diversity, as well as methodologies to effectively communicate the complexities of these subjects to their own students.

LJEC 739 LEADERSHIP THEORY & PRACTICE FOR EDUCATIONAL LEADERS (3)
Focus on the theoretical and applied foundations of leadership concepts, principles, practices, and competencies; integration of theory and practice to apply these conceptual models of leadership in the education context; and the concept of the school as a learning organizational and its implications for the practice of educational leadership. This course is aligned with the standards established by the: Educational Leadership Council Consortium (ELCC), Interstate School Leaders Licensure Consortium (ISLLC), Maryland Instructional Leadership Framework (MILF), Technology Standards for School Administrators (TSSA). Not open to students who have successfully completed ILPD 739.

LJEC 764 QUALITATIVE RESEARCH IN JEWISH EDUCATION (3)
How can research help to understand and solve problems in Jewish schools today. By studying prior research in Jewish and general education, students will learn how to design and conduct qualitative research on their own educational settings.
Courses
LBPS 570 SPECIAL TOPICS IN LGBT STUDIES (3)
Survey and critical evaluation of current research and literature in LGBT Studies. May be repeated for a maximum of 9 credits provided a different topic is covered. Prerequisites: 6 hours of course work in the LBPS minor or consent of the instructor.

LBPS 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 LBPS minor or consent of instructor.

LBPS 581 READINGS IN LGBT STUDIES (1-3)
A survey of relevant research literature under the guidance of a staff member who will direct the student's research. May be repeated for a maximum of 6 units. Prerequisite: 6 hours of course work in the LBPS minor or consent of the instructor.

LBPS 591 INDEPENDENT INVESTIGATIONS IN LGBT STUDIES (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 6 units. Prerequisite: 6 hours of course work in the LBPS minor or consent of the instructor.

Liberal and Professional Studies
(LBPS)

Courses
LBPS 601 APPROACHES TO GRADUATE RESEARCH (3)
Introduction to academic research paradigms and their relation to critical issues in professional practice and communication. Must be taken with the first 9 credits of degree work. Prerequisite: Admission to Liberal and Professional Studies program.

LBPS 602 CULMINATING SEMINAR IN LIBERAL AND PROFESSIONAL STUDIES (3)
Development, implementation and documentation of a culminating project for students enrolled in the Liberal and Professional Studies graduate program. Must be taken during last semester of degree work. Prerequisite: 24 credits of course work in the Liberal and Professional Studies Program.

LBPS 603 SCHOLARLY WRITING FOR ESL GRADUATE STUDENTS (3)
Designed to improve the scholarly writing skills of non-native speaking graduate students so that they can organize and present their ideas in a coherent and professional manner. To this end, they will assemble, evaluate, and combine data from various sources, follow proper conventions of documentation, and proofread and edit their writing to produce scholarly writing appropriate to their fields. Prerequisite: full or conditional admission to a graduate program.

LBPS 695 INDEPENDENT STUDY IN LIBERAL AND PROFESSIONAL STUDIES (3)
Independent study under direction of graduate faculty member in area related to student's course of study. May be repeated for a maximum of 6 credits. Prerequisites: Admission to graduate program, LBPS 601 and approval by graduate program director.

LBPS 796 INTERNSHIP IN PROFESSIONAL STUDIES (3)
Internship with private and public organizations, work to be concerned with issues central to program of study theme. Internship can be taken for a total of 6 credits over two semesters, with permission granted at the discretion of the program director. Prerequisite: admission to Professional Studies M.A. Program, LBPS 601 and approval graduate director.

Management (MGMT)

Courses
MGMT 602 CONFLICT RESOLUTION IN COMMERCE AND INDUSTRY (3)
An exploration of the causes of conflict and various approaches to its resolution. Conflict at the interpersonal level as well as the organizational level is examined. The focus is on avoiding litigation and using alternative methods used in common disputes in a variety of industries. Prerequisite: MNGT 601 and admission to a graduate degree program.

MGMT 605 LEADING WITH INTEGRITY (1.5)
Focuses on leadership, integrity, and core management principles. Provides an overview of concepts and practices essential to managerial effectiveness, including developing a vision for the organization in a complex business environment, setting objectives, planning, motivating others and managing for results. Prerequisite: Graduate standing.

MGMT 609 BUSINESS & SOCIETY (3)
An integrated view of the interrelationships between managing responsibility in a complex environment and stakeholders (the firm's many publics); corporate social performance; values and ethics in management, including a process of moral reasoning for managers; business-government relations; crisis management and managing corporate social performance. Prerequisite: Graduate standing.

MGMT 612 MULTINATIONAL MANAGEMENT OF INFORMATION TECHNOLOGY (3)
Information systems for multinational and international technologies. Strategic dimensions and international competition. Systems development strategies. Managing international information. Prerequisite: Admission to graduate program in Information Technology or Computer Science.

MGMT 613 APPLIED MANAGEMENT STATISTICS (3)
To provide students with an overview of the applications of statistical analysis to business decision making. Students will be exposed to statistical models, data warehousing, data mining and data models. Prerequisite: 3 units of statistics.

MGMT 614 SYSTEMS ENGINEERING MANAGEMENT (3)
Systems engineering process and design requirements, methods, tools, planning, organization, review and evaluation. Contracting for systems engineering and supplier management. Prerequisite: Admission to graduate program in Information Technology or Computer Science.

MGMT 615 MANAGING IN A DYNAMIC ENVIRONMENT (3)
Covers the processes and necessary skills for leading and managing people in organizations that compete in dynamic environments. Emphasizes leading and motivating diverse employee populations in global organizations, and human resource management issues, including evaluation, rewards, and employment law. Prerequisite: MGMT 605.
MGMT 625 COLLABORATION, NEGOTIATION, AND CONFLICT MANAGEMENT (3)
Addresses negotiation skills and the capacity to effectively resolve conflicts. Students apply theory and research to the practice of negotiation and conflict management through practical, hands-on experience including simple buyer-seller bargaining; labor-management negotiations; impasse resolution; and complex, multi-party, multi-issue negotiations. Prerequisite: MGMT 605.

MGMT 650 RESEARCH FOR STRATEGIC HUMAN RESOURCE MANAGEMENT DECISIONS (3)
Methods and tools used in business research are explored through such topics as locating sources of strategic human resource management information, developing a research project, processing and analyzing data, and organizing and presenting strategic human resource management reports. Prerequisite: OPRE 505, OPRE 506, MGMT 605 or equivalent.

MGMT 670 SPECIAL TOPICS IN MANAGEMENT (3)
Contemporary business issues as they affect management practice. Content varies with each topic. Prerequisite: Consent of instructor.

MGMT 695 INDEPENDENT STUDY IN MANAGEMENT (3)
Comprehensive paper on special topic in human resource management, organizational behavior or management. Prerequisites: 6 graduate units in business and consent of instructor.

MGMT 710 HUMAN RESOURCE AND COMPENSATION MANAGEMENT (3)
Covers human resource management issues including legal considerations, recruiting, selection, performance appraisal, development and health and safety. It will also cover strategic compensation issues including job evaluation, benefits administration and pay determination strategies. Additional emphasis will be placed on workforce diversity, international dimensions and ethical consideration. Prerequisite: Graduate Standing.

MGMT 712 EMPLOYMENT LAW AND THE HUMAN RESOURCE MANAGER (3)
Covers employment law as it applies to management decisions in recruitment and promotion as well as in terms of management’s responsibility to comply with federal laws. Topics include legal issues in employment law and the legal consequences of non-compliance, the regulatory model of government control over the employment relationship, equal employment opportunity, safety and health regulations, Americans with Disabilities Act, pay and benefits law, Employee Retirement Income Security Act, civil rights of employees (privacy and wrongful discharge), Family Leave Act, international comparisons and emerging regulatory issues. Prerequisite: MGMT 640.

MGMT 725 LABOR RELATIONS AND CONFLICT MANAGEMENT (3)
Focuses on the legal foundations of labor management relations and the collective bargaining process. It will also cover the basic principles of contract negotiation, administration, impasse resolution and comparative labor relations in cross-cultural contexts. The course will cover conflict management strategies applied to workplace setting for groups and individuals. Prerequisite: MGMT 504.

MGMT 730 LEADERSHIP, LEARNING AND CHANGE (3)
Based on the idea that the deeper we go into the exploration of organizational leadership, learning and change, the more we need to deal with the dimensions of sense-making, connection-building, choice making, vision-inspiring, reality-creating roles of leaders. The course involves a series of workshops designed to help students learn something that cannot be taught: leading, learning and changing “from within.” Readings, assignments and Web forum interactions are designed to inspire “practices of deep inflection,” storytelling, historical inquiry, reflective reading and writing, dialogue and action research.

MGMT 731 LEADERSHIP SEMINAR (3)
Focuses on the critical issues pertaining to success in operating at the executive level in business and other organizations. Topics include vision, values clarification, knowing the customer, communications for internal motivation and public awareness, ethical responsibilities, decision-making, resource decisions, performance maximization, human asset activities and individual lender behaviors for effectiveness.

MGMT 732 LEADERSHIP: SELF-ORGANIZATION IN THE FIRM (3)
Covers self-organizing systems, complexity theory in management, dialogue as a management tool, leadership in a complex system, pursuing a personal discovery process, and growing new knowledge and innovation. A major objective of this course will be to discover the management principles and processes that promote and foster self-organization as an alternative to command and control hierarchies. This course will also draw on the profound implications of self-organization for growing new knowledge and innovation. A second major objective of this course has to do with the process of personal discovery. Parallel principles of spontaneous order operate at the level of the organization and at the level of the individual. As a result, a highly leveraged form of change in an organization is leadership through personal growth and discovery.

MGMT 742 Social and Ethical Issues in Sport (3)
Social and Ethical Issues in Sport - UBTUMBA.

MGMT 745 MANAGING THE SUSTAINABLE ENTERPRISE (3)
Sustainability is a modern business concept that offices on development of win-win-win business strategies that respect people, profit and planet (the “triple bottom line”). Course will incorporate the history of capita, business, and environmentalism and the triple-bottom-line concept. It will enable managers to incorporate sustainability into every phase of the business process and develop appreciation for the competitive implications of a sustainable business strategy. Prerequisites: Graduate standing.

MGMT 757 E-COMMERCE & SUPPLY CHAIN MANAGEMENT (3)
Provides an overview of e-commerce and supply chain management. It then covers in detail the role of e-commerce in design, integration and management of supply chains: logistics networks, business-to-business and business-to-consumer supply chains, decision support systems for supply chain management, strategic alliances, internet strategy, e-business models, e-markets including auctions and exchanges, internet retailing, dynamic pricing, distribution networks, internet-based integration of value chains the role of the internet in infrastructure (banks, utilities, and so forth), decision technologies, information goods, the status of brands in the internet economy, mass customization and various technologies related to e-business.
MGMT 760 LEADING ORGANIZATIONAL CREATIVITY AND INNOVATION (3)
Focuses on strategy and techniques for successfully introducing change to formal organizations. Covers the role of power, influence and communication in the change process, confrontation and effective intervention, concepts and techniques of organizational development, frameworks for creativity and acceptance of innovation. Included are individual and group research and experiential exercises. Prerequisite: MGMT 640.

MGMT 765 SOCIAL AND ETHICAL ISSUES IN SPORT (3)
Exploration of the incontrovertible link among sport, commerce, and culture. Understanding sport forms as cultural and intertwined with business will be accomplished through the sociological and philosophical analysis of several sport related topics. Specific topics covered will include, but not be limited to, sport as a mediated spectacle, factors such as race, gender, and class, the negotiation of sporting spaces, and human rights. Knowledge of these social and ethical issues will be discussed in terms of its practical application to the sport industry setting. Prerequisites: None.

MGMT 770 PLANNING, PREVENTION AND MANAGEMENT OF RISK (3)
Explores technology and management of holistic information security and risk with respect to U.S. Homeland Security and specific technologies and techniques used by terrorists, hackers, crackers, spies, and thieves. Prerequisites: Graduate Standing.

MGMT 775 SPORT IN THE GLOBAL MARKETPLACE (3)
Using theories from a number of disciplines, students in this course will consider issues related to sport commerce in global marketplace, including market saturation, just in time manufacturing of sporting goods, global sport branding, labor conditions in developing nations, sport in core periphery economies, international sport regulation, post industrial sporting economics, sport in the global popular, sport labor migration, sport and the culturalization of economics, global Fordism, and the challenger facing global the business of sport. Prerequisites: None.

MGMT 780 LEADING ACROSS CULTURES (3)
Focuses on management challenges and dilemmas associated with business activity in multicultural environments within the United States and among other countries, and provides the knowledge and sensitivities to more effectively identify, understand and manage the cultural components of organizational and business dynamics. Topics include cultural value awareness, cross-cultural communication skills, cross-cultural management skills (strategic planning, organizational design, leadership), and creating and managing a globally competent workforce. Prerequisite: MGMT 640.

MGMT 781 INTERNATIONAL BUSINESS STRATEGY (3)
Draws on the framework of global strategic management to help students integrate the concepts of economics, finance, marketing, technology and operations in a global context. It focuses on market entry issues, transnational structures, operational issues and leadership in cross-cultural settings, and provides the framework for a real-world international business project to be completed by student teams. Offers the option for a study/analysis trip to another country. Prerequisites: All MBA 500-level courses or equivalent.

MGMT 790 STRATEGIC MANAGEMENT CAPSTONE (3)
An experiential capstone in which students assume the perspective of general managers facing decisions of strategic importance to their organizations. Emphasizes the critical functions of goal-setting, strategy formulation, implementation, and control processes. Prerequisites: ACCT 605, ECON 605, ENTR 605, FIN 605, INSS 605, MGMT 605, MKTG 605, OPRE 605.

MGMT 796 GLOBAL BUSINESS PRACTICUM (3)
The Global Business Practicum is designed to provide students with opportunities for real-world experience working with companies on international projects of real value and priority to the companies. Students choose an international study experience selected from among the participating School of Business specializations and companies. Student consulting teams will work together on a specific corporate project, focusing on a particular country or region of interest to the company. Projects may focus on market analyses, feasibility studies, distribution analyses or a variety of other specific company needs. Students register for this course as a 3-unit elective.

MGMT 797 SPECIAL TOPICS IN MANAGEMENT (3)
An intensive exploration of topics in the areas of management. Topics include e-commerce, e-commerce and supply chain management, e-venturing, leadership, organizational theory or best business practice. Refer to term class schedule for title of topic offered. May be repeated for credit when the topic varies. Prerequisites: Will be determined by the instructor.

Marketing (MKTG)

Courses

MKTG 505 MARKETING ESSENTIALS (1.5)
Covers concepts, processes, and institutions necessary for effective marketing of goods and services, including analyses of market opportunities, buyer behavior, product planning, pricing, promotion and distribution. Prerequisite: Graduate standing.

MKTG 605 MARKETING INTELLIGENCE STRATEGY (3)
Focuses on marketing intelligence strategies—a data driven strategic analysis of the market used to inform the firm’s digital strategies. Also explores the role of marketing in creating value for the firm and its stakeholders in the context of a dynamic external environment. Prerequisite: Acceptance in the MKGI-MS or IMKG-PBC or approval from program director.

MKTG 607 MARKETING RESEARCH METHODS (3)
Explores experimental design and statistics in the context of marketing research with an emphasis on application over theory. Coverage of experimental design includes understanding appropriate data collection methods, such as experiments and surveys. Basic measurement, SPSS, and hypothesis testing are examined and analysis tools such as t-test, ANOVA, and regression are explored. Prerequisite: Program admission or approval from program director.

MKTG 625 CUSTOMERS AND MARKETS (1.5)
Focuses on choosing customers and markets through data analysis, building customer loyalty and communicating to current and potential customers in B2C, B2B, and nonprofit organizations. Prerequisite: MKTG 605.

MKTG 710 INTERACTIVE MARKETING (3)
Explores the emerging business models, rules, tactics and strategies associated with interactive marketing, including search engine optimization, search ads, email marketing, social media, and mobile marketing. Prerequisite: Program admission.

MKTG 770 MARKETING ANALYTICS AND METRICS (3)
Explore the data and tools used to analyze the business environment and enable marketing decision making, including decisions related to segmentation, customer lifetime value, and return on marketing investment. Prerequisite: Program admission.
MKTG 780 ADVANCED MARKETING ANALYTICS (3)
Focuses on learning how to use various analytics tools: multivariate linear regression, logistic regression, principal component analysis, multidimensional scaling, clustering and classification, market basket analysis, choice modeling, conjoint analysis. Students will be expected to use state-of-the-art programming language to analyze real-world large data sets and make strategic recommendations for managerial actions. Prerequisite: program admission.

MKTG 781 INTERACTIVE MARKETING PROJECT (3)
An independent applied project in a content area related to interactive marketing designed to support and enhance the student’s ability to apply graduate experience and achieve tangible outcomes. Students work under the supervision of faculty advisers to plan, implement, and evaluate a project for a client as part of a practical, real-world problem-solving experience. Prerequisites: MKTG 710, program admission or approval or program director.

MKTG 791 INTERACTIVE MARKETING INTERNSHIP (3)
Supervised experience in a field setting which facilitates the application of interactive marketing theory and tools. Prerequisites: MKTG 710, program admission or approval of program director.

MKTG 796 MARKETING PRACTICUM (3)
Student teams apply concepts from other courses and their own experience to solve marketing problems. They are provided the opportunity to work on a real-life project with an organization or one of its product/service divisions. Students work together in consulting teams composed of teammates with varying interests, backgrounds and academic specializations. Projects may deal with a variety of marketing strategies, including customer and competitive analysis, feasibility studies, product and service development, promotion, pricing and distribution, analyses and a variety of other specific organization or company needs. Prerequisites: Graduate standing, MKTG 504 or area approval.

MKTG 797 SPECIAL TOPICS IN MARKETING MANAGEMENT (3)
Specialized topics in marketing, allowing flexibility for both the changing developments in applied business practice and the educational needs of students. Exact topical coverage and prerequisites are listed in the schedule of classes. Prerequisites: Graduate Standing, MKTG 504 or area approval.

MKTG 799 INDEPENDENT STUDY (1-3)
Directed independent study in selected areas of marketing. This course may be repeated. Prerequisites: MKTG 640 and approvals of marketing faculty member and chair of Marketing and E-business Department.

MKTG 881 MARKETING INTELLIGENCE PROJECT (3)
An independent, applied project in a content area related to marketing intelligence designed to support and enhance the student’s ability to apply graduate experience and achieve tangible outcomes. Students work under the supervision of faculty advisers to plan, implement, and evaluate a project for a client as part of a practical, real-world problem-solving experience. Prerequisites: MKTG 770 and consent of department.

MKTG 885 PROJECT CONTINUUM (1)
Continuation of project work from MKTG 881. Prerequisite: Previous registration in MKTG 881.

MKTG 891 MARKETING INTELLIGENCE INTERNSHIP (3)
Supervised experience in a field setting which facilitates the application of theory and tools in marketing intelligence. Prerequisites: MKTG 770, program admission or approval of program director.

Courses

MCOM 502 LITERARY JOURNALISM (3)
Literary techniques and dramatic structure for print and online journalistic media.

MCOM 507 MULTIMEDIA REPORTING (3)
Research and create multimedia news and feature articles incorporating hypertext and graphics and photographic, audio and video elements. Not open to students who have successfully completed MCOM 407. Lab/Class fee will be assessed.

MCOM 519 CORPORATE COMMUNICATION MANAGEMENT (3)
A survey of practical theories and applications that are related to corporate communication practices. Topics include group and individual behaviors in corporate environments, managing conflict, culture, change, and innovation; and leadership/management communication. The particular emphasis will be placed on advertising, public relations, or brand communication organizations and on developing a critical assessment on corporate communication practices and prepare a research paper on this topic. Prerequisite: Communication Management graduate students.

MCOM 533 MEDIA ETHICS (3)
Ethical principles, issues, dilemmas in mass communication; professional codes; interpersonal, small group, organizational and societal factors affecting mediated communication.

MCOM 543 INTERNATIONAL ADVERTISING (3)
Role of advertising and promotion programs in the world marketplace, consideration of global and local perspectives, key decisions in agency operations, creative aspects and media.

MCOM 547 ADVERTISING CAMPAIGNS (3)
Application of advertising principles and practices to the development of campaigns and the preparation of plan books.

MCOM 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.

MCOM 551 PUBLIC RELATIONS FOR NONPROFIT ORGANIZATIONS (3)
Fundraising and developing, implementing and evaluating public relations campaigns for nonprofit organizations.

MCOM 553 STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATIONS CAMPAIGNS. (3)
Research, planning, implementing and evaluating programs and campaigns.

MCOM 559 PROFESSIONAL ISSUES IN STRATEGIC PUBLIC RELATIONS AND INTEGRATED COMMUNICATIONS. (3)
Technical, managerial, legal, ethical and accreditation issues and concerns. Prerequisite: Consent of instructor.

MCOM 560 INTERNSHIP IN MASS COMMUNICATION (1-6)
Under faculty and Career Center supervision, students work as intern with a professional in the field of mass communication. May be repeated for a maximum of 9 units, but only 6 units will apply to the major. S/U grading. Prerequisites: Junior/senior standing, cumulative GPA of 2.75 and 3.00 in the major, completion of appropriate courses determined by the department; please check with Career Center for specifics.

MCOM 570 SPECIAL TOPICS IN MCOM (3)
Study of selected topics in the field of mass communication. Topics will vary according to instructor.
MCOM 603 CRITICISM IN MASS MEDIA (3)
Critical analysis of film and television with focus upon cultural, commercial and aesthetic values that affect these media.

MCOM 605 COMMUNICATION THEORY (3)
Examination and critique of contemporary communication theories. Prerequisite: MCOM graduate student or consent of instructor.

MCOM 606 PRACTICE OF PUBLIC RELATIONS AND ORGANIZATIONAL COMMUNICATION (3)
Second in sequence of two courses that examine the body of knowledge in public relations, with a focus on the strategic management of communication, including marketing, case studies and field investigations. Prerequisite: MCOM 605.

MCOM 617 INTERNATIONAL COMMUNICATION (3)
Media systems of the world compared relative to their political, cultural, sociological, economic, religious, historical and broadcasting and print structures. In-depth analysis of American global media efforts.

MCOM 621 MASS MEDIA LAW AND REGULATIONS (3)
Legal limits on freedom of the press, Constitutional guarantees, libel, contempt, obscenity, privacy, ethical problems and the right to know. Origins and concepts of freedom of information and its evolution in Constitutional law and judicial decisions: contemporary problems of censorship in publishing, broadcasting and film.

MCOM 631 QUANTITATIVE RESEARCH METHODS IN COMMUNICATION (3)
Introduction to quantitative research methods in communication. Development of quantitative communication research designs. Prerequisites: PSYC 212, or MATH 231 or equivalent, MCOM 605 (may be taken concurrently).

MCOM 632 QUALITATIVE RESEARCH METHODS IN COMMUNICATION (3)
Introduction to qualitative research methods in communication. Development and execution of qualitative communication research design. Prerequisite: MCOM 605 (may be taken concurrently) or consent of the instructor.

MCOM 638 MANAGING COMMUNICATION IN A CULTURALLY DIVERSE SOCIETY (3)
Study of the complexities of managing integrated communication in a society composed of diverse audiences including cultural, ethnic, physical, life style, religious and racial diversity. Prerequisite: Student must have graduate standing.

MCOM 639 MASS COMMUNICATION AND CULTURE (3)
Examination of the role of mass media and communication technologies in shaping culture and human agency. Emphasis on both historical and contemporary ideas about how media, culture, and communication technologies intersect to create social meaning. Prerequisites: MCOM 605 and one of the following: MCOM 631 or MCOM 632 or consent of the instructor.

MCOM 640 SOCIAL MEDIA AND CONTENT STRATEGY (3)
Explores the changing world of digital and social media, exploring both theory and content strategy in depth from the perspective of communication managers. Prerequisite: graduate standing.

MCOM 651 MEDIA AND POLITICS (3)
Relationships between the mass media and the political system. The influence of the media on political careers, the adversarial and support roles of the media.

MCOM 660 CRISIS COMMUNICATION (3)
Explores communication theories and techniques used in crisis communication and apologia. Topics include inoculation practices, crisis avoidance, bolstering, models of leadership and crisis management plans. Prerequisites: Graduate standing.

MCOM 670 SPECIAL TOPICS IN MASS COMMUNICATIONS (3)
Exploration of current media topics. Prerequisite: Varies with each topic.

MCOM 683 COMMUNICATING IN SOCIETY: PERCEPTION AND REALITY (3)
Examines historic and contemporary impact that communication has played in creating world cultures and societies. Areas of investigation will include public relations, advertising, electronic media, propaganda, the internet, and movies. Prerequisites: MCOM 605, MCOM 606, MCOM 625, and MCOM 631.

MCOM 795 INDEPENDENT STUDY IN MASS COMMUNICATION (3)
Directed study in production or research in selected areas through readings, projects, papers and/or seminars. May be repeated for a maximum of 6 units. Prerequisites: 15 units of graduate-level mass communication and/or communication studies courses, and consent of instructor.

MCOM 881 GRADUATE PROJECT IN COMMUNICATION MANAGEMENT (1-6)
Under faculty supervision, a student will complete a professional project to showcase his or her successful acquisition of knowledge from the courses in the graduate program. The student will choose a topic, develop the project with an appropriate method of investigation, and report the finding in writing. May be taken as one to six units per semester and repeated for a maximum of 6 units. Graded S/U. Prerequisite: consent of instructor.

MCOM 897 MCOM THESIS (6)
An original investigation using acceptable research method and design to be pursued under the direction of one or more faculty members.

MCOM 898 MCOM THESIS (3)
The previous course, MCOM 897, taken over two consecutive semesters.

MCOM 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Mathematics (MATH)

Courses

MATH 501 HISTORY OF MATHEMATICS (3)
Development of mathematics emphasizing mathematical concepts and contributions and individuals and societies. Prerequisites: MATH 263 or MATH 265, and MATH 274.

MATH 527 READINGS IN MATHEMATICS EDUCATION FOR THE ELEMENTARY SCHOOL TEACHER (1-3)
Directed study for the teacher of elementary school mathematics. Prerequisites: MATH 321 or MATH 323 and approval of instructor.

MATH 531 PROBABILITY (4)
Probability in sample spaces, discrete and continuous random variables, distribution theory, Tchebychev's theorem, central limit theorem, expected values and moments. Prerequisite: MATH 274.

MATH 532 MATHEMATICAL STATISTICS (3)
Sample theory and distributions, point estimation, confidence intervals, tests of hypothesis, regression, correlation and analysis of variance. Prerequisite: MATH 331 (531).
MATH 533 APPLIED REGRESSION AND TIME SERIES PREDICTIVE MODELING (4)
Simple and multiple regression models, least squares estimates, hypothesis testing, confidence intervals and prediction intervals, model building methods and diagnostic checking. Non-seasonal time series models: autoregressive, moving-average, 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. Prerequisite: MATH 265 or equivalent and MATH 332/532 or equivalent.

MATH 535 NUMERICAL ANALYSIS I (3)
Error analysis, interpolation, numerical differentiation and integration, numerical solution of algebraic equations and of systems of algebraic equations. Prerequisites: MATH 265, MATH 274 and COSC 236.

MATH 537 OPERATIONS RESEARCH (3)
Introduction to linear, integer and nonlinear programming; the simplex method and interior point methods, duality and sensitivity analysis: formulation of optimizations models and applications to problems from industry. Prerequisites: MATH 211 or MATH 273 and MATH 265.

MATH 538 LONG-TERM ACTUARIAL MODELS I (3)
Theory and applications of long-term actuarial mathematics in the area of life insurance, annuities and pensions. Topics include survival models, life table, present value random variables for contingent insurance and annuities, future loss random variables, actuarial equivalence principle and other principles for pricing life insurance and annuity contracts, benefit reserves. Prerequisites: MATH 331, MATH 312.

MATH 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 Elementary Biostatistics or equivalent and Math 273 Calculus I or equivalent.

MATH 542 SHORT-TERM ACTUARIAL MODELS (4)
Covers part of the syllabus of the Short-Term Actuarial Mathematics exam offered by Society of Actuaries. Topics including severity models, frequency models, aggregate models, risk measures, construction and selection of parametric models, insurance and reinsurance coverages, and pricing and reserving for short-time insurance coverages. Prerequisites: MATH 390 or Pass Exam P, and MATH 332 or equivalent.

MATH 548 ADVANCED ACTUARIAL MODELS (3)
Benefit reserves for traditional life insurances and annuities; multiple state models and multiple life functions, premiums and reserves based on these models; multiple decrement models and probabilities; models for cash flow of basic universal life insurance. Prerequisite: MATH 538.

MATH 551 GRAPH THEORY (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 557 DIFFERENTIAL GEOMETRY (3)
Curvatures of curves and surfaces in E3, geodesics, invariants, mappings and special surfaces. Prerequisites: MATH 275 Calculus III and MATH 265 Elecd. Linear Algebra.

MATH 553 LINEAR ALGEBRA (3)
Vector spaces over arbitrary fields, linear transformations, eigenvalues, eigenvectors, inner products, bilinear forms, direct sum decompositions and the Jordanian form. Prerequisites: MATH 265 and MATH 267.

MATH 556 THEORY OF NUMBERS (3)
Topics include congruences, polynomial congruences, primitive roots, residues, and multiplicative functions. Prerequisite: Math 369.

MATH 568 ALGEBRAIC STRUCTURES (3)
Topics include groups, solvability and insolvability of polynomials, principal ideal, Euclidean, and unique factorization domains. Prerequisite: Math 369.

MATH 574 DIFFERENTIAL EQUATIONS (3)

MATH 575 MATHEMATICAL MODELS (3)
Consideration of some mathematical problems in sociology, psychology, economics, management science and ecology, and developing appropriate mathematical models and techniques to solve them.

MATH 576 INTRODUCTORY REAL ANALYSIS (4)
Introduction to mathematical analysis. Sequence series, continuity, differentiation, integration and uniform convergence. Prerequisites: MATH 267 and MATH 275.

MATH 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 conformal mappings. Prerequisite: MATH 275.

MATH 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 579 FOURIER ANALYSIS WITH APPLICATIONS (3)
Vector, integral and differential calculus including the divergence and Stokes theorems. Fourier series, orthogonal functions and applications. Prerequisite: MATH 275.

MATH 580 SELECTED TOPICS IN MATHEMATICS (1-4)
Topics will be chosen from different areas in mathematics. Content will be determined so as to complement course offerings, as well as the needs and desires of the students. May be repeated for a maximum of 9 units provided a different topic is covered each time. Prerequisite will vary from topic to topic.

MATH 585 MATHEMATICAL FINANCE (3)
Mathematical theory, computation and practical application of derivatives in managing financial risk. Parity and option relationships, binomial option pricing, the Black-Scholes equation and formula, option Greeks, market-making and delta-hedgind, exotic options, lognormal distribution, Brownian motion and ITO’s lemma, interest rate models. Computer laboratory activities throughout. Prerequisite: MATH 331.

MATH 586 RISK MANAGEMENT AND FINANCIAL ENGINEERING (3)
Mean-variance portfolio theory, asset pricing models, market efficiency and behavioral finance, investment risk and project analysis, capital structures, 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 or MATH 585 or equivalent.
MATH 602 CULTURAL AND PHILOSOPHICAL BACKGROUND OF MATHEMATICS (3)
Meanings and origins of mathematical concepts, schools of philosophical thought, cultural and ethnomathematical context of mathematics, philosophy and purpose of mathematics education, current issues in mathematics and mathematics education, role of the mathematics teacher in current debates. Prerequisite: Admission to master's in Mathematics Education program.

MATH 621 SEMINAR IN TEACHING ELEMENTARY/MIDDLE SCHOOL MATHEMATICS (3)
Analysis of pedagogical methods and materials in elementary and middle school mathematics instruction and assessment. Mathematics topics include, but are not limited to, those taught in grades 1 – 8. Prerequisites: MATH 204, MATH 205, and MATH 251, or their equivalents.

MATH 622 SEMINAR IN TEACHING ADVANCED PLACEMENT CALCULUS (3)
Discussion and analysis of materials, pedagogy, and technology for the teaching of Advanced Placement Calculus in high schools. Prerequisites: Admitted into the MS program in Mathematics Education or the consent of the instructor.

MATH 624 EUCLIDEAN AND NON-EUCLIDEAN GEOMETRY THROUGH AN INQUIRY APPROACH (3)
An exploration and comparison of the geometry of Euclidean and Non-Euclidean surfaces, including spherical geometry. Problem solving, problem posing, and the use of physical and technological models will be integrated throughout. Prerequisite: admission to the Mathematics Education M.S. program.

MATH 625 SEMINAR IN MATHEMATICS EDUCATION FOR SECONDARY SCHOOL TEACHERS (3)
Investigations of recent curricula and research, pedagogy, materials, technology and assessment techniques for middle and high school teachers of mathematics. Prerequisite: MATH 423 or equivalent.

MATH 626 TECHNOLOGY IN SCHOOL MATHEMATICS TEACHING AND LEARNING (3)
History and use of technology in teaching mathematics in grades 6 through 12. Students will use scientific and graphing calculators, computers and other devices such as the Calculator-Based Laboratory (CBL) to solve problems found in secondary mathematics curriculum and apply this knowledge in the teaching of mathematical concepts. Software such as Mathematica, MathCad and Geometer's Sketchpad will be studied and students will write lessons using one of these software packages. The use of the Internet and other technological resources to teach mathematics will also be studied. Prerequisite: Admission to the graduate program.

MATH 627 CURRICULUM ISSUES IN SECONDARY SCHOOL MATHEMATICS (3)
Analyze secondary school mathematics curriculum development from a historical perspective and discuss past influences on current methodology. Distinguish current curriculum trends and design alternatives. Evaluate contemporary curriculum by assessing an existing text or program. Create a selected mathematics unit. Prerequisite: Math 625.

MATH 628 REAL ANALYSIS FOR TEACHERS (3)
Principles underlying calculus, including topics in real analysis such as completeness for the reals, limits, continuity, differentiation/integration, sequences and series. Emphasis on mathematical theory and the pedagogy of teaching functions. Precalculus and calculus in the secondary school. Prerequisites: Admission to the master's program in Mathematics Education (or approval of department), MATH 273 and MATH 274 or equivalent.

MATH 629 UNDERSTANDING AND USING MATHEMATICS EDUCATION RESEARCH (3)
Introduction to the theory and methodology of mathematics education research, including quantitative and qualitative designs. Students will gain experience in reading and interpreting mathematics education research, with a specific focus on applying research findings to classroom practice. Prerequisite: admission to the Mathematics Education M.S. program.

MATH 630 STATISTICS-AN INTEGRATED APPROACH (4)
Review of basic probability theory, types of convergence and limit theorems, elementary stochastic processes. Markov chains, birth and death processes. Gaussian processes. Examples from engineering, physical and social sciences, management and statistics. Prerequisite: MATH 331.

MATH 631 TOPICS IN PROBABILITY (3)
Review of basic probability theory, types of convergence and limit theorems, elementary stochastic processes. Markov chains, birth and death processes. Gaussian processes. Examples from engineering, physical and social sciences, management and statistics. Prerequisite: MATH 331.

MATH 632 COMPUTATIONAL STOCHASTIC MODELING (3)

MATH 633 QUEUING SYSTEMS (3)
Characterization and analysis of basic queuing systems, both single-server and multiple-server. The M/G/1 and G/M/m queuing systems. Multiserver with queuing, multiserver queuing rules, priority queues. Networks of queues: response time, routing, flow and congestion control. Manufacturing systems: capacity/inventory investment and scheduling. Prerequisites: MATH 331, MATH 531, or consent of chairperson.

MATH 634 TIME SERIES ANALYSIS AND FORECASTING (3)
An introduction to statistical models for time series analysis and forecasting. Topics include time series decompositions, exponential smoothing, dynamic regression, spectral analysis and filtering. A variety of models will be discussed including the Holt, Holt-Winters, ARMA, ARIMA, SARIMA, and state-space models. Prerequisites: MATH 265 and MATH 332, or MATH 532, or consent of department chair.
MATH 635 APPLIED NUMERICAL ANALYSIS (3)

MATH 636 LINEAR AND NONLINEAR PROGRAMMING (3)
Formulations and model building in linear programming. The simplex method and its variants: duality theory, sensitivity analysis, polynomial time algorithms, multiobjective optimization models and algorithms. Prerequisite: MATH 265, MATH 275 and graduate standing, or consent of chairperson.

MATH 637 ADVANCED TOPICS IN APPLIED OPERATIONS RESEARCH (3)
Dynamic programming, formulation of deterministic decision-process problems, analytic and computational methods of solution, application to problems of equipment replacement, resource allocation, scheduling, search and routing. Brief introduction to decision making under risk and uncertainty. Prerequisites: MATH 275 and MATH 331, or MATH 531, or consent of chairperson.

MATH 638 APPLIED MULTIVARIATE STATISTICAL ANALYSIS (3)
A brief review of vector and matrix algebra and an introduction to applications of multivariate statistical methods. Multivariate normal distribution and its properties, inference for mean vector of a multivariate normal distribution, and simultaneous inference for components of the mean vector. Principle components, factor analysis, and discrimination & classifications. The course introduces many applications of the topics related to real world problems in the fields of engineering, sciences, and business. Minitab or a similar software is used for real data analysis. Prerequisites: Math 531 or equivalent, Math 533 or equivalent, Math 265 or equivalent.

MATH 639 LOSS MODELS (4)
Severity models, frequency models, aggregate models, survival models, construction of parametric models, and credibility models. Prerequisites: Math 532, or equivalent.

MATH 641 ENTERPRISE RISK MANAGEMENT (3)
Covers part of the syllabus of the Enterprise Risk Management exam offered by Society of Actuaries. Serves as an introduction to Enterprise Risk Management. It will define and categorize different types of risks an entity faces, and define an ERM framework. Ways to measure and quantify the risk, such as (principle based) Economic Capital, Value at Risk (VaR), and stress scenarios will be analyzed and compared. The course will conclude with applications of these methods in a case study of an insurance company and recent regulatory developments. Prerequisite: Pass Exam P or MATH 331/ MATH 531.

MATH 643 COMPUTATIONAL METHODS OF MATHEMATICAL FINANCE (3)
Computation techniques involving tree method, finite difference scheme, Monte Carlo simulation, term structure fitting and modeling, financial derivative pricing, the Greeks of options, Capital Asset Pricing Model, Value-at Risk calculation. Software package such as Mathematica or Excel will be used. Prerequisites: Math 585, or equivalent.

MATH 644 MATHEMATICS OF FINANCIAL DERIVATIVES (3)
Modern pricing theory for financial derivatives, stochastic differential equations, Ito formula, martingales, Girsanov Theorem, Feynman-Kac PDE, term structure, Interest-Rate models and derivatives, optimal stopping and American options. Prerequisites: Math 585, or equivalent.

MATH 650 PATTERNS IN MATHEMATICAL DESIGNS (3)
A geometrical bridge between science and art covering topics such as the systems of proportion in mathematics, art, architecture, and in nature; the golden mean, Fibonacci series, Archimedes and logarithmic spirals, growth and similarity in nature; graphs and maps on the Euclidean plane and on a sphere, on a torus, and map coloring; periodic and non-periodic tilings, duality and the modules of semi regular tilings; polyhedra and platonic solids and their duality and combinatorial and space-filling properties. Prerequisite: Admission to the Master’s Program in Mathematics Education or approval of the department.

MATH 651 MATHEMATICS OF FUZZY LOGIC (3)
Basic concepts of fuzzy logic, fuzzy sets, fuzzy uncertainty, fuzzy relations, comparing fuzzy logic with first-order predicate logic, algebra of fuzzy logic, approximate reasoning, rule-based systems. Description of linguistic data using fuzzy sets. Applications: rule-based expert systems, decision making, pattern recognition, control theory, optimization. Prerequisite: Graduate standing or consent of chairperson.

MATH 653 TOPICS IN GEOMETRY (3)
Axiomatic development of Euclidean, elliptic and hyperbolic geometries; the study of the analytic plane, the sphere and the Poincare model as models for these axiomatic systems. Not open to students who have had MATH 353. Prerequisites: MATH 274 and MATH 467 (or MATH 568).

MATH 657 ALGEBRAIC TOPOLOGY (3)
Basic concepts of algebraic topology, such as homology, cohomology, homotopy, and singular homology theory. Prerequisites: MATH 374, (or MATH 574), MATH 379 (or MATH 579); or consent of chairperson.

MATH 658 ADVANCED DIFFERENTIAL GEOMETRY (3)
Differential geometry of curves and surfaces, Riemannian manifolds, and curvature theory. Prerequisites: MATH 374, (or MATH 574), MATH 379 (or MATH 579); and MATH 475 (or MATH 577); or consent of chairperson.

MATH 667 LINEAR AND NONLINEAR OPTIMIZATION (3)
Formulations and model building in linear programming. The simplex method and its variants: duality theory, sensitivity analysis, polynomial time algorithms, multiobjective optimization models and algorithms. Prerequisite: MATH 265, MATH 275 and graduate standing, or consent of chairperson.

MATH 675 ASYMPTOTIC AND PERTURBATION ANALYSIS (3)
Asymptotic series and asymptotic methods for approximating solutions to linear and nonlinear ordinary differential equations. Asymptotic expansion of integrals; Watson’s Lemma. Perturbation series; regular and singular perturbation theory. Boundary layer theory for ordinary differential equations. Prerequisites: MATH 374/ MATH 574 or equivalent and Math 475/ MATH 577 or equivalent.
MATH 676 INTRODUCTION TO MATHEMATICAL CONTROL THEORY (3)
Problems and specific models of mathematical control theory. Elements of classical control theory: controllability, observability, stability, stabilizability and realization theory for linear and nonlinear systems. Optimal control, Maximum Principle and the existence of optimal strategies. Prerequisites: MATH 265 and MATH 374/MATH 574.

MATH 677 ADVANCED MATHEMATICAL MODELING (3)
Development of appropriate stochastic as well as deterministic models to solve applied mathematical problems in the fields of physics, engineering, and the social sciences. Topics include optimization models, dynamic models, probability models and Monte Carlo simulation. Mathematica or a similar software package will be used. Prerequisites: MATH 331 or MATH 531, and MATH 379 or MATH 579, or consent of chairperson.

MATH 680 SPECIAL TOPICS IN MATHEMATICS EDUCATION (3)
Topics will be chosen focusing on pedagogy, educational theories, curriculum, research, policy, or other issues of mathematics education. Content will be determined to complement graduate course offerings in mathematics education. May be repeated for a total of 9 units provided a different topic is taken each time. Prerequisite: program admission.

MATH 681 SPECIAL TOPICS IN MATHEMATICS FOR TEACHERS (3)
Topics will be chosen from a mathematical field related to, or extending, the K-12 school mathematics curriculum. Content will be determined to complement graduate course offerings in mathematics education. May be repeated for a total of 9 units provided a different topic is taken each time. Prerequisite: program admission.

MATH 684 SPECIAL TOPICS IN MATHEMATICS AND STATISTICS (3)
Topics will be chosen in mathematics or statistics. Course content will be determined so as to complement course offerings in mathematics and statistics. Course may be repeated for a maximum of 8 units. Prerequisite: will vary depending on topic.

MATH 685 SPECIAL TOPICS IN APPLIED MATHEMATICS (3)
Topics will be chosen in a mathematical field related to differential equations/optimization or applied statistics/mathematical finance. Course content will be determined to complement the existing course offerings. Prerequisite: will vary depending on topic.

MATH 686 SPECIAL TOPICS IN DIFFERENTIAL EQUATIONS OR OPTIMIZATION (3)
Topics will be chosen in a mathematical field related to differential equations or optimization. Course content will be determined to complement the existing course offerings in the differential equations/optimization track. Prerequisite: will vary depending on topic.

MATH 687 SPECIAL TOPICS IN APPLIED STATISTICS OR MATHEMATICAL FINANCE (3)
Topics will be chosen in a mathematical field related to statistics or mathematical finance. Course content will be determined to complement the existing course offerings in the applied statistics/mathematical finance track. Prerequisite: will vary depending on topic.

MATH 695 INDEPENDENT STUDY IN MATHEMATICS (1-3)
Directed independent study in selected areas of graduate level mathematics. Prerequisite: Permission of instructor and graduate adviser.

MATH 791 MASTERS INTERNSHIP I (3)
An original investigation of a problem to be pursued in cooperation with a local industry or business under the direction of an industry supervisor and a member of the mathematics faculty. Prerequisites: Completion of at least 15 units toward the M.S. degree in Applied and Industrial Mathematics and consent of chairperson.

MATH 792 MASTERS INTERNSHIP II (3)
An original investigation of a problem to be pursued in cooperation with a local industry or business under the direction of an industry supervisor and a member of the mathematics faculty. Prerequisites: Completion of at least 15 units toward the M.S. degree in Applied and Industrial Mathematics and consent of chairperson.

MATH 880 APPLIED MATHEMATICS GRADUATE PROJECT I (3)
An internal applied mathematics graduate project based on mutual research interests of a graduate student in the APIM program and a faculty advisor will be investigated. The advisor will guide the student throughout different phases of solving the applied mathematics problem. Prerequisites: permit required, APIM graduate students only.

MATH 881 APPLIED MATHEMATICS GRADUATE PROJECT II (3)
An internal applied mathematics graduate project based on mutual research interests of a graduate student in the APIM program and a faculty advisor will be investigated. The advisor will guide the student throughout different phases of solving the applied mathematics problem. Permit required, only APIM graduate students.

MATH 885 APPLIED MATHEMATICS GRADUATE PROJECT CONTINUUM (1)
Students who cannot complete Math 880-881 in two semesters will then register for Math 885, one unit, in the next semester. Except in special circumstances, Math 885 cannot be repeated. Prerequisites: Consent of the instructor.

Mathematics Education (MTED)
Courses

MTED 605 MIDDLE SCHOOL MATHEMATICAL METHODS AND PROBLEM SOLVING (3)
Best practices for delivery and assessment of mathematical concepts and skills relevant to the middle school level of instruction. Topics include problem solving, geometry and measurement, number sense, data analysis and probability, and algebra. Cannot be used for any other graduate program in the mathematics department. Prerequisites: Admission to the Master’s program in Mathematics Education or approval of the department.

MTED 611 ALGEBRA FOR MIDDLE SCHOOL TEACHERS (3)
An intensive understanding of middle and high school algebra and the best practices for delivery and assessment of algebra for middle school instruction. Topics include divisibility and factorization, functions, equations and inequalities. Cannot be used for any other program in the mathematics department. Prerequisites: Admission to the Master’s program in Mathematics Education or approval of the department.

MTED 612 DATA ANALYSIS FOR MIDDLE SCHOOL TEACHERS (3)
Topics from statistics and probability, and recent methodologies and standards for data analysis in middle school level. The course also offers activities using Fathom—a computer learning environment for data analysis and statistics. Cannot be used for any other graduate program in the mathematics department. Prerequisites: Admission to the Master’s program in Mathematics Education or approval of department.

MTED 613 MATHEMATICAL MODELING FOR MIDDLE SCHOOL TEACHERS (3)
The prerequisite topics needed in order to learn Calculus. Topics include the behavior of functions, fitting functions to data, sequences, and modeling. The appropriate use of handheld technologies is stressed throughout the course. Internet resources for students to access outside of class have been included. Prerequisite: Admission to the Master’s Program in Mathematics Education or approval of the department.
MTED 614 CALCULUS THROUGH TECHNOLOGY FOR MIDDLE SCHOOL TEACHERS (3)
Intuitive calculus of one variable, modeling best practices. Topics include limits, differentiation, integration and applications of calculus. Graphing calculators and other computer-learning environments such as Mathematica are included. Cannot be used for any other graduate program in the Mathematics Department. Prerequisite: Math 613 or approval of the department.

MTED 615 GEOMETRY FOR MIDDLE SCHOOL TEACHERS (3)
Geometric vocabulary, relationships, concepts and skills in two and three dimensions; topics include a review of Euclidean Geometry, Coordinate and Transformational Geometries, Tessellation, Polyhedra, Measurement, and the use of appropriate technology in the classroom. Cannot be used for any other graduate program in the Mathematics Department. Prerequisite: Admission to Masters Program in Mathematics or approval of the department.

MTED 650 MATHEMATICS IN INTEGRATED STEM EDUCATION (3)
Students investigate standards-based mathematical practices and concepts, and consider how teachers teach and students learn about these practices and concepts in the context of thematic, integrated STEM (Science, Technology, Engineering & Mathematics) education in grades PreK-12.

Molecular Biology, Biochemistry and Bioinformatics (MBBB)

Courses

MBBB 501 ADVANCED BIOINFORMATICS (4)
Advanced topics in bioinformatics including 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. Permit required. Prerequisites: COSC 237 and introduction to bioinformatics MBB 301.

Music (MUSC)

Courses

MUSC 505 WESTERN MUSIC FROM 1914 TO THE PRESENT (3)
Styles, forms, and techniques of western music since 1914. Prerequisite: MUSC 302 or consent of instructor.

MUSC 506 SURVEY OF SOLO VOICE LITERATURE (3)
A musical survey of the art song from circa 1750 to the present. Prerequisite: MUSC 232 or consent of instructor.

MUSC 509 HISTORY AND LITERATURE OF GUITAR, LUTE AND VIHUELA (3)
A survey of the history and literature written for or readily adaptable to the guitar. Includes study of tablatures and transcriptions to modern notation. Prerequisite: MUSC 232 or consent of instructor.

MUSC 511 SURVEY OF OPERA (3)
Study of opera literature of various periods and styles. Prerequisite: Junior or senior standing or consent of instructor.

MUSC 513 SYMPHONIC LITERATURE (3)
Survey of orchestral music from the Classical Era to the present. Includes symphony, overture and symphonic poem. Prerequisite: MUSC 232 or consent of instructor.

MUSC 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 graduate standing.

MUSC 519 KEYBOARD LITERATURE (3)
The study of literature for keyboard instruments from 1450 to the present. Prerequisite: Upper-division or graduate standing as a Music major, or permission of instructor.

MUSC 521 AMERICAN MUSIC (3)
American music from the Colonial Period to the present. Prerequisite: Junior/senior standing or consent of instructor.

MUSC 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 526 JAZZ HISTORY (3)
Survey of jazz from its origins to the present day. Prerequisite: MUSC 232.

MUSC 527 JAZZ ARRANGING I (3)
Study and practice of arranging of standard material for jazz ensembles. Prerequisite: MUSC 232 or consent of instructor.

MUSC 542 VOCAL PEDAGOGY (3)
Theory and practice of the teaching of singing by national styles, historical approaches and the physiology of the voice. Prerequisites: MUSC 245 and MUSC 246, or consent of instructor.

MUSC 543 INSTRUMENTAL PEDAGOGY (1)
The art and science of teaching musical instruments in the applied setting. Prerequisites: No prerequisites required at the graduate level.

MUSC 550 MUSIC INDUSTRY: LIVE PERFORMANCE (3)
A survey of the music business focusing on songwriting, publishing, copyright, licensing, agents, managers, artist contracts, unions, concerts, musical theatre, arts administration and music products.

MUSC 551 MUSIC INDUSTRY: RECORDING AND DIGITAL MEDIA (3)
A survey of the music business focusing on record production, labels, promotion, distribution and marketing and on music in radio, television, videos, advertising, movies, games and production libraries.

MUSC 552 PEDAGOGY OF TECHNOLOGY IN MUSIC INSTRUCTION (3)
Methods of creation and modes of delivery of online music instruction. Prerequisite: experience with music notation or consent of the instructor.

MUSC 560 PIANO PEDAGOGY (3)
Teach the goals and steps in the art of teaching beginner, elementary and intermediate piano.

MUSC 562 GUITAR PEDAGOGY (3)
Art and science of teaching guitar, historical and current practices, and observations. Private studio organization and administration. Prerequisite: 200-level guitar private lessons or consent of instructor.

MUSC 563 MUSIC IN LATIN AMERICA (3)
Genres and styles of art and popular music in Latin America from colonial times to today. Issues of colonialism, nationalism, music and identity and globalization. The role of music in processes of political, social, and cultural change in Latin America. Prerequisites: MUSC 232 or consent of the instructor.

MUSC 571 SPECIAL TOPICS IN MUSIC (3)
Consideration of central topic in music with different topic each term. May be repeated for credit provided a different topic is covered. Prerequisite: MUSC 232 or consent of instructor.
MUSC 572 SPECIAL TOPICS IN MUSIC (3)
Consideration of central topic in music with different topic each semester. May be repeated for credit provided a different topic is covered. Prerequisite: MUSC 232 or consent of instructor.

MUSC 573 SPECIAL TOPICS IN MUSIC (3-6)
Consideration of central topic in music with different topic each semester. May be repeated for credit provided a different topic is covered. Prerequisite: MUSC 232 or consent of instructor.

MUSC 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 the instructor.

MUSC 593 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 taken. Prerequisite: MUSC 302 or consent of instructor.

MUSC 597 INTERNSHIP IN MUSIC INDUSTRY (1-6)
Field experience with working professionals. Prerequisite: Consent of music internship coordinator.

MUSC 621 PERSPECTIVES IN MUSIC HISTORY AND CULTURE (3)
An examination of issues in music scholarship, including the philosophies of music, the evolution of genres and forms, the social background to musical practice, and current trends. Prerequisite: admission to master's program in Music.

MUSC 629 CONCEPTS OF MUSIC THEORY (3)
The theoretical and analytical principles of tonal music. Emphasis on writing and listening skills. Prerequisite: Graduate standing.

MUSC 631 ADVANCED THEORY (3)
Continued development of skills in more advanced melodic, harmonic and rhythmic aspects of music through hearing, playing and writing. Prerequisite: MUSC 232.

MUSC 670 SPECIAL TOPICS IN MUSIC (3)
In-depth study of a selected topic in music. Specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the graduate adviser is required. Each topic may be taken as a separate course.

MUSC 671 SPECIAL TOPICS IN MUSIC (3)
In-depth study of a selected topic in music. Specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Approval by the graduate adviser is required. Each topic may be taken as a separate course.

MUSC 685 MUSIC BIBLIOGRAPHY AND RESEARCH (3)
Investigation of music bibliography, research methodology and the writing process. Independent research projects and experience in writing research papers, reviews and essays in musical criticism.

MUSC 699 POST BACCALAUREATE CERTIFICATE RECITAL (1)
Capstone recital delivered for the Post Baccalaureate Certificate graduate requirement. A minimum of 50 minutes of music is required. Repertoire for the recital is subject to approval by the applied faculty, and the recital will be evaluated on both musical and technical achievement. Students must be enrolled in applied lessons during the term in which the recital is presented.

MUSC 795 GRADUATE COMPOSITION RECITAL (1)
Recital of original compositions delivered for Master of Music graduation requirement. Prerequisites: A minimum of 24 units completed toward the degree and permission of the composition faculty and the graduate program director; special permit required.

MUSC 796 RECITAL RESEARCH PAPER (1)
Recital research paper for master of music graduation requirement. Includes preparation and submission of proposal and completion of manuscript that culminates with an oral defense of the final document. Permission from the master of music program director required.

MUSC 797 GRADUATE PERFORMANCE RECITAL (1)
Capstone recital delivered for Master of Music graduation requirement with a concentration in music performance. A minimum of 50 minutes of music is required. Repertoire for the recital is subject to approval by the applied faculty, and the recital will be evaluated on both musical and technical achievement. Students must be enrolled in applied lessons during the semester in which the recital is presented.

MUSC 798 RECITAL RESEARCH CONTINUUM (1)
Continuum of recital research paper. May be repeated for a maximum of 2 credits. Continuum credits may not apply toward electives in the Master of Music Program. Prerequisites: MUSC 796, Recital Research Paper and MUSC 797, Recital.

MUSC 880 GRAD PROJECT MUSC (1-2)
Fulfills a graduation requirement for M. S. in Music Education. Projects include recital, composition, research paper or practicum as appropriate to the needs and interest of the student. Prerequisites: a minimum of 21 graduation units completed and permission of the graduate program director in Music Education; consent of department.

MUSC 885 PROJECT CONTINUUM (1)
Continuing work on previously started work. Prerequisite: Previous registration for project work.

MUSC 897 MUSIC THESIS (6)
Original investigation using an acceptable research method and design conducted under the direction of a faculty committee.

MUSC 898 MUSIC THESIS (3)
The previous course, MUSC 897, taken over two consecutive semesters.

MUSC 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Music Applied (MUSA)

Courses

MUSA 502 MUSIC TECHNOLOGY (1-2)
Instruction in music technology: individual lessons (1/2 hour for 1 unit, one hour for 2 units) and one hour group master class. Private instruction in the use of current and emerging technologies for the creation, performance, research and teaching of music and sound art. By department consent only. Fees: additional fees apply. Contact the Department of Music for applicable fees. Prerequisite: consent of instructor.

MUSA 600 COMPOSITION (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.
MUSA 601 JAZZ / COMMERCIAL COMPOSITION (1-2)
Instruction in composition: individual lessons (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.

MUSA 603 VOICE LESSONS (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 605 KEYBOARD/PIANO (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 606 KEYBOARD/PIPE ORGAN (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 607 KEYBOARD/HARP SCHORD (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 613 PERCUSSION/MULTIPLE (1-3)
Private studio and master class instruction in instrumental techniques and performance. The music department applied music handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Additional fees apply. Contact the department for fee policy.

MUSA 620 BRASS/TRUMPET (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 621 BRASS/TROMBONE (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 622 BRASS/FRENCH HORN (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 623 BRASS/TUBA (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 625 WOODWINDS/FLUTE (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 626 WOODWINDS/CLARINET (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 627 WOODWINDS/OBOE (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 628 WOODWINDS/BASSOON (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.
MUSA 629 WOODWINDS/SAXOPHON (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 630 STRINGS/VIOLIN (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 631 STRINGS/VIOLA (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 632 STRINGS/CCELLO (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 633 STRINGS/STR BASS (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 635 GUITAR/CLASSIC (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 640 JAZZ/COMM GUITAR (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 641 JAZZ/COMM BASS (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 642 JAZZ/COMM PIANO (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 643 JAZZ/COMM DRUMS (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 644 JAZZ/COMM TRUMPET (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 645 JAZZ/COMM SAXOPHN (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 646 JAZZ/COMM TROMBON (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 647 JAZZ/COMM ELEC BS (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.
MUSA 648 JAZZ/COMM VOICE (1-3)
Private studio and master class instruction in instrumental techniques and performance. The Music Department Applied Music Handbook lists criteria for audition and performance standards. Successful completion of a jury examination is required at the end of each term. May be repeated for credit depending on concentration. Prerequisites: Audition and permission of the graduate program director. Additional fees apply. Contact the department for fee policy.

MUSA 650 CHORAL SOCIETY (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 651 UNIV CHORALE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 652 CHAMBER SINGERS (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 653 MUSIC F/THE STAGE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 655 PEP BAND (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 660 MARCHING BAND (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 661 SYMPHONIC BAND (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 662 SYMPHONY ORCHESTRA (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 666 WOODWIND ENSEMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 667 CHAMBER MUSC ENSMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 668 EARLY MUSC ENSEMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 670 WORLD MUSIC ENSEMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 672 PERCUSSN ENSEMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 674 SOLO & ENSEMB ACCMPNY (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 675 GUITAR ENSEMBLE (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 676 SMALL INSTRUMENTAL ENSEMBLE-FREE IMPROVISATION (1)
The study and exploration of multifaceted improvisational practice. Open to both instrumentalists and vocalists. May be repeated for a maximum of 4 units. Prerequisite: Audition or permission of instructor.

MUSA 679 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. May be repeated for a maximum of 4 units. Special permit required. Prerequisites: MUSC 329 Instrumental conducting (or equivalent) or MUSC 327 choral conducting (or equivalent); consent of instructor.

MUSA 681 JAZZ ENSEMBLE - JAZZ ORCHESTRA (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 upon the concentration. Prerequisites: Audition required; department consent.

MUSA 682 JAZZ ENSEMB-COMBO (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 683 JAZZ ENSEMB-GUITR (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 684 JAZZ ENSEMB-VOCAL (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

MUSA 685 JAZZ ENSEMB-LATIN (1)
The study and performance of literature for the designated ensemble. Open to all students by audition or permission of instructor. May be repeated for credit depending on concentration.

Music Education (MUED)

Courses

MUED 601 CURRENT TRENDS IN MUSIC AND MUSIC EDUCATION (3)
Current philosophies and objectives of music scope and sequence of music curricula (vocal and instrumental) in the schools. Prerequisite: Consent of program director.
MUED 617 CHORAL WORKSHOP IN ELEMENTARY AND SECONDARY SCHOOL MUSIC (2)
Observing, conducting and evaluating of rehearsals of the chorus made up of workshop participants. Includes sources and selection of music, audition and classification of voices, pedagogy, rehearsal techniques, choral arranging and program building and programming. Prerequisite: MUSC 327.

MUED 630 DALCROZE-ORFF KODALY FOR THE CLASSROOM I (2)
Principles of Dalcroze eurhythmics, Orff and Kodaly techniques in elementary and middle school programs. Appropriate for vocal-general and instrumental teachers. Prerequisite: Bachelor’s degree in Music or Music Education.

MUED 631 DALCROZE ORFF KODALY FOR THE CLASSROOM II (2)
Principles of beginning and intermediate level Dalcroze, Orff and Kodaly techniques in the vocal-general and instrumental music program exploring practical techniques and materials using an eclectic approach to teaching concepts and skills. Prerequisite: MUED 630 or consent of instructor.

MUED 632 DALCROZE PRACTICES (2)
Methods and materials incorporating eurhythmics, solfege, improvisation and basic keyboard improvisatory skills. Prerequisite: MUED 630 or consent of instructor.

MUED 633 ORFF TECHNIQUES (2)
Methods and materials incorporating improvisation, orchestration, mallet technique, speech chants, movement and use of Orff instruments. Prerequisite: MUED 630 or consent of instructor.

MUED 634 KODALY TECHNIQUES (2)
Methods and materials incorporating sight singing exercises, rhythm and movement, folk songs and singing games within an eclectic curriculum. Prerequisite: MUED 630 or consent of instructor.

MUED 635 THEORY, PEDAGOGY AND CURRICULUM DEVELOPMENT IN DALCROZE, ORFF, KODALY (3)
Teaching the pedagogy of musical elements and concepts using Dalcroze, Orff and Kodaly techniques and materials. Prerequisites: MUED 631, MUED 632 and MUED 633, MUED 634, or consent of instructor.

MUED 661 SEMINAR IN INSTRUMENTAL MUSIC (3)
Comparative analysis of current methods and materials used in schools and colleges. Instrumental conducting and repertoire. Construction of acoustical properties and basic techniques of instruments. Problems of ensemble and balance. Intonation, precision and interpretation are studied. Materials and music literature for bands, orchestras and small ensembles are evaluated. Prerequisite: Admission to graduate program.

MUED 662 SEMINAR IN CHORAL VOCAL MUSIC (3)
Comparative analysis of current methods and materials used in schools and colleges. Choral conducting and repertoire. Style interpretation, tone quality, diction, rehearsal and conducting techniques are analyzed. Prerequisite: Consent of program director.

MUED 670 WORKSHOPS IN MUSIC EDUCATION (1)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 671 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 672 WORKSHOP IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 673 WORKSHOP IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 674 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 675 WORKSHOP IN MUSIC EDUCATION (3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 676 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 677 WORKSHOP IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 678 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 679 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for credit when topics differ. Prerequisite: Graduate standing.

MUED 680 WORKSHOPS IN MUSIC EDUCATION (1-3)
Selected topics in music education. Can be repeated for additional credit (to a maximum of 6 units) when topics differ. Prerequisite: Graduate standing.

MUED 695 RESEARCH METHODS IN MUSIC EDUCATION (3)
The application of research to problems in the field of music education. Prerequisite: Admission to the graduate program in Music Education and consent of instructor.

Nursing (NURS)

Courses

NURS 510 SPIRITUALITY, HEALTH AND NURSING PRACTICE (3)
Application of theory and research to 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 the instructor.

NURS 523 CRISIS AND STRESS MANAGEMENT (3)
An integrated, comprehensive, multicomponent approach to crisis intervention in a variety of individuals, groups and settings. Prerequisite: PSYC 101 or HLTH 101.

NURS 594 TRAVEL STUDY IN NURSING (3)
Historical and contemporary sociopolitical factors that guide the delivery of health care to various population groups in other countries. Prerequisite: Permission of the instructor.

NURS 600 ADVANCED CLINICAL PRACTICE (3)
Advanced Clinical Practice examines the advanced pathophysiology, physical assessment and pharmacological treatments for clients with or at risk for common health alterations. Prerequisite: Graduate nursing student status or consent of department.

NURS 601 THEORETICAL FOUNDATIONS OF NURSING PRACTICE (3)
Prepares nurses to critically analyze and apply a wide range of nursing and related theories to research and clinical practice in order to develop a comprehensive and holistic approach to care. Prerequisite: Consent of instructor.
NURS 603 NURSING RESEARCH (3)
Prepares the nurse to identify clinical problems, critically evaluate nursing research, develop a research design, and apply research in practice. Prerequisites: Undergraduate research and/or statistics course and consent of instructor.

NURS 605 NURSING SYSTEMS IN HEALTH CARE (3)
Prepares the nurse to participate in the design, implementation and management of care in a variety of health care systems, provide quality cost-effective care, and assume a leadership role in the managing of human, fiscal, and physical health care resources. Prerequisite: Consent of instructor.

NURS 610 CURRICULUM DEVELOPMENT IN NURSING (3)
Overview of theory and methods for the development of nursing educational delivery systems in academic and service settings.

NURS 612 TEACHING AND LEARNING IN NURSING (3)
Focuses on the application of learning theory and teaching methods in the classroom and clinical environments with a particular emphasis on meeting the needs of diverse student populations. Includes instructional technology and micro-teaching experiences.

NURS 670 SPECIAL TOPICS IN NURSING (1-3)
An examination of current and evolving topics in nursing. The specific requirements and prerequisites will vary with each topic and will be designated by the by the department. May be repeated for a maximum of 6 credits provided a different topic is covered. Prerequisites: will vary according to topic.

NURS 671 SPECIAL TOPICS IN NURSING (1-3)
An examination of current and evolving topics in nursing. The specific requirements and prerequisites will vary with each topic and will be designated by the by the department. May be repeated for a maximum of 6 credits provided a different topic is covered. Prerequisites: Will vary according to topic.

NURS 701 ADVANCED POPULATION BASED HEALTH (3)
Focuses on the application of advanced nursing clinical reasoning to population based health. Evidence based program planning and evaluation models are applied to diverse population groups with unmet health needs across the lifespan. Emphasis is placed on the advanced clinical nursing care of vulnerable populations in diverse community based settings. Prerequisites: all graduate core and concentration courses with the exception of the elective course, NURS 802, NURS 713, IDHP 610 (applies to Clinician to Administrator students only) and NURS 810 (applies to Nursing Education students only); approval of program director.

NURS 712 THE ADULT LEARNER (3)
Introduction to learning in adulthood, including context, development, process and practice. Prerequisite: Consent of instructor.

NURS 713 EVALUATION IN NURSING EDUCATION (3)
Emphasis is placed on the evaluation of student performance, teaching, courses and programs. Assessment measures of learner outcomes, faculty effectiveness and program quality will be explored. Students who have successfully completed NURS 710 will not receive additional credit for NURS 713. Prerequisites: NURS 600, NURS 610, NURS 612 (may be taken concurrently).

NURS 802 ADVANCED POPULATION BASED HEALTH PRACTICUM (3)
Students apply concepts and theories related to advanced population based health to diverse community practice settings where advanced nursing care is provided to vulnerable population groups. Students assume advanced nursing leadership roles in executing evidence based, scholarly, population-focused health projects to promote health among targeted populations. Prerequisites: all Graduate Core and Concentration Courses with the exception of the elective course, IDHP 610 (applies to Clinician to Administrator students only) and NURS 810 (applies to Nursing Education students only); approval of program director.

NURS 810 TEACHING PRACTICUM (3)
A practicum designed to apply new advanced nursing knowledge and skills in teaching and learning in academic or service settings. Self-assessment of teaching, discussion of the nurse educator role, and exploration of issues related to the teaching/learning environment will occur throughout the semester in weekly seminars. Prerequisites: NURS 600, NURS 610, NURS 612; NURS 710 (may be taken concurrently).

Occupational Science (OSC)

Courses

OSC 742 ORIGINS AND EVOLUTION OF OCCUPATIONAL SCIENCE (3)
Examination of the historical perspective of occupational science and occupational engagement. Prerequisite: OCTH 611. Consent of department.

OSC 744 PARTICIPATION AND QUALITY OF LIFE OF PEOPLE IN THEIR CONTEXT (3)
Examination of theories and research for analyzing the occupations and quality of life of people within their socio-cultural context. Prerequisite: consent of department.

OSC 746 PARTICIPATION AND QUALITY OF LIFE IN COMMUNITIES AND POPULATIONS (3)
Examination of participation and quality of life of communities and populations from an occupational science perspective. Prerequisites: Consent of instructor.

OSC 770 SPECIAL TOPICS IN OCCUPATIONAL SCIENCE (1-6)
Explore topics of special interest in occupational science theory and research. Prerequisite: Consent of Post-Professional Program Director.

OSC 890 QUALITATIVE RESEARCH: OCCUPATION AND LIFE NARRATIVE (3)
Qualitative methods used in the study of occupation and other related social sciences. Prerequisites: OCTH 611, OCTH 613, or consent of instructor.

OSC 891 INDEPENDENT STUDY IN OCCUPATIONAL SCIENCE (1-6)
In depth investigation and development of scholarly product. May be repeated for a maximum of 6 units. Prerequisite: consent of post professional program director.

OSC 892 DIRECTED READINGS IN OCCUPATIONAL SCIENCE (3)
Readings in selected topic in occupational science. May be repeated for additional credit for a maximum of 6 units. Prerequisites: At least one 700 level OSC course and consent of post professional director.

OSC 895 APPLIED PROJECT; EVERYDAY LIFE AND DIMENSIONS OF OCCUPATION (3)
Design and implementation of an applied research project in occupation that has the potential to be developed into a dissertation topic. Prerequisites: OSC 742, 744, 746, 890, and other 700 or above quantitative statistics course. Majors only; permit required.
OSC 997 OSC DISSERTATION (1-9)
Design, implementation and documentation of focused study of applied occupation in community systems. Will be repeated for a maximum of 12 total credits. Permit required. Prerequisite: OSC Applied Project.

OSC 999 DISSERTATION CONTINUUM (1)
Continuing work toward the completion of the dissertation. Permit required. S/U Grading.

Occupational Therapy (OCTH)

Courses

OCTH 521 KINESIOLOGY OF OCCUPATION (3)
Analysis of human movement and pathology as it applies to occupational performance. Presents the principles of biomechanics, muscle physiology, joint structure, muscle function, and motor control emphasizing palpation of anatomical structures. Prerequisite: consent of department.

OCTH 570 SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3)
Designed to explore topics of special interest in the theory and practice of occupational therapy. Prerequisite: Consent of instructor. May be repeated for a maximum of 3 units.

OCTH 600 FOUNDATIONS OF OCCUPATIONAL THERAPY (4)
Historical and philosophical underpinnings of occupational therapy focusing on the meaning of occupation across the lifespan. Occupational therapy process and analysis of occupational performance are emphasized. Prerequisites: consent of department. Lab/Class fee will be assessed.

OCTH 601 GROUP DYNAMICS IN DIVERSE CONTEXTS (3)
A study of group process in various contexts, representing diverse cultures.

OCTH 603 ISSUES IN OCCUPATIONAL THERAPY (3)
Analysis of current issues in occupational therapy. Prerequisite: Admission to Occupational Therapy master’s program. Consent of department.

OCTH 604 ACADEMIC AND CLINICAL EDUCATION (3)
College/university teaching and clinical supervision strategies for the preparation of professionals in clinical disciplines. Prerequisite: Consent of instructor.

OCTH 605 MANAGING HUMAN RESOURCES IN OCCUPATIONAL THERAPY (3)
Issues and trends in leadership, decision-making styles, productivity, professional development recruitment and retention, and performance appraisal systems. Prerequisite: Consent of instructor.

OCTH 606 ADULT AND OLDER ADULT NEUROLOGICAL OCCUPATIONAL THERAPY (3)
Examination of the etiology, progression, and management of neurological conditions and other influences on adults and older adults’ engagement in occupation. Fundamentals of developmental theories, and occupational therapy theory and practice applied to adults and older adults with neurological conditions. Corequisite: OCTH 607. Prerequisites: OCTH 600, OCTH 601, OCTH 221; BIOL 427.

OCTH 607 ADULT AND OLDER ADULT MUSCULOSKELETAL OCCUPATIONAL THERAPY (3)
Examines the etiology, clinical course, evaluation, and management of musculoskeletal conditions as they influence engagement of occupation for adults and older adults. Fundamentals of occupational therapy theory and practice are applied to adults and older adults with musculoskeletal conditions. Corequisite: OCTH 606. Prerequisites: OCTH 600, OCTH 601, OCTH 221; BIOL 427. Lab/Class fee will be assessed.

OCTH 609 ADVANCED RESEARCH METHODS AND DATA ANALYSIS IN OCCUPATION BASED PRACTICE (3)
Application of qualitative and quantitative research methods and data analysis. Prerequisite: consent of department.

OCTH 610 DATA ANALYSIS IN OCCUPATION-BASED RESEARCH AND EVIDENCE-BASED PRACTICE (3)
In depth examination of quantitative and qualitative data in health related literature and application of data analysis procedures in occupation-based research. Prerequisites: consent of department.

OCTH 611 ADVANCED THEORY AND PHILOSOPHY OF OCCUPATION (3)
Analysis of the theories and philosophical assumptions underlying occupation. Prerequisite: Consent of instructor.

OCTH 612 OT HEALTH PROMOTION INITIATIVES IN THE COMMUNITY (3)
Theory and practice of occupational therapy in health promotion in the community with special emphasis on the cultural context of the community. Integrates knowledge and skills for the practice of occupational therapy services which foster healthy development; prevent health problems; maintain optimal function; and develop occupational performance skills of individuals, families, and communities. Prerequisite: OCTH 611 or permission of instructor.

OCTH 613 ADVANCED RESEARCH METHODS IN OCCUPATION BASED PRACTICE (3)
Application of qualitative and quantitative research methods. Prerequisite: consent of department.

OCTH 614 PRINCIPLES OF PSYCHOSOCIAL OCCUPATIONAL THERAPY PRACTICE (5)
Psychosocial aspects of human functioning and occupational implications of clinical conditions. Occupational therapy theory and practice are applied to mental health. Corequisite: OCTH 620. Prerequisites: OCTH 600 and OCTH 601.

OCTH 615 SEMINAR IN PROFESSIONAL AND CLINICAL REASONING (3)
Synthesis and integration of clinical reasoning, reflective practice, and professional knowledge required for clinical practice. Prerequisites: OCTH 319 and OCTH 320.

OCTH 619 ADULT PHYSICAL REHABILITATION LEVEL I FIELDWORK (3)
Course and fieldwork experiences in evaluation and intervention in adult rehabilitation and disability. Students explore assumptions related to clinical skills, identify areas in need of improvement, and apply learned concepts. Corequisites: OCTH 606 and OCTH 607 or consent of department. Prerequisites: OCTH 600, OCTH 601, OCTH 521, BIOL 427.

OCTH 620 PSYCHOSOCIAL LEVEL I FIELDWORK (3)
Occupational therapy service delivery in the mental/behavioral health practice arena. Students employ their clinical reasoning, therapeutic use of self and professional attitudes and behaviors while in the classroom and during their Level I fieldwork experience. Transformative learning theory frames learning activities and expected outcomes. Corequisite: OCTH 614. Prerequisites: OCTH 600, OCTH 601; consent of department.
OCTH 624 OCCUPATIONAL THERAPY PRACTICE WITH CHILDREN AND YOUTH (5)

OCTH 626 OCCUPATIONAL THERAPY FIELDWORK FOR CHILDREN AND YOUTH (3)
Classroom and fieldwork practice in occupational therapy evaluation and intervention with children and youth and their families. Students gain knowledge of delivery of occupational therapy services in various practice settings, legislation, and documentation. Competency and professionalism are addressed in Level I fieldwork. A transformative learning theory is used to frame the course. Corequisite: OCTH 624. Prerequisite: consent of department.

OCTH 627 ADMINISTRATION AND ORGANIZATION OF OCCUPATIONAL THERAPY SERVICES (3)
Administrative and organizational processes applied to occupational therapy service delivery. Includes leadership in personnel relationships, systems analysis, program planning, budgeting, marketing occupational therapy and related services, and ethical and legal issues. Topics are viewed within the perspective of the dynamics of the current health care industry. Prerequisite: consent of department.

OCTH 628 CONTEMPORARY OCCUPATIONAL THERAPY PRACTICE (3-6)
Combines classroom preparation with a directed independent study focused on expanding and developing skills in an area of occupational therapy practice of special interest to the student. May be repeated for a maximum of 6 units. Prerequisite: completion of one Level II fieldwork or consent of instructor.

OCTH 633 OCCUPATION BASED PEDIATRIC INTERVENTION (3)
Advanced intervention principles for pediatric populations, including provisions for care of children from birth to 21 years of age in health delivery systems, including the schools. Prerequisite: consent of the department, permit required.

OCTH 634 CONTEXTUAL FACTORS AND OCCUPATIONAL PERFORMANCE (3)
Study of contextual factors that influence occupational performance across the lifespan. Prerequisites: Consent of department.

OCTH 635 LEVEL II FIELDWORK I (9)
Supervised Level II Fieldwork in occupational therapy practice. Prerequisites: OCTH 614, OCTH 620, OCTH 606, OCTH 607, OCTH 619, OCTH 625, OCTH 626 and consent of department.

OCTH 636 LEVEL II FIELDWORK II (9)
Supervised level II fieldwork in occupational therapy practice. Graded S/U. Prerequisites: OCTH 635 and consent of department.

OCTH 670 SPECIAL TOPICS IN OCCUPATIONAL THERAPY (1-3)
Study of selected topics in occupational therapy. Prerequisites: Vary with each topic, consent of instructor.

OCTH 678 ASSESSMENT THROUGHOUT THE LIFESPAN (3)
Examination, selection, administration, and evaluation of a variety of measurement tools used in Occupational Therapy Practice. Corequisite OCTH 326. Prerequisites: OCTH 319, OCTH 320; consent of department. Lab/Class fee will be assessed.

OCTH 691 DIRECTED READINGS IN OCCUPATIONAL THERAPY (1-3)
Guided review of literature to explore in-depth subjects related to occupational therapy theory and practice. Prerequisite: Graduate standing.

OCTH 692 INDEPENDENT STUDY (1-6)
In-depth investigation specific to area of interest in occupational therapy. Prerequisite: Consent of Department.

OCTH 778 ADVANCED OCCUPATIONAL THERAPY ASSESSMENT (3)
Analysis of current assessment practices in occupational therapy and synthesis of current evidence to advance assessment procedures for the profession within specific practice areas. Prerequisites: consent of department.

OCTH 779 ADVANCED OCCUPATIONAL THERAPY INTERVENTIONS (3)
Analysis of current intervention practices in occupational therapy and synthesis of current evidence to advance intervention procedures for the profession within focused practice areas. Prerequisite: consent of the department.

OCTH 781 GRADUATE SEMINAR IN OCCUPATIONAL THERAPY (3)
Graduate project of thesis proposal preparation with feedback and discussion. Corequisite OCTH 319. Prerequisites: OCTH 320, OCTH 610, OCTH 613; and consent of department. Lab/Class fee will be assessed.

OCTH 782 RESEARCH PRACTICUM (3)
Supervised participation in a research process that is oriented toward the application of specific research techniques in occupational therapy and occupational science. Prerequisites: OCTH 613 and OCTH 610 or OCTH 609 and consent of department.

OCTH 881 CAPSTONE RESEARCH PROJECT I (3)
Creation of an independent research project proposal related to current occupational therapy practice areas. Prerequisites: OCTH 609, OCTH 610, or other evidence of adequate statistical analysis preparation, and consent of department.

OCTH 882 CAPSTONE RESEARCH PROJECT II (3)
Implementation, documentation, and dissemination of an evidence-based project. Prerequisites: OCTH 881 and consent of the department.

OCTH 885 PROJECT CONTINUUM (1)
Continuing work on previously started project. prerequisites: Previous registration for project work.

OCTH 895 DOCTORAL EXPERIENTIAL PRACTICUM (9)
The Doctoral Experiential Practicum (DEP) is a 16-week (640 hours) in-depth experience to implement a pre-approved student plan designed to develop advanced skills in as area of focus. Approval of the placement and plan is contingent upon review by the DEP Coordinator, the assigned faculty member, and placement mentor. Prerequisites: OCTH 635 and OCTH 636 and consent of department; taken concurrently with OCTH 882.

OCTH 897 OCCUPATIONAL THESIS (6)
Original investigation using an acceptable research method and design conducted under the direction of a faculty member. Prerequisites: OCTH 781, successful completion of the graduate examination and consent of thesis chairperson.

OCTH 898 OCTH THESIS (3)
The previous course, OCTH 897, taken over two consecutive semesters.
Operations Research (OPRE)

Courses

OPRE 505 FUNDAMENTALS OF STATISTICS (1.5)
Emphasizes applications of descriptive statistics in business. Topics include basic probability concepts, summary measures of location and dispersion, discrete and continuous probability distributions, sampling distribution of mean, and introductions to confidence interval estimation and hypothesis testing. Excel-based software is used for computer implementation. Prerequisite: OPRE 505.

OPRE 506 MANAGERIAL STATISTICS (1.5)
Emphasizes applications of inferential statistics in business. Topics include confidence interval estimation, hypothesis testing, analysis of variance, simple linear regression and an introduction to multiple regression. Excel-based software is used for computer implementation. Prerequisite: OPRE 505.

OPRE 605 BUSINESS ANALYTICS (1.5)
Explores business analytics and their applications to management decision-making for a range of business situations. Covers problem structuring; big data, data mining and optimization; computer simulation; decision analysis; and predictive modeling. Prerequisites: OPRE 505 and OPRE 506 or permission of the MBA program director.

Philosophy (PHIL)

Courses

PHIL 501 PHILOSOPHIES OF INDIA (3)
Examination of major ideas in the Vedic, Epic, Classical darsana and modern periods. Prerequisite: One lower-division course in philosophy or consent of instructor.

PHIL 502 PHILOSOPHIES OF CHINA AND JAPAN (3)
Examination of major philosophical systems through selected writings in translation. Prerequisite: One lower-level course in philosophy or consent of instructor.

PHIL 509 AESTHETICS (3)
Examination of major philosophical systems through selected writings in translation. Prerequisite: One lower-level course in philosophy or consent of instructor.

PHIL 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; application to contemporary moral concerns. Prerequisite: One lower-division course in philosophy.

PHIL 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. Prerequisites: 6 units in philosophy.

PHIL 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: 6 units in philosophy.

PHIL 522 HELLENISTIC AND MEDIEVAL PHILOSOPHY (3)
Deals with the philosophical schools of the Hellenistic and Roman periods, viz., Stoicism, Epicureanism, Skepticism and Neo-Platonism, and with the two main Christian philosophies of the Middle Ages, viz., Augustinianism and Thomism. Prerequisite: One lower-division course in philosophy.

PHIL 524 MODERN PHILOSOPHY (3)
The history of philosophy, beginning with Descartes, through the 19th century. Prerequisite: One lower-division course in philosophy.

PHIL 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-division course in philosophy.

PHIL 526 AMERICAN PHILOSOPHY (3)
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-division course in philosophy.

PHIL 530 PHILOSOPHY AND FILM (3)
Philosophical insights on issues such as knowledge, personal identity, reality, freedom, justice, death, love, violence, and happiness as they are represented in the film medium; examination of how films reflect the values of the cultures in which they are embedded and how they participate in the formation of values. Prerequisites: One philosophy course of permission of instructor.

PHIL 532 FEMINIST PHILOSOPHY (3)
Contemporary problems, including redefinition of traditional areas of philosophy and creation of new issues for investigation. Prerequisite: One lower-division philosophy course or consent of instructor.

PHIL 539 THEORIES OF KNOWLEDGE (3)
A 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-division course in philosophy.

PHIL 540 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.

PHIL 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. Prerequisite: Two previous courses in philosophy or religion.

PHIL 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-division course in philosophy or consent of instructor.

PHIL 563 BUSINESS ETHICS (3)
Economics is one of the "moral sciences" in so far 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-division course in philosophy.
PHIL 570 PHILOSOPHICAL PROBLEMS (3)
A consideration of one of the perennial interests of philosophy.
Prerequisites: Two previous courses in philosophy.

PHIL 571 PHILOSOPHICAL PROBLEMS (3)
A consideration of one of the perennial interests of philosophy.
Prerequisites: Two previous courses in philosophy.

PHIL 580 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 interests will be offered. Prerequisite: One lower-division course in philosophy.

PHIL 581 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 interests will be offered. Prerequisite: One lower-division course in philosophy.

Physical Science (PHSC)

Courses

PHSC 501 ADVANCED LABORATORY IN PHYSICAL SCIENCE (2)
Exacting laboratory work of an advanced nature under the guidance of the physical science staff. Each student will present and defend his or her work at a seminar. May be repeated for a maximum of 6 units. Prerequisite: Consent of instructor.

PHSC 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.

PHSC 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 allowed if student has taken ASTR 161 and/or PHSC 121. Prerequisite: GEOL 101 or equivalent.

PHSC 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 561 GENERAL ASTRONOMY II (3)
Stars, stellar systems, galaxies and cosmology. Emphasis in determination of the distance scale and modern trends in astronomy. Prerequisite: ASTR 161 General Astronomy I or equivalent.

PHSC 570 SPECIAL TOPICS PHSC (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. Prerequisite: Consent of instructor.

PHSC 594 TRAVEL STUDY (1-3)
A detailed investigation of field problems and phenomena. Locations and topics to be selected by the department and instructors sponsoring program. May be repeated for maximum of 3 units. Prerequisite: Consent of instructor.

Courses

PAST 601 RESEARCH METHODS IN PHYSICIAN ASSISTANT PRACTICE (3)
Examination of theory and methodology for designing and coordinating qualitative and quantitative research, including data collection and analysis. Prerequisite: Admission to program.

PAST 602 ETHICS, ISSUES, AND TRENDS IN PHYSICIAN ASSISTANT PRACTICE (3)
Examines professional and ethical issues, as well as legal implications, confronting the physician assistant. Effect of social, political and economic changes is also explored, together with the physician assistant role in the health care team. Prerequisite: Admission to program.

PAST 603 MEDICINE I (2)
Physiological and pathological mechanisms of disease process; treatment and preventive aspects of care are included. Prerequisite: Admission to program.

PAST 604 MEDICINE II (6)
Second course in physiological and pathological mechanisms of the disease process, treatment and prevention. Prerequisites: Admission to program and completion of Medicine I.

PAST 605 MEDICINE III (2)
Third course in physiological and pathological mechanisms of the disease process, treatment and prevention. Prerequisites: Admission to program and completion of Medicine I and II.

PAST 606 PEDIATRICS I (2)
Clinical assessment and management of disease in infant to adolescent patients. Prerequisites: Admission to program and completion of Medicine I.

PAST 607 PEDIATRICS II (2)
A second course in clinical assessment and management of disease in infant to adolescent patients. Prerequisites: Admission to program and completion of Pediatrics I.

PAST 608 MEDICINE IV (6)
The fourth course in physiological and pathological mechanisms of the disease process, treatment and prevention. Prerequisites: Admission to program and completion of Medicine III.

PAST 609 PHARMACOLOGY I (2)
First of two courses in pharmacology dealing with initiating a monitoring routine drug therapy. Included are the principles of pharmacokinetics and pharmacodynamics. Prerequisites: Admission to program and completion of Medicine I.

PAST 610 PHARMACOLOGY II (2)
The second of two courses in pharmacology dealing with initiating a monitoring routine drug therapy. Included are the principles of pharmacokinetics and pharmacodynamics. Prerequisites: Admission to program and completion of Pharmacology I.

PAST 653 PA CLINICAL PRACTICUM III (6)
Clinical experience designed for the application of principles of the practice of medicine. Demonstration of increasing skill mastery through provision of patient care from presentation through follow-up including diagnostic evaluation and patient management. Prerequisites: successful completion of first two clinical courses in clinical year sequence PAST 251 and PAST 252 (CCBC courses).
PAST 654 PA CLINICAL PRACTICUM IV (3)
Clinical experience designed for the application of principles of the practice of medicine. Demonstration of increasing skill mastery through provision of patient care from presentation through follow-up including diagnostic evaluation and patient management. Prerequisites: successful completion of first three clinical courses in clinical year sequence PAST 251 and PAST 252 (CCBC courses) and PAST 653.

PAST 655 CLINICAL PRACTICUM V (11)
Clinical experience designed for the application of principles of the practice of medicine. Demonstration of increasing skill mastery through provision of patient care from presentation through follow-up including diagnostic evaluation and patient management. Prerequisite: successful completion of first four clinical courses in clinical year sequence.

PAST 670 SPECIAL TOPICS IN PHYSICIAN ASSISTANT STUDIES (1-6)
A study of contemporary topics in Physician Assistant studies. The specific requirements and prerequisites will vary with each topic and will be designated by the program. May be repeated for a maximum of 10 units provided a different topic is taken each time.

PAST 671 UMES TRANSFER WORK (1-6)
Being used solely for posting transfer credit from UMES.

PAST 730 CLINICAL MANAGEMENT I (2)
The first of a two-course sequence of case-based learning seminars and student grand rounds presentations. Permit required; registration limited to those admitted to the program. Prerequisites: Medicine IV, Pediatrics II, Pharmacology II, successful completion of all year 1 courses.

PAST 731 CLINICAL MANAGEMENT II (2)
The second of a two-course sequence of case-based learning seminars and student grand rounds presentations. Permit required; registration limited to those admitted to the program. Prerequisites: Medicine IV, Pediatrics II, Pharmacology II, successful completion of all year 1 courses.

PAST 756 FINAL CLINICAL PRACTICUM (6)
Capstone clinical experience designed for the application of principles of the practice of medicine. Provide patient care from presentation through follow-up including diagnostic evaluation and patient management. Prerequisites: PAST 251, PAST 252, PAST 253, PAST 254; (the PAST program is offered collaboratively between TU and CCBC Essex; both TU and CCBC courses are required in the program; PAST 251, PAST 252, PAST 253, PAST 254 are CCBC courses).

PAST 801 PHYSICIAN ASSISTANT GRADUATE SEMINAR (1)
The first of two research project courses for Physician Assistant students. Completion and presentation of graduate research proposal. Prerequisites: admission to program and completion of PAST 601.

PAST 802 PHYSICIAN ASSISTANT GRADUATE PROJECT (1)
Completion of research project and final presentation of findings. Taken final year of program. Prerequisites: Admission into Physician Assistant Studies Program and PAST 801 Physician Assistant Graduate Seminar.

Physics (PHYS)

Courses

PHYS 507 INTRO MATH PHYS (3)
As the mathematical maturity of the students will allow, selected topics will be examined such as the generalized expressions for forces and potentials, vector analysis, applications of Fourier series and complex variables, and solutions of the harmonic oscillator and wave equations. Three lecture hours. Prerequisites: PHYS 212 or PHYS 242; MATH 274.

PHYS 511 MODERN PHYSICS (3)
Special relativity, the quantum theory, atomic structure and spectra, and nuclear structure and reactions are the main topics covered by the course. Other topics that may be covered involve molecular, solid state, and high energy physics. Four lecture hours. Prerequisites: MATH 274; PHYS 212 or PHYS 242.

PHYS 512 MODERN PHYSICS II (3)
Co-listed with PHYS 312 which is a required course for the Applied and General tracks of the Physics major. Application of special Relativity and Quantum theory to the various disciplines in physics including solid state physics, nuclear physics, elementary particles and cosmology. Students taking this course for graduate credits will be expected to attend special lectures and seminars, undertake guided in-depth study of selected topics and complete additional assignments which may include presentations and term papers. Prerequisite: PHYS 311 or consent of instructor.

PHYS 533 BASIC ELECTRONICS (4)
Circuit components, characteristics of semiconductors, electrical measurements, method of circuit analysis, electronic devices. Three lecture hours and one three-hour laboratory. Prerequisite: PHYS 212 or PHYS 222 or consent of instructor.

PHYS 534 DIGITAL ELECTRONICS (4)
Subjects covered will be basic concepts of digital electronics such as: gates, logic modules, truth tables, digital codes, sequential systems, semiconductor memories, decade counters, etc. The laboratory program is designed to give students firsthand experience on the material covered in lecture using integrated circuits and LED display systems. Two hours lecture and three hours laboratory. Prerequisite: MATH 115 or equivalent.

PHYS 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. Prerequisites: PHYS 305 and PHYS 335.

PHYS 537 INTRODUCTION TO MICROPROCESSOR BASED DIGITAL SYSTEMS (3)
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 337.

PHYS 541 INTERMEDIATE PHYSICS LABORATORY I (3)
First semester: the measurement of several fundamental physical constants. Exploration of classical and modern research methods: lasers, holography, optical and nuclear spectroscopy. Second semester: several advanced experiments and a research project. Familiarization with machine shop procedure, vacuum and other experimental techniques. Five laboratory hours. Prerequisite: PHYS 311 (may be taken concurrently).

PHYS 542 INTERMEDIATE PHYSICS LABORATORY II (3)
First semester: the measurement of several fundamental physical constants. Exploration of classical and modern research methods: lasers, holography, optical and nuclear spectroscopy. Second semester: several advanced experiments and a research project. Familiarization with machine shop procedure, vacuum and other experimental techniques. Five laboratory hours. Prerequisite: PHYS 341.
PHYS 550 MECHANICS (4)
Systems of coordinates, kinematics and transformations; newtonial
dynamics 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;
nonlinear oscillations. Prerequisite: PHYS 242, PHYS 307 or consent of
instructor.

PHYS 551 MECHANICS II (3)
Continuation of PHYS 351. Rotation transformations; perturbation and
Green's function techniques in solution of oscillating systems; collisions;
rotating frames of reference and dynamics of rigid bodies (including
Euler's angles, precession, notation); theory of coupled small oscillations.
Optional; special relativity; continuum mechanics. Prerequisite: PHYS
351.

PHYS 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. Three lecture hours. Prerequisites: PHYS 212
or PHYS 243, MATH 274 (may be taken concurrently with PHYS 243 or by
permission).

PHYS 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 554 ELECTRICITY AND MAGNETISM (4)
Electrostatics, magnetostatics and electromagnetic radiation, including
Divergence Theorem and Stoke's Theorem, electrostatics in free space
and dielectric materials, the Biot-Savart Law, the magnetic vector
potential, inductance and electromotive force, magnetic materials, Maxwell's
equations in free space and in materials, boundary value problems
(Snell's and Fresnel's Laws). Prerequisite: PHYS 243, PHYS 307 or consent of
instructor.

PHYS 555 INTRODUCTORY QUANTUM MECHANICS (3)
The Schroedinger 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 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-Boltzman transport equation and the hydrodynamic equation,
transport coefficients. Three lecture hours. Prerequisite: PHYS.

PHYS 557 SOLID STATE PHYSICS (3)
Crystal structure, wave propagation in periodic structures, the Fermi gas,
ergy bands, magnetism are present 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 559 NUCLEAR PHYS (3)
A lecture and problem course dealing on an introductory level concerning
experimental and theoretical method for the study of nuclear structure.
Topics to be covered include: properties of nuclei, electromagnetic
transition and beta decay; nuclear models, nuclear reactions and two-
body interactions. Prerequisite: PHYS 311, PHYS 307 or consent of
instructor; offered in alternate years.

PHYS 561 OPTICS FUNDAMENTALS (4)
Develops the fundamental concepts relating to geometric optics, wave
optics, and quantum optics and provides exposition to selected advanced
topics emphasizing practical applications of optical techniques,
measurements, design, and instrumentation. Instructional topics include
lenses and mirrors, lens aberrations and design, optical instruments,
interference, diffraction, polarization, absorption and scattering, lasers,
holography and the dual nature of light. Prerequisites: PHYS 243 and
PHYS 341 or consent of the instructor.

PHYS 570 SPECIAL TOPICS IN PHYSICS (1-4)
Special topics in the area of physics. Special topics will be determined
by current interests of the faculty and the needs of the curriculum.
Prerequisite: department consent.

PHYS 571 SPECIAL TOPICS IN PHYSICS (1-4)
Special topics in the area of physics. Special topics will be determined
by current interests of the faculty and the needs of the curriculum.
Prerequisite: department consent is required.

PHYS 575 SPECIAL TOPICS IN PHYSICS (1-4)
Prerequisites: At least junior status and one course in the physics
department; may be repeated for a maximum of 6 credits.

PHYS 585 PHYS SEMINAR I (1)
Students participate in colloquia on topics of current interest in physics
research under guidance instructor. One lecture hour. Prerequisite: Senior
standing or consent of instructor.

PHYS 586 PHYS SEMINAR II (1)
Students participate in colloquia on topics of current interest in physics
research under guidance instructor. One lecture hour. Prerequisite: Senior
standing or consent of instructor.

PHYS 590 INDEPENDENT STUDY IN PHYSICS (1-4)
Prerequisites: At least junior status and one course in the physics
department; may be repeated for a maximum of 6 credits.

PHYS 591 DIRECTED READINGS (1-4)
Prerequisite: At least junior status and one course in the physics
department; may be repeated for a maximum of 6 credits.

PHYS 595 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, the student must write a formal research paper
on the work done. Students may register for this more than once but at
different levels. Prerequisite: Permission of the instructor who will direct
the proposed work.

PHYS 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, the student must write a formal research paper
on the work done. Students may register for this more than once but at
different levels. Prerequisite: Permission of the instructor who will direct
the proposed work.
PHYS 641 LABORATORY TECHNIQUES AND INSTRUMENTATION (3)
An introduction to experimental methods of fabrication and characterization of advanced materials and devices including analytical techniques and instrumentation employed in applied research and in industry; computer-based data acquisition and experimental control, materials fabrication and characterization, cryogenic and vacuum techniques. Prerequisites: None.

PHYS 658 MAGNETISM AND MAGNETIC MATERIALS (3)
Fundamental principles of magnetism as well as techniques and applications based on these principles. Isolated magnetic moments, exchange interaction, magnetic ordering and magnetic structures, magnetic resonance techniques, phase transitions, magnetic excitations, magnetoresistance, spin electronics. Prerequisites: None.

PHYS 662 SPECTROSCOPIC AND MICROSCOPIC TECHNIQUES (3)
An introduction to modern spectroscopic and microscopic techniques employed in the measurement of novel nanoscale and condensed matter materials. Techniques include absorption, Fourier-transform, Raman, and fluorescence spectroscopies; near-field microscopies; atomic force microscopies; scanning tunneling and transmission electron microscopies/spectroscopies. Three lecture hours. Prerequisites: None.

PHYS 663 FUNCTIONAL ELECTRONIC MATERIALS (3)
This course provides advanced, state of the art knowledge of functional electronic materials employed in current and emerging technologies, including metals, dielectrics, semiconductors, superconductors, and magnetic materials. Topics of emphasis will include electronic phenomena that underlie technological applications, structure property correlations and opportunities and challenges associated with engineering the material properties in thin film/nanoscale structures for device applications. Prerequisites: None.

PHYS 664 NANOTECHNOLOGY (3)
An introduction to structures and processes which occur at the nanometer length scale. Topics include properties of nanostructures, nanofabrication, and nanomechanics. Prerequisites: None.

PHYS 670 COMPUTATIONAL PHYSICS (3)
The use of computational techniques in the study of applied physics. The emphasis is on the modeling and analysis of physical systems as applied to physics and astronomy, and on the analysis of experimental data. Topics covered include error analysis, analysis of oscillatory and periodic motions, waveforms, advanced curve fitting techniques, spectral analysis, systems of equations, diffusion equation, Schrodinger Equation, finite element analysis, molecular dynamics simulation, Metropolis algorithm and Monte Carlo simulations. Two hours lecture and one hour laboratory.

PHYS 685 PROFESSIONAL SCIENCE MASTERS SEMINAR (1)
Guest speakers from industry, government agencies, national laboratories and non-profit organizations will share various aspects of their professional environments. The seminar course will offer students opportunities to network with potential employers and also serve as a forum for sharing internship projects and experience with faculty and peers. Course is S/U grading. Prerequisites: None.

PHYS 690 INDEPENDENT STUDY (3)
Independent study of a topic in one of the sub-disciplines of physics. The study will be commensurate with the breadth and depth expected at the Master's level. Prerequisite: consent of department.

PHYS 795 APPLIED PHYSICS RESEARCH (3)
Students will undertake research in applied physics under the guidance of a faculty member on research topics that have a strong relevance to technological application in the work place. Whenever possible, these topics have a strong relevance to technological application in the work place. Whenever possible, these topics will be chosen to allow the student to be involved in faculty collaborations with industry or other technology work places. May be repeated for a maximum of 9 units. Prerequisite: None.

PHYS 799 PHYSICS MASTERS INTERNSHIP (1-6)
Students will gain practical experience by working onsite at an industry, government or nonprofit agency organization in an internship position for a total minimum duration of 450 hours. May be repeated for a maximum of 12 units. S/U grading.

PHYS 896 MASTER'S RESEARCH PRACTICUM (1-6)
Students will carry out a research project in physics, astronomy or an interdisciplinary area related to these disciplines, under the supervision of a faculty member. Requirements for successful completion of the course consist of one or more of the following: (i) an oral or poster presentation at a conference (ii) a departmental seminar on the project (iii) a project report. Graded S/U. Prerequisite: PHYS 795.

PHYS 897 PHYSICS THESIS (6)
Students will undertake research in applied physics towards a masters thesis under the guidance of a faculty member. Thesis research will be structured so that student will need to collaborate actively and function as a team. Research topics will be chosen that have a strong relevance to technological application in the work place. Whenever possible, these topics will be chosen to allow the student to be involved in faculty collaborations with industry or other technology work places. Course is S/U grading. Prerequisites: None.

PHYS 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Political Science (POSC)

Courses

POSC 503 THEORY OF INTERNATIONAL POLITICS (3)
The theories of mutual relations of states. Elements of national power; international politics as a struggle for power. Restrictions upon the struggle for power. Prerequisite: HIST 242 or POSC 107, or consent of instructor.

POSC 504 POLITICS OF METROPOLITAN GROWTH AND CHANGE (3)
Examination of the political economy of metropolitan growth; role of federal, state and local actors and policies in shaping development. Prerequisites: One lower level POSC class of consent of instructor.

POSC 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 and the metropolitan area. Prerequisite: POSC 103.

POSC 506 SIMULATION AND GAMES IN POLITICAL SCIENCE (3)
Analysis of political decisions using the formal methods of rational choice and game theory. Discussion of voting methods, public goods and paradoxes of collective choice. Use of computer simulations and games to model politics. Prerequisite: One upper-division (300 or 400) political science course or permission of the instructor.
POSC 507 CONTEMPORARY INTERNATIONAL POLITICS (3)
Computer simulation (conducted jointly with colleges and universities throughout the world) used to study formulation and implementation of contemporary international politics. Prerequisite: POSC 107, POSC 303 or consent of instructor.

POSC 508 COMPARATIVE GOVERNMENT OF FOREIGN POWERS: THE WESTERN WORLD (3)
Examination of the problems of modernization and stable constitutional rule in England, France, Italy and Germany. Prerequisite: POSC 101, POSC 137 or consent of instructor.

POSC 509 COMPARATIVE POLITICAL SYSTEMS (3)
The course will 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, POSC 137 or consent of instructor.

POSC 512 THE LATIN AMERICAN POLICY OF THE UNITED STATES (3)
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, POSC 137 or consent of instructor.

POSC 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 515 THE PRESIDENCY (3)
A discussion of the origin of the office, the selection of the president and policy making in the executive branch. Prerequisite: POSC 103.

POSC 516 CONGRESS (3)
An investigation of the relations of Congress with the other branches of government and with political parties and interest groups. The course also examines the relationships between a member of Congress and his constituency as well as the internal dynamics of Congress. Prerequisite: POSC 103.

POSC 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 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 519 CIVIL RIGHTS AND 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 520 CONSTITUTIONAL PROTECTIONS: PERSONAL LIBERTY AND THE 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 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 522 POLITICS AND ENVIRONMENTAL POLICY (3)
Political thought in the West from the Greeks to the end of the 16th century. Prerequisite: POSC 101 or consent of instructor.

POSC 527 POLITICAL THY 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 549 U.S. HOMELAND SECURITY POLICY (3)
Concept of U.S. homeland security in the context of recent history, nature of threats and major vulnerabilities that are the focus of homeland security efforts, and the range of activities that constitute the U.S. homeland security enterprise. Prerequisites: POSC 107 or consent of the instructor.

POSC 550 INTEREST GROUPS AND PUBLIC POLICY (3)
The structure, organization, objectives and activities of interest groups and their impact on public policy. The access and influence of groups in lobbying and campaign financing. Prerequisite: POSC 103 or consent of instructor.

POSC 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, POSC 137 or consent of instructor.

POSC 553 INTELLIGENCE AND NATIONAL SECURITY (3)
Principle roles of intelligence in nation 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. Prerequisites: POSC 107 or consent of instructor.

POSC 556 RESEARCH METHODS IN POLITICAL BEHAVIOR (3)
The major emphasis in this course will be on the use of quantitative techniques in political research. Topics include survey research, the use of computers and statistical analysis. Prerequisite: Any course at 100 level.

POSC 564 JUDICIAL SYSTEM (3)
Roles, functions, and operations of American judicial system. Examining ideology of law and justice, politics of criminal processing and consequences of legal decisions. Prerequisite: POSC 103 or consent of instructor.

POSC 566 POLITICS AND THE BUDGETARY PROCESS (3)
Analysis of the budgetary process. Prerequisite: POSC 375 or consent of instructor (not open to students who have successfully completed the course as a special topic POSC 470 - POSC 479).

POSC 570 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 571 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 572 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 573 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 574 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 575 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 576 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 577 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 578 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 579 SPEC TOPICS POSC (3)
Examination of current topics in political science. The content of the course will depend upon mutual faculty and student interest. Prerequisite: Any 100-level POSC course or consent of instructor.

POSC 580 THE SUPREME COURT (3)
Roles, behavior, structure and operations of the United States Supreme Court. History, politics, decision making and impact of cases. Prerequisite: POSC 103 or consent of instructor.

POSC 581 SEMINAR: AMERICAN GOVERNMENT AND PUBLIC POLICY (3)
In depth investigation into the structures and institutions of the American national government and the process of policy formation, implementations and evaluation. Specific topic of the seminar will vary from semester to semester. May be repeated for a maximum 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 375, or POSC 381 or POSC 384 or consent of instructor.

POSC 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 semester to semester. May be repeated for a maximum 6 units if a different topic is chosen. Prerequisites: POSC 301 and POSC 337, or POSC 339 or POSC 340 or consent of instructor.

POSC 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 semester to semester. May be repeated for a maximum 6 units. Prerequisites: POSC 301 and POSC 303 or POSC 307 or POSC 434 or POSC 436 or consent of the instructor.

POSC 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 semester to semester. May be repeated for a maximum of 6 units. Prerequisites: POSC 301 and POSC 418 or POSC 420 or POSC 422 or consent of the instructor.

POSC 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 semester to semester. May be repeated for a maximum of 6 units. Prerequisites: POSC 301 and POSC 427 or POSC 428 or consent of instructor.
POSC 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 semester to semester. May be repeated for a total of 6 units if a different topics is chosen. Prerequisites: POSC 301 and POSC 305 or consent of instructor.

POSC 590 INDEP STUDY (1-3)
Individual and supervised study in selected areas of political science. Admission by consent of instructor.

POSC 591 SEMINAR IN CONTEMPORARY UNITED STATES FOREIGN POLICY (3)
Contemporary nature, basis and instruments of American foreign policy. Prerequisites: 15 units of POSC including POSC 107 or POSC 303 or consent of instructor.

POSC 593 INTERNSHIP IN POLITICS (3-9)
Familiarizes students with the practical working of government institutions in which students combine theory and practice. No more than 3 units may be earned in any one semester. Prerequisites: Junior/senior standing and consent of instructor.

**Professional Writing (PRWR)**

**Courses**

**PRWR 611 RHETORIC: THE PURSUIT OF ELOQUENCE (3)**
Concepts of rhetoric, from classical to contemporary, which have shaped persuasive and expository writing. Prerequisites: Two 600-level writing courses or consent of instructor. Not open to students who have successfully completed WRIT 611.

**PRWR 612 RHETORICAL GRAMMAR (3)**
Study and analysis of grammar as an extension of rhetorical effectiveness. Practice in adapting grammatical structure to subject and purpose, to audience, and to writer/audience relationship. Prerequisite: Admission to master’s in Professional Writing (MPW) program or consent of instructor. Not open to students who have successfully completed WRIT 612.

**PRWR 613 THEORY EXPOSITION (3)**
Exposition as an empirically based model for factual writing; conventions of diction, sentence form, paragraph and organization; techniques of verifiability and probability; adaptability to different audiences, fields of knowledge, and public purposes; illogical and emotional distortions in expository writing. Prerequisite: Admission to MPW program or consent of instructor. Not open to students who have successfully completed WRIT 613.

**PRWR 615 HISTORY AND DEVELOPMENT OF PROSE STYLE (3)**
Theory of English prose style from earliest times to the present. Prerequisite: Admission to MPW program or consent of instructor. Not open to students who have successfully completed WRIT 615.

**PRWR 617 EDITING (3)**
Study of fundamental editing theory and supervised practice in editing. Also practice in copy editing, exposure to electronic editing, overview of copyright and libel laws, and instruction in publication design and production. Prerequisite: Admission to a graduate program or consent of instructor. Not open to students who have successfully completed WRIT 617.

**PRWR 619 COMMUNICATION IN THE PROFIT/NONPROFIT SECTORS (3)**
Communication process, with special emphasis on writing, within the profit/nonprofit organization. Theories of organization, management styles, and relationship of written messages to the function of climate of the profit/nonprofit organization. Strategies of preparing written communication to meet internal and external needs. Prerequisite: Admission to MPW program or consent of instructor. Not open to students who have successfully completed WRIT 619.

**PRWR 621 BUSINESS WRITING (3)**
Major forms of business and industrial writing, including correspondence, memoranda, short reports and long reports. Emphasis on audience analysis and planning of written communication to meet audience needs. Prerequisites: Two 600-level writing courses or consent of instructor. Not open to students who have successfully completed WRIT 621.

**PRWR 623 TECHNICAL WRITING AND INFORMATION DESIGN (3)**

**PRWR 625 DESIGN LAYOUT & PRODUCTION (3)**
Intensive workshop in developing and editing technical documents: instructions, feasibility studies, investigation reports, proposals, etc. Not open to students who have successfully completed WRIT 625.

**PRWR 627 MODERN RHETORIC (3)**
Current theories of rhetoric and composition, with emphasis upon the cognitive and social aspects of writing; relationships between language and abstraction, conventions of discourse communities, and various approaches to communication in a pluralistic society. Prerequisite: Admission to MPW program or consent of instructor. Not open to students who have successfully completed WRIT 627.

**PRWR 628 DESIGNING CONTENT FOR THE WEB (3)**
User-centered design and development of web content. Rhetorical theory and empirical research supporting best-practice guidelines. Projects in web content selection, information architecture, and writing style. Prerequisites: None.

**PRWR 633 TEACHING COLLEGE COMPOSITION (3)**
Prepares graduate students for teaching writing in the two-year college, or freshman writing at a four-year institution. Focuses on history, theories and the practice of teaching writing. Prerequisites: Four core courses; paired with Tutoring or Internship. Not open to students who have successfully completed WRIT 633.

**PRWR 637 CREATING ON LINE HELP (3)**
User-centered design and development of online help. Rhetorical theory and empirical research supporting best-practice guidelines. Hand-on hypertext projects. Prerequisites: None.

**PRWR 641 THEORY CREATIVITY (3)**
Current theory of creative process, its stages, and its relation to the central techniques of poetry and fiction. Focus on analyzing student writings as they embody creative techniques. Prerequisite: Admission to the MPW program. Not open to students who have successfully completed WRIT 641.

**PRWR 647 WRITING POETRY (3)**
Poetry writing seminar; analysis of student and published poetry, with attention to craft and readership. Overview of modern theories of poetics and poetry criticism; survey of poetry markets and publishing procedures. May be repeated for a maximum of 6 units. Prerequisite: Any WRIT or PRWR 600-level course or consent of instructor. Not open to students who have successfully completed WRIT 647.
PRWR 651 WRITING SHORT FICTION (3)
Short-fiction workshop. Analysis of student and published fiction with attention to plot, narrative technique, characterization and readership. Survey of short-fiction markets and publishing procedures. May be repeated for a maximum of 6 units. Prerequisite: Any PRWR or WRIT 600-level course or consent of instructor. Not open to students who have successfully completed WRIT 651.

PRWR 653 WRITING THE NOVEL (3)
Workshop on the planning, writing and publishing of the novel. May be repeated for a maximum of 6 units. Prerequisites: One PRWR or WRIT 600-level course and consent of the instructor. Not open to students who have successfully completed WRIT 653.

PRWR 655 APPLIED RESEARCH FOR INFORMATION DESIGN (3)
Techniques for researching and analyzing targeted audience groups; writing up results to guide the design of information products. Rhetorical theory and empirical research supporting best-practice guidelines. Hands-on projects. Prerequisites: None.

PRWR 660 SEMIOTICS FOR THE PROFESSIONAL WRITER (3)
Recognizing and interpreting the symbols, signs and implied messages of cultural environments. Focus is on creating and controlling these elements in professional writing. Prerequisite: Any PRWR or WRIT 600-level course or consent of instructor. Not open to students who have successfully completed WRIT 660.

PRWR 670 TOPICS IN WRITING (3)
Specialized focus on particular formats, theories or practices in professional writing. May be elected twice. Prerequisites: Two 600-level PRWR or WRIT courses or consent of instructor. Not open to students who have successfully completed WRIT 670, WRIT 671, WRIT 672, WRIT 673, WRIT 674, WRIT 675, WRIT 676, WRIT 677, WRIT 678 or WRIT 679.

PRWR 677 TOPICS IN WRITING (3)
Specialized focus on particular formats, theories or practices in professional writing. May be elected twice. Not open to students who have successfully completed WRIT 670, WRIT 671, WRIT 672, WRIT 673, WRIT 674, WRIT 675, WRIT 676, WRIT 677, WRIT 678 or WRIT 679. Prerequisites: Two 600-level PRWR or WRIT courses or consent of instructor.

PRWR 691 RESEARCH TECHNIQUES IN PROFESSIONAL WRITING (3)
Major sources of primary and secondary information; observation, interview, survey, controlled experiment and library resources. Gathering, synthesizing and interpreting data using statistical analysis and computer programs. Techniques of poetry and fiction. Focus on analyzing student writings as they embody creative techniques. Prerequisite: Admission to the MPW program. Not open to students who have successfully completed WRIT 691.

PRWR 705 WRITING CREATIVE NON-FICTION (3)
Workshop in the writing of creative non-fiction (essay, lyrical essay, memoir, narrative journalism, etc.); analysis of student and published work. May be repeated one time for a total of 6 units. Prerequisites: PRWR 611 or WRIT 611, PRWR 615 or WRIT 615, or consent of instructor. Not open to students who have successfully completed WRIT 705.

PRWR 713 FREELANCE WRITING (3)
Freelance writing for magazines, newspapers, corporations, associations and technical journals. Analyzing markets, creating jobs; understanding copyrights, contracts and agents. Prerequisite: PRWR 613 or WRIT 613 or consent of instructor. Not open to students who have successfully completed WRIT 713.

PRWR 729 CORPORATE COMMUNICATIONS CONSULTING (3)
Designing and marketing programs, and training writers in business and government. Finding clients, developing workshops, evaluating programs. Students engage in consulting activities. Prerequisite: Recommended PRWR 625 or WRIT 625. Not open to students who have successfully completed WRIT 729.

PRWR 730 WRITING REVIEWS (3)
Develop proficiency in writing and marketing reviews of books and other fine/performing arts presentations. Emphasize reviewing strategies and avenues for publication. Discuss student reviews, critical stances, role of critic and aesthetics. Rhetorical analysis reviews. Prerequisite: Any 600-level PRWR or WRIT course or consent of instructor. Not open to students who have successfully completed WRIT 730.

PRWR 731 SCIENCE AND ITS PUBLIC AUDIENCE (3)
Addresses scientific writing as analyzable discourse, increasingly issue-oriented, public and available to nonscientists. Choosing issues, writing queries and articles. No background in sciences necessary. Prerequisite: Admission to a graduate program or consent of instructor. Not open to students who have successfully completed WRIT 731.

PRWR 795 INDEPENDENT STUDY IN WRITING (3)
Directed independent study in selected areas of graduate-level writing. Prerequisite: Permission of instructor and graduate adviser.

PRWR 797 INTERNSHIP PROF WRITING (3)
Writing, editing, layout/design or communications consulting under the supervision of professionals in a work setting. Course may be taken only once. Prerequisites: Minimum of 15 credits completed in the program with a 3.00 average, successful completion of qualifying examination, and special permit from program director. Not open to students who have successfully completed WRIT 797.

PRWR 897 PROFESSIONAL WRITING THESIS (6)
Original writing of publishable quality, using skills emphasized in the course work of the program. Content and design of project to reflect goals and interest of student. May be based on extensive library, laboratory or field research, or may be entirely creative. Prerequisites: Completion of all course work for M.S. in professional writing, 3.50 GPA and consent of program director. Not open to students who have successfully completed WRIT 898.

PRWR 898 PROFESSIONAL WRITING THESIS (3)
The previous course, PRWR 897, taken over two consecutive semesters.

PRWR 899 THESIS CONTINUUM (1)
Continuation of thesis work.

Psychology (PSYC)

Courses

PSYC 503 INFANT AND CHILD DEVELOPMENT (3)
Advanced course reviewing historical and current changes in the areas of infancy and childhood. Emotional, cognitive and individual development will be covered in-depth. Emphasis is placed on critical analysis of research theory construction and methods. Prerequisite: PSYC 203; spring semester.

PSYC 504 ADOLESCENT PSYCHOLOGY (3)
Physical, emotional and intellectual development during adolescence; social development and heterosexuality; adolescent personality; problems of adjustment; juvenile delinquency. Prerequisite: PSYC 203; fall and spring semester.
PSYC 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 and PSYC 212; fall, spring and summer semester.

PSYC 512 PSYCHOPHARMACOLOGY (3)
Mechanisms of drugs, their effects on behavior, and related topics. Prerequisites: 9 units of PSYC or consent of instructor; BIOL 110.

PSYC 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 that will be emphasized are aggression, sex, achievement (competence) and cognitive-social influences. Prerequisites: 6 units of psychology; PSYC 203 and junior standing recommended.

PSYC 517 SENSATION AND PERCEPTION (3)
A systematic investigation of 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 nonhuman data will be presented. Prerequisites: 9 units of psychology or consent of instructor.

PSYC 519 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 532 CROSS CULTURAL PSYCHOLOGY (3)
Comparison of psychological behavior and theory in Western and non-Western cultures. Prerequisite: PSYC 101.

PSYC 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 difference and similarities.

PSYC 550 PERSONALITY (3)
Introduction to 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. Prerequisites: 6 units of psychology; fall and spring semester.

PSYC 551 INTRODUCTION TO THE EXCEPTIONAL CHILD (3)
Children with atypical physical, mental, social and emotional development, including the physically handicapped, the mentally retarded, the gifted, and emotionally disturbed children. Prerequisite: PSYC 201, PSYC 203 or PSYC 211.

PSYC 557 GENDER IDENTITY IN TRANSITION (3)
Psychological consequences of changing definitions of femininity, masculinity and personhood will be examined by using recent theories of gender identity formation. Concepts such as androgyny, sex-role transcendence and future shock will be related to psychological adaptation to change. Prerequisite: PSYC 315 or PSYC 447, or consent of instructor.

PSYC 560 ETHELOGY AND COMPARATIVE PSYCHOLOGY (3)
A survey of the major behavioral adaptations in nonhuman and human species, within the framework of evolutionary theory, ethology and experimental psychology. Three lecture hours weekly. Prerequisites: 9 units of psychology or consent of instructor.

PSYC 561 COGNITIVE PSYCHOLOGY (3)
Examination of human cognitive processes and theories of cognition from the perspectives of information processing theory, neuroscience and connectionism. Topics include pattern perception, attention, memory, concepts, decision making, problem solving and language. Prerequisite: PSYC 314 or consent of instructor.

PSYC 565 PHYSIOLOGICAL PSYCHOLOGY (3)
Course is concerned with an introduction to the physiological bases of behavior. The topics to be considered are basic neuroanatomy and neurophysiology, sensory and motor systems, motivational systems, and higher order behavioral systems. Three lecture hours weekly. Prerequisites: 9 units of psychology or consent of instructor.

PSYC 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.

PSYC 570 SPECIAL TOPICS IN PSYCHOLOGY (1-3)
Survey and critical evaluation of modern literature pertaining to selected problems in psychology. May be repeated in a different topic for a maximum of 12 units.

PSYC 571 SPECIAL TOPICS IN PSYCHOLOGY (1-3)
Survey and critical evaluation of modern literature pertaining to selected problems in psychology. May be repeated in a different topic for a maximum of 12 units.

PSYC 581 READINGS IN PSYCHOLOGY (1-2)
A survey of relevant research literature under the guidance of a staff member who will direct the student's research. May be repeated for a maximum of 4 units. Graded S/U. Prerequisite: 9 units of PSYC and consent of instructor.

PSYC 591 INDEPENDENT INVESTIGATION IN PSYCHOLOGY (3)
An opportunity for especially qualified students to undertake independent 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. Prerequisite: PSYC 314 or PSYC 313, PSYC 391, and consent of instructor.

PSYC 594 TRAVEL AND STUDY ABROAD IN PSYCHOLOGY (1-3)
Study of 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.

PSYC 605 COUNSELING TECHNIQUES (3)
Training the student in practical counseling skills through demonstration and role playing with feedback in behavioral performance.

PSYC 606 CAREER DEVELOPMENT (3)
Designed to familiarize students with aspects of career development, to introduce them to a variety of relevant resources and media, and to assist them in integrating this knowledge by planning a program of career development for a specific group.

PSYC 607 APPLIED THEORIES OF COUNSELING (3)
Counseling theorists whose applied methodology has been successful in the treatment of various client populations. Techniques and application of methodologies in field settings.
PSYC 609 ADVANCED COUNSELING TECHNIQUES (3)
Advanced counseling techniques and the application of these skills to various client populations. 
Prerequisite: PSYC 605 and PSYC 607.

PSYC 610 ADVANCED PSYCHOLOGY OF AGING (3)
Advanced study of the aging process, with emphasis upon the psychological and social aspects of aging. 
Prerequisites: 6 units of psychology including PSYC 203. Students should be aware of how to read and understand psychology journals and how psychological research is conducted. Fall semester, evening, in alternate years.

PSYC 611 DEVELOPMENTAL PSYCHOLOGY (3)
Psychological structures and functions in human development across the life span. Both theoretical and research approaches are presented.

PSYC 613 COMMUNITY MENTAL HEALTH COUNSELING (3)
Types of community health services and the relationships between those services; the responsibility of counseling in a mental health center; and the area of mental health consultant. Emphasis will be given to the application of counseling skills in a mental health setting.

PSYC 615 INTRODUCTION TO RESEARCH METHODS IN COUNSELING (3)
Principal methods of behavioral research emphasizing concepts rather than statistical procedures. Preparation of counselors to evaluate methods, designs, and results of counseling research.

PSYC 622 ADVANCED MULTICULTURAL PSYCHOLOGY (3)
Promotion of cultural awareness and understanding of relevant theories, terminology and techniques for communicating and working with individuals of diverse backgrounds. Prerequisites: Advanced standing in counseling, clinical or school psychology and permission of instructor.

PSYC 623 PSYCHOLOGICAL ISSUES IN THE WORKPLACE (3)
Psychological effects and consequences of workplace stressors on employees and their families; job lost and insecurity, workplace stress, work-life balance and employee well-being, quality of work life and diversity management, adapting to organization change and career transition, and workplace ethical issues. Integration of course concepts from the disciplines of organizational psychology, human resource management and development, counseling, and occupational psychology. Prerequisites: None.

PSYC 625 FUNCTIONAL BEHAVIORAL ASSESSMENT (3)
Application of behavioral assessment and analysis techniques in school settings. Prerequisites: 21 units in psychology, matriculation in graduate program in Psychology, consent of program director.

PSYC 631 ADVANCED ABNORMAL PSYCHOLOGY (3)
Current and historical perspectives of psychopathology. Emphasis on various diagnostic approaches. Prerequisite: PSYC 361.

PSYC 632 ADVANCED CHILD PSYCHOPATHOLOGY (3)
Etiology and presentation of various behavioral and psychological disorders which begin in or are unique to childhood and adolescence. Overview of pertinent developmental information and various perspectives of psychology and how they relate to the etiology and treatment of these disorders. Prerequisite: PSYC 631.

PSYC 637 COUNSELING STRATEGIES FOR DRUG AND ALCOHOL ABUSE (3)
Understanding the basic issues of substance abuse, referrals, clinical assessments and developing counseling strategies for successful intervention.

PSYC 647 INDIVIDUAL APPRAISAL (3)
Practice in the use and analysis of techniques for understanding the individual with emphasis upon standardized procedures.

PSYC 651 INTERVENTIONS IN SCHOOL SETTINGS (3)
Group and individual intervention strategies appropriate for school settings. Prerequisite: PSYC 625.

PSYC 665 PSYCHOTHERAPY AND BEHAVIOR CHANGE I (3)
First of two-term sequence. Development of skill in theory-based and diagnostic case conceptualization and intake interviewing. Readings, lectures, and practical experiences related to intake interviewing. Dynamic, behavioral, cognitive, and humanistic theoretical models as they relate to case conceptualization. Prerequisites: Graduate standing in School or Clinical Psychology tracks and consent of program director.

PSYC 666 PSYCHOTHERAPY AND BEHAVIOR CHANGE II (3)
Second of two-term sequence. Development of knowledge of evidence-based practices in psychology. Readings, lectures, exercises, and practical experience to develop skill in goal setting treatment planning, and delivery of empirically supported individual therapies and treatment techniques. Prerequisites: PSYC 665 and consent of program director.

PSYC 672 PROSEMINAR (3)
Development of research proposals, including the literature review, proposed method and data analysis. Emphasis on use of appropriate format and style, both written and oral presentation of material. Prerequisite: PSYC 212 and PSYC 314.

PSYC 674 ADVANCED BIOLOGICAL PSYCHOLOGY (4)
Major concepts, processes and methods in the field of biological psychology. Prerequisites: PSYC 212, PSYC 314 and PSYC 672.

PSYC 675 RESEARCH SEMINAR IN EXPERIMENTAL PSYCHOLOGY (1)
Preparation and presentation of first-year empirical research projects to peers and faculty. Prerequisites: PSYC 672, PSYC 687, and enrollment in the Experimental Psychology Program. Corequisite: PSYC 691.

PSYC 678 SCHOOL-WIDE PREVENTION AND INTERVENTION SEMINAR (3)
Practical school-wide prevention and intervention approaches for various issues that impact PK-12 schools, emphasis on universal (Tier 1) level. Corequisite: PSYC 773. Prerequisite: School Psychology Program admission.

PSYC 679 SPECIAL TOPICS SEMINAR (1-3)
Topics vary according to the instructor. May be repeated to a maximum of 12 units.

PSYC 680 ADVANCED COGNITIVE PSYCHOLOGY (4)
Study of human cognition, the cognitive perspective, and major methods of cognitive psychology. Topics will include perception, attention, memory, language, thinking, and cognitive neuroscience. The course includes reading of primary source articles and laboratory investigations of cognitive phenomena. Permit from program director required. Prerequisites: PSYC 212 and PSYC 314.

PSYC 682 ADVANCED SOCIAL PSYCHOLOGY (3)
Study of major theories, methods, and studies in social psychology. Course involves reading and discussion of primary research articles. Topics include social cognition, attitudes, and social influence. Permit from program director required. Prerequisites: PSYC 212, PSYC 314.

PSYC 685 COLLEGE TEACHING PRACTICUM (3)
Supervised teaching of introductory psychology. Prerequisite: PSYC 684.

PSYC 687 ADVANCED EXPERIMENTAL DESIGN I (3)
Treatment of descriptive and inferential statistical methods and design considerations. Prerequisite: PSYC 212 or equivalent.

PSYC 688 ADVANCED EXPERIMENTAL DESIGN II (3)
Treatment of advanced analysis of variance designs and related techniques. Prerequisite: PSYC 687 or equivalent.
PSYC 689 MULTIVARIATE METHODS (3)
Multivariate statistical methods useful in behavioral scientific research. Topics: correlation, regression, factor analysis, discriminate analysis. Prerequisites: PSYC 687.

PSYC 691 INDEPENDENT INVESTIGATION IN PSYCHOLOGY (1-3)
An opportunity for graduate students to undertake research problems according to their interest and training under the direction of a faculty member. May be repeated for a maximum of 6 units. Prerequisites: PSYC 212 and PSYC 314; instructor permit.

PSYC 695 INDEPENDENT STUDY (3)
Individual and supervised study in selected areas of psychology. Prerequisite: Consent of instructor.

PSYC 697 PRACTICUM IN CLINICAL PSYCHOLOGY (1-6)
Supervised experience in psychological interviewing, assessment and psychotherapy. Practicum in which students will meet for individualized supervision with the practicum instructor. Prerequisites: PSYC 620, M.A. candidacy in Clinical Psychology and consent of program director.

PSYC 703 PRESCHOOL ASSESSMENT (3)
Understanding the development of young children through formal and informal assessment. Prerequisites: PSYC 620, matriculation in School Psychology Track or consent of program director.

PSYC 713 ROLE OF THE SCHOOL PSYCHOLOGIST (3)
History and foundations of school psychology, ethics and standards of practice, professional trends, organization and operation of schools. Prerequisites: Matriculation in School Psychology Track and consent of program director.

PSYC 717 THEORIES OF FAMILY COUNSELING (3)
Theoretical approaches and strategic methods of evaluating and counseling disturbed families.

PSYC 718 TECHNIQUES OF FAMILY COUNSELING (3)
Identification of problems that cause families to deteriorate, diagnosis of those problems, and techniques that will help families work through their difficulties. Emphasis on development of skills essential to effective family counseling practice. Prerequisites: Must have passed the departmental advancement candidacy examination or be enrolled in the CAS Program, and consent of the course instructor.

PSYC 720 ASSESSMENT OF INTELLIGENCE (3)
Construction, standardization, administration, scoring and interpretation of tests. Prerequisites: Matriculation in Clinical or School Psychology and consent of program director. Lab/Class fee will be assessed.

PSYC 721 GROUP COUNSELING (3)
Theories, principles and techniques of group counseling. Prerequisites: Must have passed the departmental advancement to candidacy examination and have consent of instructor.

PSYC 722 ADVANCED MULTICULTURAL COUNSELING (3)
Self-awareness, theoretical, assessment and treatment issues in the areas of multicultural counseling.

PSYC 730 ADVANCED CHILD AND ADOLESCENT PSYCHOTHERAPY (3)
Treatment of specific presenting problems seen in childhood and adolescence. Application of techniques in students’ field. Prerequisites: Instructor approval.

PSYC 731 SCHOOL BASED CONSULTATION (3)
Theoretical and applied aspects of school consultation within framework of curricular, administrative and overall school environment. Prerequisite: Matriculation in School Psychology Track or consent of instructor.

PSYC 733 EXCEPTIONAL CHILD: ADVANCED ISSUES (3)
Identification of and planning for the students with exceptionalities in the schools. Focus of IDEA diagnostic categories and relevant new techniques. Prerequisite: Matriculation in School Psychology Track or consent of program director.

PSYC 735 DIRECT ASSESSMENT OF ACADEMIC SKILLS (3)
Direct assessment of academic skill deficits with a focus on developing technical and theoretical expertise in the area of assessment-to-intervention practices for children in academic settings. Corequisite: PSYC 773. Prerequisites: instructor approval, matriculation in the program in School Psychology, and completion of PSYC 720, PSYC 790, and PSYC 771 with a grade of B or higher.

PSYC 745 PRACTICUM IN COUNSELING PSYCHOLOGY (1-3)
Supervised experience in educational, vocational and personal counseling. Must be taken in two separate semesters (3 credits per semester). Prerequisites: PSYC 609, PSYC 790 and must have passed the departmental advancement to candidacy examination and have consent of counseling program director.

PSYC 755 COGNITIVE THERAPY I (3)
Theory and techniques of cognitive and rational-emotive therapy, including assessment strategies and basic applications. Prerequisites: PSYC 631, PSYC 655, PSYC 665, matriculation in Clinical Psychology Program and consent of program director.

PSYC 761 SOCIAL-EMOTIONAL AND BEHAVIORAL ASSESSMENT (3)
Advanced knowledge of social/emotional and behavioral assessment. Identification and assessment of common internalizing and externalizing disorders through a variety of methods. Prerequisites: Matriculation in School Psychology Track or Clinical Psychology Program and consent of program director.

PSYC 765 PERSONALITY ASSESSMENT IN CLINICAL PSYCHOLOGY (3)
Theoretical and empirical bases underlying personality assessment. Introduction to methods and instruments used in clinical evaluation. Prerequisites: Matriculation in Clinical Psychology Program and consent of program director.

PSYC 771 SCHOOL PSYCHOLOGY PRACTICUM I (3)
Fieldwork in a public school setting under the supervision of a certified or licensed school psychologist. Concurrent weekly class meetings. Prerequisites: PSYC 605, PSYC 651, PSYC 625, PSYC 611, PSYC 713, PSYC 733, PSYC 687, PSYC 761, PSYC 720, PSYC 790: matriculation in School Psychology Program; and consent of program director.

PSYC 773 SCHOOL PSYCHOLOGY PRACTICUM II (3)
Fieldwork under the supervision of a certified or licensed psychologist. Students must be available for clinic or school placement. Stress on techniques appropriate for the schools. Prerequisites: PSYC 651, PSYC 731 and PSYC 771; matriculation in School Psychology Program and consent of program director.

PSYC 790 ETHICAL, LEGAL AND PROFESSIONAL ISSUES IN PSYCHOLOGY (3)
Treatment of ethical, legal and professional issues related to the practice of school, clinical and counseling psychology. Prerequisite: Consent of instructor.
Continuation of thesis research.

The previous course, PSYC 897, taken over two consecutive semesters.

PSYC 898 PSYCHOLOGY THESIS (3)
Director.
Prerequisites: PSYC 697 and consent of Clinical Psychology Program placement, and permission of program director.

PSYC 897 PSYCHOLOGY THESIS (6)
Supervised field experience in a community mental health center, completion of all coursework in the Graduate Program of School Psychology leading up to the Internship, acquisition of an internship placement, and permission of program director.

PSYC 792 INTERNSHIP SEMINAR IN SCHOOL PSYCHOLOGY II (1.5)
Seminar to accompany school psychology internship during Spring semester of the one-year internship. Focus on adaptive, ethical, and professional competence. Graded S/U. Prerequisites: C.A.S candidate in School Psychology track, successful completion of Masters Comprehensive Exam, completion of all coursework in the Graduate Program of School Psychology leading up to the Internship, acquisition of an internship placement, and permission of program director.

PSYC 793 INTERNSHIP IN COUNSELING PSYCHOLOGY (3-9)
Intensive experience within a counseling facility involving exposure to the many facets of a mental health professional, including administrative and record-keeping duties; individual and group counseling observations and experiences; referral resources, etc. Prerequisites: PSYC 745 and consent of instructor.

PSYC 794 INTERNSHIP IN SCHOOL PSYCHOLOGY I (4.5)
Full-time internship placement in a school setting. Offered Fall semester only. Graded S/U. Prerequisites: C.A.S candidate in School Psychology track, successful completion of Masters Comprehensive Exam, completion of all coursework in the Graduate Program of School Psychology leading up to the internship, acquisition of an internship placement, and permission of program director.

PSYC 795 INTERNSHIP IN SCHOOL PSYCHOLOGY II (1)
Full-time internship placement in a school setting. Offered Winter session only. Includes on-campus seminar for interns within 50 miles of campus. Prerequisites: CAS candidate in school psychology track and permission of program director.

PSYC 796 INTERNSHIP IN SCHOOL PSYCHOLOGY II (4.5)
Full-time internship placement in a school setting. Offered Spring semester only. Graded S/U. Prerequisites: C.A.S candidate in School Psychology track, successful completion of Masters Comprehensive Exam, completion of all coursework in the Graduate Program of School Psychology leading up to the Internship, acquisition of an internship placement, and permission of program director.

PSYC 797 INTERNSHIP IN CLINICAL PSYCHOLOGY (3)
Supervised field experience in a community mental health center, state psychiatric hospital, or other public mental health facility with exposure to the duties of a master's level clinical psychologist including psychological assessment, psychotherapy, and report writing. Prerequisites: PSYC 697 and consent of Clinical Psychology Program director.

PSYC 897 PSYCHOLOGY THESIS (6)
Original research in psychology, using acceptable design and methodology, supervised by one or more faculty members.

PSYC 898 PSYCHOLOGY THESIS (3)
The previous course, PSYC 897, taken over two consecutive semesters.

PSYC 899 THESIS CONTINUUM (1)
Continuation of thesis research.

Reading Education (REED)

Courses

REED 601 READING THEORY AND PRACTICE (3)
Theoretical foundations of reading instruction; methods and materials used in integrated literacy learning.

REED 602 TEACHING READING: THEORY AND PRACTICE (3)
Opportunity to develop an understanding of the reading process, consider competing theories of reading, learn about reading assessment and explore a range of instructional strategies and materials for integrating into PreK-12 classrooms. This course has some overlap with REED 601; however this course includes substantial components on reading assessment that REED 601 does not contain. This course may appear to parallel SCED 560; however this course has a broad PreK-12 perspective.

REED 609 READING ASSESSMENT (3)
Reading assessment using both standardized tests and informal procedures; interpretation of assessment data.

REED 621 READING DISABILITIES (3)
Etiology of reading disabilities, observation and interview procedures, standard and informal tests, report writing and instructional intervention. Prerequisite: REED 609.

REED 626 CLINICAL INTERNSHIP IN READING (3-6)
Supervised clinical experience with clients with reading difficulties. Prerequisites: REED 601, REED 609, REED 621, 663, and 665.

REED 628 GUIDED READING (3)
Examines how to scaffold reading instruction using the process of guided reading. Includes analyzing multiple perspectives on guided reading and applying the approach to instruction with small groups of children in a clinical setting.

REED 632 WORD STUDY FOR IMPROVING LITERACY (3)
Examines the characteristics of students with language-learning disabilities, how to identify their needs for literacy improvement, and how to design and implement an individualized program for literacy development.

REED 650 SOCIAL, CULTURAL, AND CURRICULAR CONTEXTS FOR SECOND LANGUAGE LEARNING (3)
Social and cultural contexts of second language learners’ lives and the different types of curricular programs for second language literacy learning. Models of literary instruction found in English for Speakers of Other Languages (ESOL), Bilingual, Dual Immersion and content area focused settings are explored. Possible relationships between language arts instructors, ESOL, and Reading Specialists are examined. May be repeated for an additional 3 units if taken as short-term study abroad course.

REED 651 INSTRUCTION AND ASSESSMENT FOR SECOND LANGUAGE LEARNERS (3)
Course participants will be invited to critically examine approaches to second language development and assessment for children congruent with recent research in second language acquisition in children. Class members will read professional literature framing second language acquisition and discuss strategies for implementing sound theoretical practice within the classroom. How to provide appropriate instruction based on informal and formal assessment results for PreK-12 English Language Learners will be major focus of the this course.
REED 652 INTRODUCTION TO LINGUISTICS FOR TEACHERS OF LANGUAGE AND LITERACY (3)
Introduction to the basic principles and concepts of the study of language and its relevance to teachers of language and literacy. Students will develop foundational knowledge in the areas of grammatical competence (phonology, morphology, syntax, semantic, pragmatics), spoken and written discourse, language variation, first and second language acquisition, and language processing. The course will equip students to use linguistic analysis to conduct inquiries that address issues or concerns about the use, development, assessment and/or teaching of language and literacy in classrooms or other educational settings.

REED 660 INTEGRATING TECHNOLOGY IN LITERACY INSTRUCTION (3)
A course designed to help teachers develop technology-based reading instruction. Emphasis on designing reading segments on phonemic awareness, vocabulary development, comprehension and writing, using presentation, graphics, and multimedia authoring software.

REED 663 STRATEGIC USE OF MATERIALS (3)
Theories underlying literature-based instruction examined; recent research evaluated, instructional techniques introduced, modeled, and applied; materials for instruction cooperatively developed; and criteria for literature selection established.

REED 665 TEACHING READING AND WRITING IN THE CONTENT AREAS PREK-12 (3)
Examination of interrelationship of reading and writing, and their roles in instruction of content areas, PreK-12.

REED 670 SPECIAL TOPICS IN READING EDUCATION (3-6)
In-depth study of a selected topic in reading education. Specific requirements and prerequisites will vary and will be designated by the department each time a topic is scheduled. Approval by the Reading program director is required. Prerequisite: Varies according to topic.

REED 695 INDIVIDUALIZED STUDY IN READING EDUCATION (3-6)
Individually planned program of study, which will permit the student to engage in research and/or field studies in reading education. Approval by the Reading program director is required. Prerequisite: Varies according to areas of study.

REED 710 MULTICULTURAL LITERATURE FOR CHILDREN AND ADOLESCENTS (3)
An in depth critical examination of multicultural literature for young children and adolescents. Strategies for selecting and evaluating tests/resources will be explored considering issues of voice, worldviews, culture, rituals, language, and lifestyles.

REED 712 CRITICAL CONVERSATION: EARLY LITERACY, RESEARCH, POLICY AND PRACTICE (3)
Critically examine current policies, research and instructional trends in early literacy instruction. Engage in personal and collaborative inquiry into important issues affecting all elementary teachers and reading professionals. Examine current professional literature, early literacy research, and key public policy documents representing a range of contrasting perspectives in the field. Prerequisites: Admission to a graduate program in education.

REED 714 ADOLESCENT LITERACY (3)
Examines critical issues that affect the literacy development and instruction of adolescents. Through readings, reflection, assessment and conversations, we will highlight multiple perspectives of how best to engage adolescents and how secondary schools can be structured to advance the reading and writing skills of adolescents.

REED 726 ADVANCED CLINIC INTERNSHIP IN READING (3)
Advanced clinical experience with clients, families and paraprofessionals. Prerequisite: REED 626.

REED 729 SEMINAR IN READING (3)
Review of theories and research in the field of reading. Prerequisites: 15 credits in reading education or consent of instructor.

REED 740 GRANT WRITING IN EDUCATION (3)
Essentials of proposal development and funding acquisition. Exploration of specific steps involved in the grant writing process via lecture, class discussion, small group work, and individual instructor consults. By the conclusion of the course, students will have successfully created an actual grant application that is ready for submission to a potential funding source.

REED 745 PROFESSIONAL DEVELOPMENT IN LITERACY (3)
Design, implement, and evaluate experiences for the professional development of educators in the area of literacy. Explore research from various fields that influence the effectiveness of professional development in the area of literacy. Prerequisites: 15 units in reading education courses.

REED 751 LANGUAGE, LITERACY AND CULTURE (3)
Historical perspectives and current topics in the fields of linguistics, semiotics, and culture studies will inform the discussion of literacy learning in a variety of contexts.

REED 752 LITERACY THEORY AND RESEARCH (3)
Expand insights into past and current research and theory in the literacy field. Critically analyze research findings and develop a research proposal. This course is restricted to C.A.S. in Reading majors unless permission is granted by the program director and the professor.

Religious Studies (RLST)

Courses

RLST 505 FAITH PERSPECTIVES IN MEDICAL ETHICS (3)
Hindu, Buddhist, Islamic, Christian and Jewish perspective on issues in medical ethics including the role of the doctor, abortion, cloning, pre-gender selection, mental health and euthanasia. Prerequisites: One course in a natural science, religious studies, philosophy or consent of the instructor.

RLST 510 THE JEW CONFRONTS THE MODERN WORLD: JEWISH LAW AND ETHICS (3)
Response of Jewish Law and Ethics to medical ethics, war, citizenship, environment, family, sexual ethics, government, contemporary State of Israel, women's issues, and Jewish/Gentile relationships in a multi-denominational approach. Prerequisite: One course in PHIL or RLST or consent of instructor.

RLST 511 JEWISH MYSTICISM AND KABBALAH (3)
Study of the Classical Kabbalah of Provence and Gerona, the Zohar, and the Kabbalah of Zadef with attention given to major trends in Jewish mysticism. Prerequisites: One course in Religious Studies or one course in Philosophy of consent of instructor.

RLST 513 THE KABBALAH OF THE ZOHAR (3)
The Book of Splendor (Zohar), the most influential composition of the Kabbalah; parts of the soul, mystical experience, good and evil, the Zoharic concepts of life and death and time and eternity. Prerequisites: At least two course in Religious Studies or Philosophy of the consent of the instructor.
RLST 531 EXPLORING GENESIS (3)
Theological, textual and sociological analysis of Genesis aimed to
develop new perspectives on the text and on Israelite civilization.
Prerequisites: One course in Religious Studies or consent of the
instructor.

RLST 535 PROPHETS AND PROPHECY IN ANCIENT ISRAEL (3)
Examination of phenomenon and history of Israelite prophecy in the
Hebrew Bible in light of prophecy in the ancient Near East. Prerequisite:
one course in Religious Studies or Philosophy at the 100 or 200 level.

RLST 555 INTRODUCTION TO THE NEW TESTAMENT (3)
Study of the literature, history, sociology and theology of the early
Christian movement focusing on canonical and non-canonical materials.
Prerequisite: One lower level course in philosophy or religious studies.

RLST 557 SPECIAL TOPICS IN COMPARATIVE RELIGION (3)
Exploration of culturally diverse religious traditions in terms of a specified
theme, topic or problem. May be repeated for credit. Prerequisite: one
lower level course in philosophy or religious studies.

RLST 563 SUFISM: ISLAMIC MYSTICISM (3)
Survey of the origins and development of Islamic mysticism, including
its scriptural sources, mystical practices and rituals, Sufi orders, Sufi
saints, and Sufism's influence on Islamic material culture and literature.
Prerequisite: one course in Religious Studies of Philosophy or consent of the
instructor.

RLST 567 ISLAM IN THE MODERN AGE (3)
An examination of modern and contemporary Islamic movements of
reform, renewal, and revolution. Topics include the status of women,
religious pluralism, human rights, forms of governance, and warfare.
Prerequisite: One course in RLST or PHIL, or consent of the instructor.

RLST 570 ADVANCED TOPICS IN RELIGIOUS STUDIES (3)
Examination of diverse topics in the study of religion. Maybe be
repeated for a maximum of 15 units provided a different topic is covered.
Prerequisites: None.

Science Education (SCIE)

Courses

SCIE 551 TEACHING SCIENCE IN EARLY CHILDHOOD (2)
Course is designed to familiarize the student with appropriate methods
and materials in science for the young child. Emphasis will be on
interdisciplinary approach. Prerequisite: ECED 341 (may be taken
concurrently).

SCIE 570 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER I (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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 school.

SCIE 571 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER II (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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 school.

SCIE 572 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER III (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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.

SCIE 573 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER IV (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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 school.

SCIE 574 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER V (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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 school.

SCIE 575 SEQUENTIAL SCIENCE MODULES FOR THE ELEMENTARY
SCHOOL TEACHER VI (1-3)
Three different modules of science instruction will be offered each
semester for teachers of primary and intermediate grades. The course
will emphasize instructional strategies in both the process and content
of the science. A student may elect to take one, two or all three modules
for 1, 2 or 3 credits 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 school.

SCIE 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. Corequisites:
BIOL 303 and PHSC 303.
SCIE 580 TEACHING SCIENCE IN THE SECONDARY SCHOOLS (3)
Selection of appropriate content, method and evaluation techniques, analysis of textbooks and resource materials for teaching science in the middle and high schools. Must be taken the semester prior to student teaching. Prerequisite: SCED 341 or ELED 363.

SCIE 650 ENGINEERING IN INTEGRATED STEM EDUCATION (3)
Students investigate the engineering design process, engineering habits of mind, and engineering fields, and consider how teachers teach and students learn about engineering and to engineer in the context of integrated STEM (Science, Technology, Engineering & Mathematics) education in grades PreK-12.

SCIE 652 EARTH-SPACE & PHYSICAL SCIENCE IN INTEGRATED STEM EDUCATION (3)
Students explore physical and Earth-space science concepts, scientific practices, and ways in which teachers teach and students learn about these concepts and practices in the context of integrated STEM (Science, Technology, Engineering & Mathematics) education in grades PreK-12.

SCIE 670 SPECIAL TOPICS IN SCIENCE EDUCATION (1-4)
Selected topic in science education. Prerequisite: Varies with topic.

SCIE 671 SPECIAL TOPICS IN SCIENCE EDUCATION (1-4)
Selected topic in science education. Prerequisite: Varies with topic.

SCIE 672 SPECIAL TOPICS IN SCIENCE EDUCATION (1-4)
Selected topic in science education. Prerequisite: Varies with topic.

SCIE 685 PRACTICUM IN INTEGRATED STEM EDUCATION (3)
Practices and trends in organizing, teaching, and improving programs in PreK-12 integrated STEM education.

Secondary Education (SCED)

Courses

SCED 518 YOUNG ADULT LITERATURE (3)
Literature as expression of basic needs and ideas of youth through independent reading; criteria and aids for evaluation and selection of books and other media. Not open to those who have completed EDUC 418/518.

SCED 560 USING READING AND WRITING IN THE SECONDARY SCHOOL (4)
Developmental reading and writing, assessment, vocabulary building, comprehension, special needs adaptations, and clinical practice. Prerequisites: SCED 341 (may be taken concurrently); written permission from the Department of Secondary Education chairperson (written permission not required for part-time evening students).

SCED 561 TEACHING READING IN THE SECONDARY CONTENT AREAS (3)
Application and assessment of reading strategies and instructional frameworks in secondary content classroom. Prerequisites: SCED 560 and currently teacher or student.

SCED 563 DEVELOPMENTAL READING FOR THE EARLY ADOLESCENT (3)
Methods of designing and teaching developmental reading programs for the middle or junior high school student. Attention to the following: providing for individual differences, teaching students to read critically, developing and extending reading interests. Prerequisite: SCED 460 or equivalent reading methods course.

SCED 570 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic in secondary or adult education. Specific requirements and prerequisites will vary with each topic and will be designated by the department each time a topic is scheduled. Graduate credit only with approval of the graduate program director. Each topic may be taken as a separate course.

SCED 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 chairperson and sponsoring instructor. Consent of graduate program director required for graduate credit.

SCED 595 INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4)
An opportunity for specially 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 graduate program director.

SCED 596 DIRECTED READING IN SECONDARY EDUCATION (1-4)
Independent reading in selected areas of secondary education in order to provide a comprehensive coverage for the individual, or to meet special needs. By invitation of the department to qualified students. Prerequisite: Consent of graduate program director.

SCED 603 TEACHING WRITING ACROSS THE CURRICULUM (3)
The process of writing, given for specific school systems, by the Maryland Writing Project. Small group and assessment techniques included. Prerequisites: Bachelor's degree and teaching experience. Graduate credit only with approval of the graduate program director.

SCED 621 INDIVIDUALIZING LEARNING IN THE SECONDARY SCHOOL (3)
Philosophical and psychological bases; goal development; organizational patterns; assessment; teaching strategies in content areas; grading and evaluation; programming for classroom, departmental and school levels. Prerequisite: Teaching experience.

SCED 623 THE MIDDLE SCHOOL (3)
Functions and characteristics, historical development, philosophical and psychological bases, nature of youth, and curriculum and organizational patterns.

SCED 625 TEACHING IN THE MIDDLE SCHOOL (3)
Goals and objectives, planning, instructional procedures and materials, evaluation techniques, and special problems of instructing preadolescents. Prerequisite: Teaching experience.

SCED 627 TRAINING STRATEGIES IN THE WORKPLACE (3)
Teaching/learning dimensions of adults in nontraditional settings - business, industry, government and the nonprofit sector. Prerequisite: Business or personnel experience, or consent of instructor.

SCED 631 THE COMMUNITY COLLEGE (3)
Historical development, purposes and goals, curriculum evaluation, finance, accreditation and trends, state and national patterns and current student needs. Prerequisite: Consent of instructor.

SCED 633 CURRICULUM AND INSTRUCTION IN THE COMMUNITY COLLEGE (3)
Educational programs, curricula, instructional techniques, evaluative procedures, community involvement and societal expectations, concerns and trends affecting programs, and objectives as related to institutional goals. Prerequisite: SCED 631 or equivalent.
SCED 635 DISCIPLINE AND CLASSROOM MANAGEMENT IN SECONDARY SCHOOLS (3)
Theories of pupil behavior and effective discipline, procedures and routines for efficient classroom management, discipline problems in urban and suburban schools, and solutions to discipline problems. Prerequisite: Teaching experience or completion of student teaching.

SCED 641 SECONDARY TEACHING METHODS (3)
Philosophy and purposes of constructivist secondary education; principle of teaching and learning; basic techniques of lesson planning and instructions. Course restricted to conditionally certified teachers enrolled through the Towson Learning Network. Prerequisites: None.

SCED 647 ADVANCED PROCESSES OF TEACHING AND LEARNING (3)
Systems for analyzing teaching behavior, models of instruction for achieving cognitive, social, and personal learning objectives; and analysis of classroom application of teaching models. Prerequisite: Teaching experience or consent of instructor.

SCED 649 TEACHING GIFTED STUDENTS IN THE SECONDARY SCHOOL (3)
Characteristics of gifted adolescents, role of the gifted in society, educational programs, identification procedures, administrative arrangements, curriculum and methodology.

SCED 651 TECHNIQUES FOR TEACHING SPECIAL-NEEDS ADOLESCENTS AND ADULTS (3)
Assessment, diagnostic and remedial strategies, and motivational devices for adolescents and adults of below-average mental ability as defined under IDEA. Prerequisite: Teaching experience, student teaching or consent of instructor.

SCED 670 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate program director.

SCED 671 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate program director.

SCED 672 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate program director.

SCED 673 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate program director.

SCED 695 INDEPENDENT STUDY IN EDUCATION: SECONDARY (1-4)
Independent study in selected areas of secondary education. Prerequisite: Consent of instructor.

SCED 696 DIRECTED READING IN SECONDARY EDUCATION (1-4)
Independent reading in selected areas of secondary education. Prerequisite: Consent of instructor.

SCED 731 FIELD EXPERIENCES IN ADOLESCENT OR ADULT LEARNING DISABILITIES (3)
Observation and analysis of adolescents or adults with learning disabilities, assessment strategies, design of remedial activities, evaluation of observed teaching/learning strategies, and preparing written reports of observations. Prerequisites: One course in special education or learning disabilities, and approval of instructor.

SCED 741 CURRICULUM DEVELOPMENT IN THE SECONDARY SCHOOL (3)
Principles and practices, significant historical and contemporary influences, objectives, content and evaluation, trends, and teachers as curriculum developers and implementers. Prerequisite: Consent of instructor.

SCED 751 SEMINAR IN MIDDLE SCHOOL CURRICULUM (3)
Curriculum designs and programs, organization for instruction, teacher preparation programs, guidance and nature of middle school students, community involvement and evaluation. Prerequisite: Middle school teaching experience or consent of instructor.

SCED 753 SEMINAR IN SECONDARY SCHOOL CURRICULUM (3)
Theories, research and evaluation; analysis of present programs; rationale for program development and change. Prerequisite: Graduate course in curriculum.

SCED 770 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate instructor.

SCED 774 SPECIAL TOPICS IN SECONDARY EDUCATION (1-3)
In-depth study of a selected topic. Specific requirements and prerequisites vary as designated by the department. Prerequisite: Consent of graduate instructor.

SCED 779 SEMINAR IN SECONDARY SCHOOL SOCIAL STUDIES (3)
Current research, trends, practices, issues, content, materials and problems. Prerequisite: Teaching experience in social studies.

SCED 781 INTEGRATED PROFESSIONAL PRACTICE SEMINAR (3)
Trends, issues, problems in education. Integrative investigations through quantitative/qualitative research, curriculum and instruction development or policy and program development for selected aspects of secondary education. Prerequisites: 27 credits of graduate work, EDUC 761 and permission of advisor.

SCED 898 SECONDARY EDUCATION THESIS (3)
The previous course, SCED 897, taken over two consecutive semesters.

Social Sciences (SOSC)

Courses

SOSC 600 INTERDISCIPLINARY APPROACHES TO GLOBAL PROBLEMS (3)
Interdisciplinary approaches to global problems; comparative frameworks; issues include economic integration, urbanization, environment.

SOSC 601 GEOGRAPHER’S VIEW (3)
The role of geography within the social sciences through an exploration of recent trends in the discipline.

SOSC 602 COMPARATIVE HISTORY AND HISTORIOGRAPHY (3)
Examination of selected topics in comparative history, including consideration of the developed and less developed world. Exploration of competing approaches and leading historiographical issues.

SOSC 603 THE ECONOMIST’S PERSPECTIVE (3)
Use of economic concepts and tools (such as cost and benefit, supply and demand) to facilitate logical thinking about complex social issues and, therefore, to promote understanding of society and of other social sciences.
SOSC 604 EAST ASIAN SECURITY ISSUES, 1945-PRESENT (3)
Examines the post war search for security and stability in East Asia through economic development, diplomacy, and military action by the major powers, such as the United States, Japan, the People's Republic of China, and the Soviet Union. The efforts of smaller states, such as North Korea, South Korea, and Taiwan also merit attention. Focus on the historical continuities in security concerns from the pre- to post-Cold War eras.

SOSC 605 AMERICAN POLITICS IN THE 21ST CENTURY (3)
The course will constitute the political science department's core offering to the Master of Science degree in Social Science. It will address the change and continuity in American politics and American political science in the last 50 years.

SOSC 606 SOCIOLOGICAL INSIGHT (3)
Theories, methods and substantive issues in sociology. Consideration of recent advances in sociological research.

SOSC 609 DEVELOPMENTAL HUMAN LEARNING: A LIFESPAN APPROACH (3)
Provides graduate students with basic theories, historical development and application of scientific methods to human learning.

SOSC 625 TOPICS IN SOCIAL SCIENCES (3)
Content will be selected from different areas of the Social Sciences to complement course offerings and the needs of students and the program. May be repeated for a maximum of 9 units provided a different topic is taken each time.

SOSC 787 DIRECTED INDIVIDUAL READINGS IN SOCIAL SCIENCE (1-6)
Permit students in the Master of Science Program in Social Science to undertake individual readings at the graduate level in a topic potentially not covered by existing courses. May be repeated for a total of 6 units. Prerequisite: graduate standing and 18 units of SOSC core courses.

SOSC 797 DIRECTED INDIVIDUAL RESEARCH IN SOCIAL SCIENCES (1-3)
Research and reading with a social science topic to be selected by the instructor and the student. No more than 6 units may be applied toward a degree. Prerequisites: Graduate Standing and 18 units of SOSC core courses.

SOSC 897 SOCIAL SCIENCE THESIS (6)
Topically selected research and reading within a specifically selected social science discipline for the purpose of producing a master's thesis. Prerequisites: Graduate standing and 18 units of SOSC core courses.

SOSC 898 SOCIAL SCIENCE THESIS (3)
Topically selected research and reading within a specifically selected social science discipline for the purpose of producing a master's thesis. Prerequisites: Graduate standing and 18 units of SOSC core courses.

SOSC 899 SOCIAL SCIENCE MASTER'S THESIS CONTINUUM (1)
Individual research and writing of master's thesis. Prerequisite: 6 units of SOSC 897 or SOSC 898.

Sociology (SOCI)

Courses

SOCI 511 INDIVIDUAL AND SOCIETY (3)
A social psychological approach to the interrelationships of the individual and his/her social and cultural environment; behavioral characteristics resulting from social experience. Prerequisite: SOCI 101.

SOCI 512 RELIGION AND SOCIETY (3)
Connections between religious expression, practice, and social contexts; classic and contemporary sociological theories of religion; role of religion in global society. Prerequisites: SOCI 101.

SOCI 523 SOCIAL CHANGE (3)
A sociological analysis of the sources, processes and consequences of social change. Prerequisite: SOCI 101.

SOCI 524 SOCIOLOGY OF POPULAR CULTURE (3)
Sociological analysis of the sources and meanings of popular culture; production and consumption of popular culture objects, including music, film, and television; relationship of popular culture to high culture. Prerequisite: SOCI 101.

SOCI 527 URBAN SOCIOLOGY (3)
Survey of the theoretical and sociological conceptualizations of modern Western industrial cities. Prerequisite: SOCI 101.

SOCI 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 530 DEVIANCE AND ORGANIZATIONS (3)
Major social patterns associated with contemporary large-scale organizations, with special emphasis on organizational deviance by and within corporations, governments and crime syndicates. Prerequisite: SOCI 101.

SOCI 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 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 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, and one 300 level SOCI course.

SOCI 541 CLASS, STATUS AND POWER (3)
Examination of major theories and significant research on socially structured inequality in modern and traditional societies. Prerequisite: SOCI 101.

SOCI 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, introduction to Sociology.

SOCI 551 DEVIANT BEHAVIOR (3)
Deviance as a process in society. Understanding conformity and deviance; identification and labeling of deviants; and society's response to deviant behavior. Prerequisite: SOCI 101.

SOCI 553 THEORIES OF CRIME (3)
Evolution of criminological theory; crime rates and trends; social profile of criminal offenders and victims; societal responses. Prerequisites: SOCI 101, CRMJ 201, or CRMJ 254; and 9 additional units of CRMJ, SOCI, and/or ANTH.

SOCI 555 DELINQUENCY AND JUVENILE JUSTICE (3)
Nature, distribution and causes of youth crime, youth gangs, the juvenile justice system. Prerequisite: SOCI 101Introduction to Sociology.
SOCI 557 SOCIAL WELFARE (3)
Sociological analysis of social welfare institutions and the functions they perform within modern societies. Prerequisite: SOCI 101.

SOCI 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 560 TOPICS IN SOCIOLOGY (3)
Current topics in sociology designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. The content of the course will depend upon mutual faculty and student interest. Prerequisites: SOCI 101 and 6 additional units of sociology.

SOCI 561 TOPICS IN SOCIOLOGY (3)
Current topics in sociology designed for non-majors as well as majors. May be repeated for credit provided a different topic is covered. The content of the course will depend upon mutual faculty and student interest. Prerequisites: SOCI 101 and 6 additional units of sociology.

SOCI 570 SPECIAL TOPICS IN SOCIOLOGY (3)
Current topics in sociology at the most specialized level. May be repeated for credit provided a different topic is covered. Prerequisites: SOCI 101 and 6 additional units of sociology.

SOCI 581 SOCIOLOGICAL THEORY (3)
Major systems of sociological theory; the works, assumptions, and implications of major European and American schools. Prerequisites: SOCI 101; 9 additional credits of sociology.

SOCI 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; and either SOCI 212, PSYC 212, MATH 231, or ECON 205.

SOCI 585 SEMINAR IN SOCIOLOGY (3)
Capstone application of ideas, methods, and facts learned in previous sociology courses. Prerequisites: SOCI 101; 9 additional credits of SOCI, and permission of the instructor.

SOCI 591 INTERNSHIP IN SOCIOLOGY I (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 semester for 3 units (SOCI 591) or two semesters for 3 units each (SOCI 591 and SOCI 592), in one agency both semesters or in a different agency each semester. No more than 3 credits may be earned in a semester except with consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

SOCI 592 INTERNSHIP IN SOCIOLOGY II (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 semester for 3 units (SOCI 591) or two semesters for 3 units each (SOCI 591 and SOCI 592), in one agency both semesters or in a different agency each semester. No more than 3 units may be earned in a semester except with consent of the chair, which will be granted only when agency requirements and student needs make it appropriate. Prerequisite: Consent of internship coordinator.

SOCI 595 INDEPENDENT RESEARCH (3)
Supervised research and sociological investigation involving library and/or field experiences, and culminating in a written report. Prerequisites: SOCI 581, SOCI 582 and consent of instructor.

Special Education (SPED)

Courses

SPED 525 FORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES (PREK-12) (3)
Overview of trends and issues related to assessment in special education with review of specific assessment techniques. Emphasis on observation skills, administration procedures, interpretation of results, and how to use these to improve programming. Prerequisites: 6 units PSYC; 9 units SPED or consent of instructor.

SPED 527 CURRICULUM/METHODS OF SOCIAL EMOTIONAL AND MOTOR DEVELOPMENT FOR STUDENTS WITH DISABILITIES PREK-12 (3)
Social and emotional development of children across the lifespan with curricula and techniques to support social emotional needs of students with disabilities. Prerequisite: 6 units SPED or consent of instructor.

SPED 601 SPECIAL EDUCATION: CURRICULUM & METHODS OF INSTRUCTION FOR SECONDARY TRANSITION (3)
Methodologies for transition for students with disabilities from school to employment and adult life. Prerequisite: SPED 301 or consent of instructor.

SPED 603 INFORMAL TESTS AND MEASUREMENTS FOR STUDENTS WITH DISABILITIES PREK-12 (3)
Theory and strategies for informal and classroom-based assessment with an emphasis on response to intervention. Prerequisite: SPED 301 and consent of department.

SPED 604 ACTION RESEARCH IN SPECIAL EDUCATION (3)
Structured reflection of an action research project completed within a classroom, school, or district with a review of fundamental concepts and practices in special education research.

SPED 605 WORKING WITH FAMILIES OF STUDENTS WITH DISABILITIES (3)
The role of the family system and the impact of having a child with a disability on that system. Practice in strategies for effective communication and family support. Prerequisites: SPED 301 and consent of department.

SPED 607 CURRICULUM/METHODS OF CLASSROOM MANAGEMENT FOR STUDENTS WITH DISABILITIES (3)
Research and best practices for interventions and management strategies that support positive behaviors of students with disabilities. Prerequisites: SPED 301 and consent of instructor.

SPED 620 EDUCATING STUDENTS WITH AUTISM SPECTRUM DISORDERS (3)
Provides an in-depth introduction into the characteristics, assessment methods, and instructional issues related to educating a student with an autism spectrum disorder in the classroom. Prerequisites: None.

SPED 621 FORMAL AND INFORMAL ASSESSMENT TECHNIQUES FOR STUDENTS WITH ASD (3)
Information related to both formal and informal assessment for students with autism spectrum disorders. Participants will improve observation skills, learn administration procedures, learn how to interpret assessment results, and use this information to improve programming. Prerequisite: None.

SPED 622 SOCIAL THINKING AND CONNECTEDNESS FOR STUDENTS ON THE AUTISM SPECTRUM (3)
Theories and research on social development, social communication, social connectedness and instructional techniques for individuals on the autism spectrum. Prerequisites: None.
SPED 623 BEHAVIOR MANAGEMENT FOR STUDENTS WITH ASD (3)
Provides participants with an understanding of the process of conducting a functional analysis of behavior and developing a practical behavioral support program which promotes social, communicative, and academic behaviors for classroom and home implementation. Prerequisites: None.

SPED 624 EVIDENCE-BASED STRATEGIES AND INTERVENTIONS FOR STUDENTS WITH ASD (3)
Provides in-depth information related to evidence-based practices for students with autism spectrum disorders. Students will gain theoretical information, hands-on experience with implementation, and critical reasoning skills related to identifying appropriate instructional strategies for individual student learning profiles.

SPED 625 CURRICULUM AND METHODS OF INSTRUCTION FOR STUDENTS WITH ASD I (3)
Examination of the instructional strategies shown to be effective in promoting the academic success of students with autism spectrum disorders (ASD). Participants will examine methods in order to ensure access of the general education curriculum to students with ASD who exhibit mild to moderate impairments. Prerequisite: None.

SPED 626 CURRICULUM AND METHODS OF INSTRUCTION FOR STUDENTS WITH ASD II (3)
Provides specific, evidence-based information regarding delivery of curricula, conducting assessments, and designing appropriate, individualized instruction for students diagnosed with autism spectrum disorder (ASD). Focus and materials are on students who need intensive supports due to the severity of their diagnosis of ASD.

SPED 627 CO-TEACHING AND INCLUSION OF STUDENTS WITH ASD II (3)
Best practices for successful inclusion of students with autism spectrum disorders (ASD) in the general education setting. Inclusion and the concept of least restrictive environment are viewed and discussed as a part of the civil rights movement. The depth of the inclusion process for individuals with ASD is examined in the following contexts: discussion legislation, co-teaching and collaboration, identifying factors that challenge the process, examining and practicing differentiated instruction, understanding characteristics of learners with ASD and celebrating successful experiences.

SPED 628 INTEGRATING INSTRUCTIONAL AND ASSISTIVE TECHNOLOGIES TO SUPPORT STUDENTS WITH ASD (3)
Practical application in the use of both instructional and assistive technologies to increase the access and learning of students with autism spectrum disorders in general education curriculum. Prerequisite: consent of the department.

SPED 630 CULTURALLY AND LINGUISTICALLY RESPONSIVE SPECIAL EDUCATION PRACTICES (3)
In-depth introduction to current research, trends, policies, and instructional practice related to educational placement and service delivery for students who are culturally and linguistically diverse and/or who have exceptionalities.

SPED 631 CLASSROOM STRATEGIES AND INTERVENTIONS FOR DIVERSE STUDENT POPULATIONS (3)
Overview of best practices for instruction and intervention for students who are culturally and linguistically diverse and/or who have special education needs. Addresses equitable practice, universal design for learning, response to intervention, and strategies for including second-language learners.

SPED 632 ASSESSMENT ISSUES FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS (3)
Overview of educational assessment as it relates to culturally and linguistically diverse student populations, addressing the impact of variables such as language, culture, acculturation, and socioeconomic status in the assessment process. Emphasis will be placed on these and other factors impacting assessment, on informal and dynamic assessment procedures, and on the formal assessment and identification process for special education as it relates to diverse students. Prerequisite: none.

SPED 633 SCHOOL, FAMILY AND COMMUNITY COLLABORATION FOR DIVERSE POPULATIONS (3)
Strategies and approaches for productively involving families, caregivers and appropriate community members in the identification and education of diverse learners, particularly those who are culturally and linguistically diverse and/or who have special education needs. Course topics include varied perceptions of disabilities and the education system, communication skills, human relations, counseling and conferencing with families and other stakeholders to support students through all stages of the educational process.

SPED 634 UNIVERSAL DESIGN FOR LEARNING AND DIFFERENTIATED INSTRUCTION (3)
Applications of the universal design for learning framework to current instructional practices; specifically, designing flexible goals, materials, methods, assessments, and environments that enable student learning. Prerequisite: consent of department.

SPED 637 INCLUSION FOR THE CLASSROOM TEACHER (3)
Fundamental concepts in special education, including response to intervention, universal design for learning, legal requirements, characteristics of students with disabilities, and supports for inclusion. Prerequisite: student teaching or consent of instructor.

SPED 641 ED STD W/DIS:CM&I (3)
Instructional interventions within a multi-tiered system of supports with emphasis on development of individualized education programs for students with disabilities. Prerequisites: 6 units in PSYC and 6 units in education.

SPED 644 UNIVERSAL DESIGN FOR LEARNING AND DIFFERENTIATED INSTRUCTION (3)
Applications of the universal design for learning framework to current instructional practices; specifically, designing flexible goals, materials, methods, assessments, and environments that enable student learning. Prerequisite: consent of department.

SPED 646 USING TECHNOLOGY TO DIFFERENTIATE INSTRUCTION (3)
Practical application of best practices differentiating instruction, using computer software to increase the access and learning of students with disabilities in general education curriculum. Prerequisite: Student teaching or teaching experience or consent of instructor. Lab/Class fee will be assessed.

SPED 670 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3)
Studies in selected content areas tailored to student needs. Prerequisites: Vary according to area of concentration; consent of department.

SPED 671 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3)
Studies in selected content areas tailored to student needs. Prerequisites: Vary according to area of concentration; consent of department.

SPED 672 SPECIAL TOPICS IN SPECIAL EDUCATION (1-3)
Studies in selected content areas tailored to student needs. Prerequisites: Vary according to area of concentration; consent of department.

SPED 741 INTERNSHIP: STUDENTS WITH DISABILITIES (6)
Placement in a special education facility or special education agency according to student interest and background. Prerequisites: 12 credits in special education and consent of department. S/U grading.
Theater Arts (THEA)

Courses

THEA 591 PRODUCTION DRAMATURGY (1-3)
Practical experience in production dramaturgy, includes research, text analysis and educational outreach. Projects related to specific theatrical productions. May be repeated for a maximum of 9 credits.

THEA 601 THEORIES OF THE AVANT-GARDE (3)
Investigation of the historical European and American Avant-Garde, starting from the end of the 19th century through to the end of the 20th. Prerequisite: Consent of program director.

THEA 602 HISTORY OF EXPERIMENTAL PERFORMANCE (3)
Investigation of post-World War II experimental performance. Approach will be cross-disciplinary and intercultural, focusing on theatre, music, dance, and performance art from various nationalities and cultures. Prerequisite: Consent of program director.

THEA 603 PERFORMANCE: SOLO (1-4)
Creating solo performance by exploring language and environment through a variety of traditions, styles and techniques. May be repeated for up to 12 credits. Prerequisite: Consent of graduate program director.

THEA 605 PERFORMANCE: ENSEMBLE (1-4)
Creating collaborative performance by exploring language and environment through a variety of traditions, styles and techniques. May be repeated for up to 12 credits. Prerequisite: Consent of graduate program director.

THEA 607 SELF-EMPOWERMENT IN THEATRE (3)
Entrepreneurial management strategies for a self-empowered life in theatre. Prerequisite: Consent of program director.

THEA 608 THEATRE DESIGN TECHNIQUES (1-3)
The vocabulary and background needed to develop and communicate design concepts, to work collaboratively with other design artists, and to understand the needs of designing for different sizes and types of venues. Prerequisite: Consent of graduate program director.

THEA 609 TEXT CONSTRUCTION (3)
Exploring a variety of means of developing theatrical text, with special attention to the relationship of language and structure. May be repeatable for a total of six credits. Prerequisite: Permission of instructor.

THEA 610 THEATRE SYSTEMS (1-3)
A practical overview of technology. Prerequisite: Consent of graduate program director and special permit.

THEA 670 PERFORMANCE AND SOCIETY (3)
Bridges the separation between the art form of theatre and the community in which it is made and with/for whom it is performed. Will undertake an examination of various cultures, communities, and identities and will seek to understand them through the creation of performance pieces inspired by and informed by this examination. Prerequisite: Consent of graduate program director.

THEA 675 SYNTHESIS II: FORMAL ELEMENTS (3)
Examining the formal elements of performance through theoretical study and practical exploration. Prerequisite: Consent of program director.

THEA 680 SPECIAL TOPICS (1-4)
In-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of instructor.

THEA 681 SPECIAL TOPICS (1-4)
In-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of instructor.

THEA 682 SPECIAL TOPICS (1-4)
In-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of instructor.

THEA 683 SPECIAL TOPICS (1-4)
In-depth study in a selected area dependent upon faculty and student interest. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of instructor.

THEA 695 INDEPENDENT PROJECT IN THEATRE (1-9)
Independent project in research, acting, directing or theatre production. May be repeated for a maximum of 9 units. Prerequisite: Consent of instructor.

THEA 710 TEACHING INTERNSHIP (3)
Assisting a faculty mentor with the teaching of an undergraduate theatre course. Prerequisite: Consent of department chairperson, graduate program director and instructor.

THEA 720 SYNTHESIS II: DIRECTING (3)
Development of directorial vision, emphasizing usage of text in performance. Prerequisite: Consent of graduate program director.

THEA 740 GRADUATE PROJECT LABORATORY (1-4)
Conceptualization, research and development of a graduate performance project. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of graduate program director.

THEA 750 GRADUATE PROJECT AND PERFORMANCE (1-4)
Execution of a graduate performance project. May be repeated for a total of no more than 16 credits. Prerequisite: Consent of graduate program director.

THEA 760 INTERNATIONAL THEORIES AND AESTHETICS (3)
Understanding and applying specific international performance theories and aesthetics. May be repeated for up to 9 units if different topic is taken. Prerequisite: Consent of graduate program director.

THEA 770 SYNTHESIS III: WORKING WITH DESIGN IN PERFORMANCE (3)
Scenography in vocabulary and practice for the experimental theatre artist. Prerequisite: Theatre Systems or consent of Graduate Director.

THEA 780 PROJECTS IN PROCESS (3)
Researching and creating an appropriate development process for an original performance project in preparation for the MFA Final Project. May be repeated for a maximum of 6 units. Prerequisite: Consent of graduate program director.

THEA 880 MFA FINAL PROJECT (1-9)
Culminating creative process that includes a research paper, and may include a production or project component.

THEA 885 PROJECT CONTINUUM (1)
Continuing work on previously started project. Prerequisites: Previous registration for project work.

Women's and Gender Studies (WMST)
Courses

WMST 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 533 WOMEN AND AGING (3)
American society’s view of older women and the impact of stereotypes and images on their self-concepts. Prerequisite: 3 credits in women's studies or social sciences.

WMST 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 credits in women's studies or consent of instructor.

WMST 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 credits in women's studies or social sciences.

WMST 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. Prerequisite: 3 credits in women's studies or social sciences.

WMST 539 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. GenEd II.A.2.

WMST 540 WOMAN AS A CITIZEN (3)
Role of gender in defining citizenship; critical analysis of the principles of citizenship promulgated by leading contributors to Western political thought. Prerequisites: none.

WMST 545 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. Prerequisites: none.

WMST 550 B-MORE: BALTIMORE AND URBAN COMMUNITIES (3)
Analyzes significant political, economic, and cultural issues facing Baltimore and other urban communities including poverty, discrimination, economic development, and the criminal justice system; special attention to gender, race, class, and youth activism.

WMST 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 semesters. May be repeated for a maximum of 6 units when a different topic is covered. Prerequisite: one women's studies course or consent of instructor.

WMST 581 THE EROTIC IMAGINATION IN CHRISTIANITY AND HINDUISM (3)
Explores use of sexual imagery to understand the human-divine relationship in Christianity and Hinduism. Critical analysis of the ways that erotic religious traditions both re-inscribe and destabilize cultural norms of gender and sexuality. Prerequisite: WMST 231 or RLST 105 or by consent of instructor.

WMST 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 instructor. May be repeated for a maximum of 6 credits when a different topic is covered. Prerequisites: 15 hours in interdisciplinary or departmental women's studies courses; minimum 3.00 GPA average in women's studies; department consent.

WMST 601 WOMEN AND GENDER IN THE WORKPLACE (3)
Examination of the organization of work and the role of gender in the division of labor, power and authority, income and other rewards, in diverse work settings. Prerequisite: graduate standing.

WMST 603 THE DIVERSITY OF WOMEN (3)
Examination of feminist scholarship on race, class and sexualities, particularly with regard to the distribution of power within a variety of institutions. A required course for the WMST Master's Program. Non-WMST Graduate students are asked to join the wait list and will be accepted into the class as space permits. Prerequisite: graduate standing.

WMST 604 Women and NFP Leadership; Governance and Advocacy (3)
Role of governance and advocacy in the not-for-profit organization with attention to women's roles and issues; topics include strategic planning, board governance and community power-building. Prerequisite: Graduate Standing.

WMST 605 WOMEN IN AN INTERNATIONAL CONTEXT (3)
Examination of the diverse experiences of women in a variety of national and international contexts. Particular attention will be devoted to how global forces impact women's lives today and the diverse ways that women struggle against inequality. Prerequisite: graduate standing.

WMST 607 ADVANCED FEMINIST THEORY (3)
Major feminist theories on women's experience, emphasizing the areas in the graduate concentrations: workplace, health, public policy and international. A required course for the WMST Master's Program. Non-WMST Graduate students are asked to join the wait list and will be accepted into the class as space permits. Prerequisite: graduate standing.

WMST 609 APPLIED RESEARCH METHODS AND SKILLS I (3)
How to interpret, evaluate, and conduct research about women and gender issues in organizations and society, using the computer, the Internet, and statistical software for accessing and producing information. Prerequisites: graduate standing and adequate computer skills.

WMST 611 WOMEN, PUBLIC POLICY AND SOCIAL CHANGE (3)
How public policy affects the experiences of women and men, and groups to which they belong. Includes study of components of public policy-making, case studies of gender-related public policy, and methods of instituting change. A required course for the WMST Master's Program. Non-WMST Graduate students are asked to join the wait list and will be accepted into the class as space permits. Prerequisite: graduate standing.
WMST 613 WOMEN AND HEALTH (3)
An interdisciplinary study of women's health from a holistic perspective that builds on socioeconomic, political and biological aspects of women's health. Prerequisite: graduate standing.

WMST 620 FIELD EXPERIENCE (3)
Non-culminating field placement for students in organizations or agencies (including governmental) working on projects that serve women. Course includes a proposal, regular meetings with adviser a journal and a final written report of the project. May be repeated once for a maximum of 6 credits by student not electing the WMST 796 Internship option; site of placement may not be repeated. Prerequisites: Completion of a minimum of 9 credits toward a master's in WMST and approval of the student's adviser and graduate program director.

WMST 670 SPECIAL TOPICS IN WOMENS STUDIES (3)
Topics pertaining to WMST graduate concentrations. May be repeated two times for a total of 9 credits maximum.

WMST 673 SPECIAL TOPICS IN WOMENS STUDIES (3)
Topics pertaining to WMST graduate concentrations. May be repeated two times for a total of 9 credits maximum.

WMST 695 INDEPENDENT STUDY (3)
Study and research including writing a research paper on a selected topic in women's studies. May be repeated with a different topic for a maximum of 6 units. Prerequisites: 15 undergraduate or 9 graduate units in women's studies; graduate standing and consent of women's studies prior to registration.

WMST 796 INTERNSHIP (3)
Intensive hands-on experience in approved organization related to student's concentration. Written report required upon completion. Must be taken in two separate semesters for a total of 6 credits. Prerequisite: Minimum of 9 credits completed in graduate program in Women's Studies and consent of student's graduate adviser.

WMST 897 WOMEN'S STUDIES THESIS (6)
Original research on a topic related to the student's concentration using acceptable research methods and design. May be based in extensive library, survey or field research. A thesis prospectus detailing the nature and scope of the investigation and the methods to be employed must be submitted and approved in advance to the student's adviser and the graduate director. Students will be required to do an oral presentation of their thesis in a meeting with their graduate adviser and one other WMST faculty. Must be taken in two separate semesters for a total of 6 credits. Prerequisites: Completion of a minimum of 21 credits in WMST and completion of WMST 609.

WMST 898 WOMEN'S STUDIES THESIS (3)
The previous course, WMST 897, taken over two consecutive semesters.

WMST 899 THESIS CONTINUUM (1)
Continuation of thesis beyond the 6 units.

Debra Moriarty, Vice President for Student Affairs
Brian DeFilippis, Vice President for University Affairs
Marina Cooper, Vice President for Marketing and Communications
Timothy Leonard, Director of Athletics

Deans
Shohreh Kaynama, College of Business and Economics
Laurie Mullen, College of Education
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Lisa Plowfield, College of Health Professions
Terry Cooney, College of Liberal Arts, Rector, Honors College
Vonnie Shields (Acting Dean), Jess and Mildred Fisher College of Science and Mathematics
Janet V. Delany, Office of Graduate Studies
Deborah A. Nolan, Dean of University Libraries, Albert S. Cook Library

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Rajeswari Kolaqani, Applied Physics
Ray Martens, Art Education
Bridget Z. Sullivan, Art, Interactive Media Design
Tonia Matthews, Art, Studio
Susan J. Rotkovitz, Arts Integration
Jennifer Smart, Audiology (Au.D.)
Connie Anderson, Autism Studies
Petra Tsuji, Biology
Lisa Martinelli Beasley, Child Life, Administration and Family Collaboration
Marcie Weinstein, Clinician-Administrator Transition
Lingling Zhang, Communication Management
Michael McGuire, Computer Science
Jonathan Mattanah, Clinical Psychology
Christa K. Schmidt, Counseling Psychology
Stephen Schroth, M.Ed, Early Childhood Education
Robert Blake, Elementary Education
David Ownty, Environmental Science
Justin Buckingham, Experimental Psychology
Catherine Breeman, Family-Professional Collaboration
Mark Profili, Forensic Science
Todd Moore, Geography and Environmental Planning
Niya Werts, Health Science
Abby Mello, Human Resource Development (M.S., PBC)
Carla Finkelstein, Human Resource Development, Educational Leadership (Traditional)
Marilyn Nicholas, Human Resource Development, Educational Leadership (Online)
Jennifer Ballengee, Global Humanities
Chao Lu, Information Technology (D.Sc.)
Bill Sadera, Instructional Technology (Ed.D.)
David Robinson, Instructional Technology, School Library Media
Liyan Song, Instructional Technology
Joseph Clark, Integrated Homeland Security Management
Pam Lottero-Perdue, Integrated STEM Instructional Leadership (PBC)
Bridget Sullivan, Interactive Media Design
Kate Collins, Interdisciplinary Arts Fusion
Benjamin Fisher, Jewish Studies
Hana Bor, Leadership in Jewish Communal Services, Jewish Education
Philippe Duverger, Marketing Intelligence
Pamela Wruble, Master of Arts in Teaching- MAT
Sandy Spitzer, Mathematics Education
Kate Evans, Music Education
Terry Ewell, Music Performance and Composition
Kathy Ogle, Nursing
Mary Beth Merryman, Occupational Science (Sc.D.)
Sonia Lawson, Occupational Therapy M.S.
Kendra Heatwole Shank, Occupational Therapy, Post Professional (OTD)
Marilyn Nicholas, Organizational Change
Mark McKinney, Physician Assistant Studies
Karen Eskow, Professional Studies
Geoffrey Becker, Professional Writing
Meghan Liebfreund, Reading Education
Bruce Mortenson, School Psychology
Ashley Lucas, Secondary Education, M.Ed.
Paul McCartney, Social Science
Andrea Parrish, Special Education, M.Ed.
Karen Fallon, Speech-Language Pathology
Natalie Scala, Supply Chain Management
Kay Holman, Teacher as Leader in Autism Spectrum Studies
Pamela Wruble, Teaching-MAT
Tavia La Follette, Theatre
Stephen Nunns, Theatre
Kate Wilkinson, Women’s and Gender Studies

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Stephen Schroth, College of Education
Bill Sadera, College of Education
Tonia Matthews, College of Fine Arts and Communication
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Kendra Heatwole Shank, College of Health Professions
Jeff Kukucka, College of Liberal Arts
Lisa Martinelli-Beasley, College of Liberal Arts
Rajeswari Kolagani, The Jess and Mildred Fisher College of Science and Mathematics
Petra Tsuji, The Jess and Mildred Fisher College of Science and Mathematics
Student, Graduate Student Association
Janet DeLany, ex officio
Debbie Nolan, ex officio
Erika Carlson Hiles, ex officio
GRADUATE FACULTY

The following faculty list includes name, rank, department, year of appointment, and highest degree and institution where it was earned.

Blake Abbott
Assistant Professor
Communication Studies
2012
Ph.D., University of Georgia

Subrata Acharya
Associate Professor
Computer and Information Sciences
2008
Ph.D., University of Pittsburgh

Aisha Ali-Gombe
Assistant Professor
Computer and Information Sciences
2017
Ph.D., University of New Orleans

Nadim Alkharouf
Professor
Computer and Information Sciences
2011
Ph.D., George Mason University

Mostafa Aminzadeh
Professor
Mathematics
1988
Ph.D., Oregon State University

Lena Ampadu
Professor
English
2009
Ph.D., UMCP

Saradha Ananthakrishnan
Assistant Professor
Audiology/Speech-Language Pathology/Deaf Studies
2013
Ph.D., Purdue University

Connie Anderson
Assistant Professor, Director, Autism Studies
Health Science
2012
Ph.D., University of S. California

Maria Joao Antunes
Assistant Professor
Sociology, Anthropology & Criminal Justice
2014
Ph.D., University of Maryland

Anne Ashbaugh
Professor, Chairperson
Philosophy & Religious Studies
2008
Ph.D., Duquesne University

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Assistant Professor
English
2013
Ph.D., University of Virginia

Elizabeth Austin
Associate Professor
Nursing
2009
Ph.D., Binghamton University

Shantanu Bagchi
Assistant Professor
Economics
2014
Ph.D., Utah State University

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Assistant Professor
Philosophy & Religious Studies
2016
Ph.D., University of Pittsburgh

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Clinical Assistant Professor
Educational Technology & Literacy
2014
Ed.D., University of Maryland - College Park

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Professor
English
2013
Ph.D., Emory University

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Professor
Music
2010
M.A., UNH

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Professor, Chairperson
Finance
2001
Ph.D., Texas A & M University

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Philosophy & Religious Studies
2016
Ph.D., University of Virginia

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Assistant Professor
Women's & Gender Studies
2014
Ph.D., North Carolina University

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Geography & Environmental Planning
Vanessa Beauchamp
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Biological Sciences
2008
Ph.D., Arizona State University

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Biological Sciences
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Ph.D., University of Miami

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English
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M.F.A., University of Iowa

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Communication Studies
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M.A., Bowie State

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Music
2009
MAS, University of Houston

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Elementary Education
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Ph.D., University of Illinois - Chicago

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Family Studies & Community Development
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Ph.D., American Jewish University

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Ph.D., Boston University

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Family Studies & Community Development
2011
Ph.D., University of Pittsburgh

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Art + Design, Art History, Art Education
2013
Ph.D., The Union Institute

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Psychology
2008
Ph.D., VA Commonwealth University

Cheryl T. Brown
Lecturer
Computer and Information Sciences
1996
M.S., Johns Hopkins University

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Psychology
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Chemistry
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Political Science
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DOC, Boston University

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Nursing  
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Ph.D., University of Wisconsin-Milwaukee  
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Art + Design, Art History, Art Education  
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English  
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Associate Professor  
Mathematics  
2011  
Ed.D., Boston University  
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Associate Professor  
Philosophy & Religious Studies  
2012  
Ph.D., University of Buffalo  
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Associate Professor  
Early Childhood Education  
2012  
Ph.D., University Of Maryland  
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Assistant Professor  
Political Science  
2014  
Ph.D., George Washington University  
Jack Cole  
Lecturer  
Secondary Education  
2009  
Ph.D., University of Maryland  
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Assistant Professor  
Graduate Studies Faculty  
2014  
Ph.D., Ohio State University  
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Professor  
Sociology, Anthropology & Criminal Justice  
2010  
Ph.D., American University  
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Professor, Chairperson  
Music  
2013  
DMA, UMCP  
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Instructional Leadership & Professional Development  
2008  
Ed.D., George Washington University  
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Professor  
Communication Studies  
2010  
Ph.D., University of Tennessee  
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Mathematics  
2011  
Ph.D., UMCP  
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Professor  
Health Science  
2007
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Occupational Therapy & Occupational Science
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Educational Technology & Literacy
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Early Childhood Education
2013
Ph.D., University of Maryland

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Psychology
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2008
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2012
Sc.D., Towson University

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Chemistry
2015
Ph.D., Western Michigan University (2012)

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Psychology

2011
Ph.D., McGill University

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Finance
2010
Ph.D., University of Oklahoma

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Biological Sciences
2012
Ph.D., University of CA, Berkeley

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Associate Professor
History
2011
Ph.D., Temple University

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DMA, Peabody Institute of the Johns Hopkins University

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Kinesiology
2012
Ph.D., Louisiana University

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Psychology
2016
Ph.D., Auburn University

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History
1998
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Special Education
2011
EDD, George Washington University

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English
2013
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Biological Sciences
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Ph.D., Purdue University

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Special Education
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Early Childhood Education
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Psychology
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S.c.D., Towson University

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Biological Sciences
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Ph.D., Johns Hopkins University

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MS, Western McDaniel College

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Chemistry
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Ph.D., Clark University

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Ph.D., Emory University

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DMA, Eastman School of Music - Rochester, NY

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SC.D., Towson University

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Mathematics
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Ph.D., George Mason University

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Accounting
2013
MBA, George Washington University

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Psychology
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Ph.D., University of Texas, Austin

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Chemistry
2011
Ph.D., University of California, Berkeley

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Computer and Information Sciences
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Ph.D., University of Arizona

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Geography & Environmental Planning
2012
Ph.D., University of Kentucky
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Secondary Education
2012
Ph.D., Ohio State University

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Clinical Associate Professor
Nursing
2005
Ph.D., University of Maryland School of Nursing

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Educational Technology & Literacy
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Ph.D., Iowa State University

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Mass Communication
2015
Ph.D., Pennsylvania State University

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Mass Communication
2003
Ph.D., Penn State University

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Assistant Professor
Mass Communication
2014
Ph.D., University of Georgia

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Art + Design, Art History, Art Education
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MFA, Maryland Institute College of Art

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Computer and Information Sciences
2008
Ph.D., Penn State University

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Kinesiology
2009
Ph.D., University of Maryland

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Dance
2006
D.Ed., Temple University Philadelphia

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Professor
Early Childhood Education
2011
Ed.D., Harvard University

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Professor
Music
2004
DOC, Indiana University

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Assistant Professor
Special Education
2017
Ph.D., University of South Florida

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Physics, Astronomy & Geosciences
2012
Ph.D., Indian Inst Science

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Professor
Mathematics
2013
Ph.D., Carnegie Mellon University

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History
2007
Ph.D., University of Delaware

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Audiology/Speech-Language Pathology/Deaf Studies
2013
Ph.D., Grad Century CUNY

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Professor, Chairperson
Political Science
2010
Ph.D., SUNY - Albany

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Special Education
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Ph.D., University of Maryland

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Mathematics
1987
Ph.D., Ohio State University

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Kinesiology
1997
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Psychology
2015
Ph.D., CUNY Graduate Center (2014)

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Marketing
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Ph.D., University of Maryland

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Mathematics
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Ph.D., University of South Carolina

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Art + Design, Art History, Art Education
2008
M.F.A., MD Insitute of Art

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Theatre Arts
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Sociology, Anthropology & Criminal Justice
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Ph.D., George Mason University

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Biological Sciences
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Ph.D., Rutgers University

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Nursing
2007
Ph.D., University of Maryland, College Park

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Elementary Education
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Special Education
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M.Ed., Johns Hopkins

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Ph.D., University of Maryland, College Park

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Mass Communication
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Music
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Elementary Education
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Ph.D., Texas Tech University

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Physics, Astronomy & Geosciences  
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Computer and Information Sciences  
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Ph.D., CUNY

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Geography & Environmental Planning  
2011  
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Music  
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Ph.D., Northwestern University

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Educational Technology & Literacy  
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Ph.D., University of Alberta

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Music  
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Ph.D., UCLA

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Psychology  
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MAS, Towson University

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Elementary Education  
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M.A., College Of Notre Dame

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Sociology, Anthropology & Criminal Justice  
2011  
Ph.D., Emory University

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DMA, The Catholic University of America

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Family Studies & Community Development  
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Family Studies & Community Development  
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Early Childhood Education  
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Psychology  
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I. Summary Mission Statement
Towson University fosters intellectual inquiry and critical thinking preparing graduates who will serve as effective, ethical leaders and engaged citizens. Through a foundation in the liberal arts, an emphasis on rigorous academic standards, and the creation of small learning environments, we are committed to providing a collaborative, interdisciplinary and inter-professional atmosphere, excellence in teaching, leadership development, civic engagement, and applied and sponsored research opportunities at the undergraduate and graduate levels. Our graduates leave Towson University with the vision, creativity and adaptability to craft solutions that enrich the culture, society, economy, and environment of Maryland, the region, and beyond.

II. Institutional Identity
Towson University, founded in 1866 as the Maryland State Normal School, offers nationally recognized undergraduate and graduate programs in the liberal arts, sciences, arts, and applied professional fields. Towson University is more than Maryland’s largest comprehensive university; it is an institution that prepares a qualified workforce and produces innovative, evidence-based research. As a productive, research-oriented comprehensive university, it provides students with extraordinary opportunities to work alongside faculty in addressing significant issues, while also generating new knowledge to solve real world societal problems.

The university’s longstanding commitment to creating a multicultural campus is advanced by policies and practices that promote the recruitment and retention of diverse student, staff, and faculty bodies that reflect local, regional, national, and global diversity. Curricular and extracurricular programming supports TU’s commitment to diversity and inclusion.

As a large and complex learning community, TU offers rigorous undergraduate and graduate programs. The undergraduate curriculum promotes the intellectual skills essential for:

- communicating effectively,
- gathering and evaluating information,
- thinking critically and meaningfully,
- using technology effectively.

- appreciating diversity and commonalities, and
- making informed ethical choices.

These skills are grounded in the university’s long-standing commitment to a strong liberal education core that emphasizes an understanding of how the arts and sciences gather, evaluate, and apply information to reach valid conclusions. The core curriculum, combined with focused study in a chosen discipline and a commitment to students’ co-curricular experience, serves to develop intellectual and social abilities that will guide students as contributing members of the workforce and of a democratic society.

The masters and applied doctoral programs build on the strengths of TU and are in areas that are fundamental to the development and vigor of the institution and the State of Maryland by conducting critical research that informs business, health care, and educational practices. The goal of these programs is to prepare ethically and globally minded professionals who are leaders in their fields.

The six colleges that define the fields of study at Towson University include:

The College of Business and Economics, accredited by AACSB International (The Association to Advance Collegiate Schools of Business) in both its accounting and business administration programs, offers a one-of-a-kind Business Excellence program designed to prepare students to enter their careers. AACSB accreditation places the college in the top one percent of business schools worldwide and the top 10 percent in the United States. Offering both undergraduate and graduate programs, the college provides a comprehensive business and entrepreneurial focused education.

Recognized as Maryland’s preeminent teacher education institution as well as a national model for professional preparation, Towson University has a distinguished history in the preparation of classroom teachers and education specialists. The College of Education offers a comprehensive slate of high quality, performance-based, professional education programs for the initial and advanced preparation of teachers and education specialists. The majority of graduates from the college enter schools as teachers and specialists.

The College of Fine Arts and Communication encourages students to develop their creative and analytical abilities, tailored to their aspirations, by encouraging dialogue, inspiration, passion and beauty. These attributes are fostered through a broad liberal arts education and specialized professional training. Recognized as a thriving visual arts center for Maryland, the college contributes to the cultural life of Towson and the Greater Baltimore region.

The College of Health Professions develops outstanding professionals at the undergraduate and graduate levels in a wide range of health care, human service, and sport-related fields that promote and enhance health, well-being, and human performance in a diverse world. Students are supported in a wide array of applied experiences that complement their academic coursework, including via the Institute of Well-being, which provides a wide range of professional and inter-professional opportunities that develop and evaluate best practices, promote professional development, facilitate research, and enhance the lives of community members through outreach programs.

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.

The Jess and Mildred Fisher College of Science and Mathematics offers undergraduate and graduate programs in the physical, mathematical, computational and life sciences, with an emphasis on student success through improving student retention, persistence, and time-to-graduation. The FCSM promotes a wide range of opportunities for authentic research experiences for all undergraduates. The college is the home of numerous STEM education and outreach programs including Towson UTeach — Towson’s path to becoming a high school science or mathematics teacher.

III. Institutional Capabilities

By Carnegie Classification, Towson University is a Masters (Comprehensive) University I. It has achieved national prominence as a premier comprehensive university by offering a wide-range of excellent graduate and undergraduate degree programs. Towson University has increased 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 outreach to business, education, non-profit, and health care organizations.

Towson University’s faculty members actively pursue scholarship and creative activities that complement and expand disciplinary knowledge while maintaining superior teaching. TU values and rewards equally the scholarships of discovery, teaching, integration, and application. Members of Towson University also engage in a wide range of research, entrepreneurship and service activities which support TU’s institutional outreach programs to government, health care, sport organizations, non-profit groups, education, business, and the fine arts. Towson University is designated by the Carnegie Foundation as a university recognized for curricular engagement, outreach, and partnership. Our intercollegiate athletics program is an integral part of building campus community and pride. Athletics also provides leadership development and other co-curricular opportunities for both student-athletes and the student body as a whole.

TU capitalizes on its location by providing varied and distinctive opportunities for students, staff and faculty, learning, leadership development, teaching, and research. It recognizes its obligation to serve at the local, regional, state, and national levels through its academic programs, applied research, and professional services. Towson University is an integral partner with the state’s community college system. TU serves a robust and growing transfer student population, focusing on program offerings, integration and success in completing their baccalaureate degree and beyond. As part of its pursuit to meet societal needs in a comprehensive manner, Towson University will maintain a wide range of baccalaureate programs while further developing graduate education, and expanding its focus on research, particularly in the applied fields.

As Towson University has grown, we strive to maintain our commitment to student-centered experiences that include frequent engagement with faculty and librarians through diverse course formats and settings. This value is reflected in the master plan that calls for substantial modification to and growth of the academic precinct over the next 10 years. The plan includes a focus on designing new academic and academic support spaces which emphasize the values of interactive learning, informal teaching and learning communication, and individual student attention.

IV. Institutional Objectives and Outcomes

In keeping with the Towson University 2020 Focused Vision, the University System of Maryland Strategic Plan, and the Maryland State Plan for Higher Education, TU will pursue the following directions:

We are committed to:

- Rigorous undergraduate and graduate education,
- Expanded interdisciplinary and co-curricular experiences,
- Innovative community outreach to meet societal needs,
- The University Library as a center for intellectual inquiry, and
- Quality faculty and staff professional development.

Our undergraduate and graduate student learning outcomes include:

- Information literacy and technological competency
- Effective communication
- Critical analysis and reasoning
- Specialized knowledge in defined fields
- Working in multifaceted work environments
- Local and global citizenship and leadership

TU2020 is the evolution of Towson University’s two previous strategic plans, TU2010 and TU2016 and focuses the action items into institutional priorities as presented.

Academic Excellence and Student Success: Towson University’s top priority, academic excellence and student success, is dependent on the teaching and mentorship of faculty. Academic innovation through academic transformation and course redesign are central to enabling student success. We are committed to the continuous improvement process of examining programming, curricular and co-curricular offerings to ensure students have outstanding educational experiences and opportunities.

Assess and strengthen academic programs to ensure students develop Towson’s Learning Outcomes.

- Review and evaluate curriculum to ensure challenging content that addresses workforce and geographic demands.
- Include diverse perspectives across the curriculum.
- 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.
- Improve recruitment, marketing and outreach to make TU a first choice institution for an increasing percentage of students.

We will continue to improve graduation completion and retention rates, close the achievement gap, ensure a seamless transfer process, and prepare globally conscious students for an expanding workforce.

Optimize retention and time to graduation for all students.
• Strengthen student advising.
• Implement an early warning system to assist students throughout their academic career.

Provide support programs for student populations with non-traditional needs.

• Identify and address needs of non-traditional students.
• Support transfer student transition through model programs focusing on orientation and advising.

A Model in Higher Education through Innovation in Teacher and Leader Preparation, STEM Workforce Development, and a National and International Reputation for Arts and Arts Education: Towson University will focus program enhancements in areas of existing strength. We will continue to lead the nation as an example of best practices in teacher preparation and school leadership. In addition to teacher preparation, we will reinforce and expand our contributions to workforce development in critical STEM disciplines such as cyber-security, forensic chemistry, and environmental science.

We will continue to expand our national and international reputation in arts and communication.

Feature the arts, academics and community outreach as key components of the Towson University experience.

• Celebrate the accomplishments of the university community and alumni within TU and beyond.

Continually assess our success in meeting marketplace demands and continuing education needs through feedback from alumni, donors, employers and business and government leaders.

• Right-size enrollment, faculty and staff to build capacity in high demand fields such as STEM, health professions and education.
• Continue to develop and implement regular market research from opinion leaders, alumni and employers.

Innovation, Entrepreneurship and Applied Research: Towson University’s focus on innovation and entrepreneurship facilitates collaborations and strategic partnerships with the community and state. We will continue to support our faculty, staff and student applied research endeavors and connect their work to teacher transformation, innovation and entrepreneurship.

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 successful community outreach efforts and continue to enhance collaboration with our neighbors.

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.

Communicate the significance of 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.

We will continue to promote economic and workforce development to keep the majority of TU graduates working in Maryland.

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.

Internships and Experiential Learning Opportunities: Towson University will expand its emphasis on internships and experiential learning, and significantly increase corporate, educational, government and health care partnerships to help provide these opportunities.

Increase corporate, educational, government, and health care partnerships to help provide internship and experiential learning opportunities.

• Build upon successful community outreach efforts and continue to enhance collaboration with our neighbors.
• Further implement service learning as a component of the academic experience tied to the curriculum with linkages to the region.

Increase philanthropic support to achieve TU’s goals.

• Maximize fundraising opportunities and collaboration throughout TU.
• Aggressively identify and cultivate friends and extramural funds for academic, arts, athletics, and community and student development endeavors.

Involve students in co-curricular educational experiences on- and off-campus that build civic engagement and 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.

A Model for Leadership Development: Towson University is rooted in our strong commitment to civic engagement, civility and ethics. TU supports personal and professional growth by recognizing and developing positive leadership philosophies and styles. Our primary goal is to instill in our students the qualities essential for outstanding, lifelong leadership in all aspects of their lives. We are committed to increasing credit and noncredit opportunities in leadership development for our faculty, staff and students.

Challenge, inspire and support members of the academic community to perform at the highest level.

• Provide credit and non-credit bearing programming for students, faculty, staff and the community to develop and understand leadership philosophies and styles.
• Inspire students, faculty and staff to become educated, engaged, informed citizens with leadership skills and a passion for intellectual challenge.
A Model for Campus Diversity: Towson will further strengthen its commitment to diversity and continue to provide a safe, inclusive, welcoming, and peaceful community respectful to all. Our institutional strategies will expand and continue to provide a forum for campus dialogue and action.

Enhance and celebrate a diverse and complex university.

- Promote appreciation for and advancement of equity, diversity and inclusion at TU.
- Enhance recruitment and retention of students from under-served and/or underrepresented populations.
- Close the achievement gap for first generation, low income and students from underrepresented groups.
- Enhance recruitment and retention of faculty and staff from under-served and/or underrepresented populations.
- Support respectful and mutually beneficial community collaboration.

A Model of Outstanding Stewardship – People and Natural Resources: Towson University is committed to serving as an effective steward of our natural resources. This includes ensuring that students, faculty, staff and the community have opportunities to realize their full potential. We are dedicated to continue to empower our campus and greater community to make choices for lifelong well-being and effective stewardship of our natural resources.

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.

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.

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.

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.

- Empower faculty with innovative pedagogical methodologies and establish best practices within each discipline.
- Offer professional development programs on the use of online delivery and new technology to support faculty and students.

Emphasize the shared governance structure throughout TU to ensure responsive organizational leadership.

- Encourage and support the university community to engage in effective shared governance.
- Improve communication in the development of priorities and policies.

Appendix B: 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 matriculated at the university. 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 contact the student prior to determining whether to release 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, 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, permanent address, Towson University email address, 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. If they no longer wish to have Directory information withheld, they must also notify the Office of the Registrar in writing.

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 C: VIII-2.70 Policy on Student Classification for Admission and Tuition Purposes

USM Bylaws, Policies and Procedures of the Board of Regents

VIII-2.70 POLICY ON STUDENT CLASSIFICATION FOR ADMISSION AND TUITION PURPOSES


I. Policy

A. Purpose

To extend the benefits of its system of higher education while encouraging the economical use of the State’s resources, 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 residency for the purpose of admission and assessing tuition at USM institutions.

B. Qualification for In-State Status

Generally, in order to qualify for in-state status, prospective, returning or current students must demonstrate that they are a permanent Maryland resident. Under certain circumstances as set forth in this Policy, students who are not permanent Maryland residents may qualify temporarily for in-state status. Students who do not qualify for in-state status under this policy shall be assigned out-of-state status for admissions and tuition purposes.

C. Standard of Proof

Students seeking in-state status shall have the burden of proving by clear and convincing evidence that they satisfy the requirements and standards set forth in this Policy. Assignment of in-state or out-of-state status will be made by each USM institution upon review of the totality of facts known or presented to it.
II. DETERMINATION OF RESIDENCY STATUS

A. Criteria for Determination of Residency Status

An initial determination of residency status will be made at the time of admission and readmission based upon information provided by the student with the signed application certifying that the information provided is complete and correct. Additional information may be requested by the institution to clarify facts presented. To qualify for in-state status, the student must demonstrate that for at least 12 consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state status, the student had the continuous intent to reside in Maryland indefinitely and for a primary purpose other than that of attending an educational institution in Maryland. The student will demonstrate the requisite intent by satisfying all of the following requirements for the 12 month periods (or shorter period indicated):

1) Has continuously maintained their primary living quarters in Maryland.

2) Has substantially all 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 of Maryland, and has filed a Maryland Resident Tax Return.

4) Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state. Students who have lived in Maryland for at least 12 consecutive months but who have had their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state.

5) Has possessed a valid Maryland driver's license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have lived in Maryland for at least 12 consecutive months but who have held a Maryland driver’s license for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their driver’s license was issued in Maryland within 60 days after moving to the state.

6) Is currently registered to vote in Maryland, if registered to vote (no time requirement).

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 and without interruption in Maryland.

B. Presumption of Out-of-State Status

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 a 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. A student will be considered financially independent if the student provides 50% or more of their own living and educational expenses and has not been claimed as a dependent on another person’s most recent tax returns.

III. CHANGE IN CLASSIFICATION FOR TUITION PURPOSES

A. Petition for Change in Classification for Tuition Purposes

After the initial determination is made, a student seeking a change to in-state tuition status must submit a Petition for Change in Classification for Tuition Purposes that includes all of the information the student wishes the institution to consider. All information must be submitted by the institution’s deadline for submitting a petition for the semester for which the student seeks reclassification. Only one Petition may be filed per semester.

B. Criteria for Change in Tuition Status

A student seeking reclassification from out-of-state to in-state tuition status must demonstrate by clear and convincing evidence that for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state status, the student had the continuous intent to 1) make Maryland their permanent home; 2) abandon their former home state; 3) reside in Maryland indefinitely; and reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

A student will demonstrate the requisite intent by satisfying all of the following requirements for a period of at least twelve consecutive months (or for the shorter period of time indicated) 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. 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 and the totality of facts known to the institution. Students must demonstrate (providing appropriate documentation as necessary) that for the relevant period they:

1) Continuously maintained their primary living quarters in Maryland.

2) Has substantially all of their 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 Resident Tax Return.

4) Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state. Students who have been living in Maryland for at least 12 consecutive months but who have held their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state.

5) Has possessed a valid Maryland driver’s license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have been living in Maryland for at least 12 consecutive months but who have held a Maryland driver’s license for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their driver’s license was issued in Maryland within 60 days after moving to the state.
6) Is currently registered to vote in Maryland, if previously registered to vote in another state (no time requirements).

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 either not raised the presumption set forth in Section II.B, or alternatively if the student’s circumstances have raised the presumption set for in Section II.B above the student has rebutted that presumption.

C. Rebuttal Evidence

If the information received by the institution about the student has raised the presumption set forth in Section II.B, the student bears the burden of rebutting the presumption set forth in Section II.B by presenting additional evidence of objectively verifiable conduct to rebut the presumption and show the requisite intent. Rebuttal 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 and the totality of facts known to the institution. 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. 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.

For purposes of rebutting the presumption, additional evidence that will be considered includes, but is not limited to:

1) Source of financial support:

a. Maryland employment and earnings history through sources beyond those related 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.).

b. Evidence the student is Financially Dependent for the previous 12 months, upon a person who is a resident of Maryland.

2) 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 commitment to the student’s community or to the State of Maryland.

3) Registration as a Maryland resident with the Selective Service, if applicable.

4) Evidence that the student is married to a Maryland resident.

5) Evidence that the student attended schools in Maryland for grades K-12.

6) Evidence showing the student uses their Maryland address as their sole address of record for all purposes including on health and auto insurance records, bank account, tax records, loan and scholarship records, school records, military records, leases etc.

7) 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 reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

8) Evidence of life and employment changes that caused the student to relocate to Maryland for reasons other than primarily educational purposes (e.g. divorce, family relocation, taking care of a sick family member, etc.).

D. Appeal

A student may appeal an adverse decision on a Petition for Change in Classification.

E. Change in Circumstances Altering In-State Status

The student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status. Failure to do so could result in retroactive charges for each semester/term affected.

F. Incomplete, Untimely, False or Misleading Information

If necessary, information is not provided by the institution’s deadline, the USM institution may, at its discretion, deny or revoke in-state status. 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 policies. Such action may include suspension or expulsion. In such cases, the institution reserves the right to retroactively access all out-of-state charges for each semester/term affected.

IV. CRITERIA FOR TEMPORARY QUALIFICATION OF NON-RESIDENTS FOR IN-STATE STATUS

Non-residents with the following status shall be accorded the benefits of in-state status for the period in which they hold such status, if they provide clear and convincing evidence through documentation by the institution’s deadline for the semester for which they seek in-state status, showing that they fall within one of the following categories:

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. An active duty member of the Armed Forces of the United States as defined in 38 U.S.C.A. §101(10) as the United States Army, Navy, Marine Corps, Air Force, and Coast Guard including the reserve components thereof who is stationed in Maryland, resides in Maryland, or is domiciled in Maryland, or his/her spouse or financially dependent child of such an active duty member. Spouses and children who qualify for exemptions under this provision will retain in-state status for tuition purposes as long as they are continuously enrolled, regardless of whether the active duty member’s station assignment, residence, or domicile remains in Maryland.

D. A veteran of the Armed Forces of the United States who provides documentation that they were honorably discharged and currently resides or is domiciled in Maryland.

E. A veteran who lives in Maryland and was discharged from a period of at least 90 days of service in the active military, navy, or air service less than three years before the date of the veteran's enrollment and
is pursuing a course of education with educational assistance under the Montgomery G.I. Bill (38 U.S.C. §3001) or The Post 9/11 G.I. Bill (38 U.S.C. §3301).4

A veteran so described will continue to retain in-state status if the veteran is enrolled prior to the expiration of the three-year period following discharge, is using educational benefits under either chapter 30 or chapter 33, of title 38 United States Code and remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school.

F. Anyone who lives in Maryland and:

1. Is using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. §3319) and enrolls within three years of the transferors discharge or release from a period of at least 90 days of service in the active military, navy or air service, or
2. Is using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. §3319) and the transferor is a member of the uniformed services who is serving on active duty, or
3. Is using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. §3311(b) (9)).5

An individual as described in F(1) will continue to retain in-state status if the individual is enrolled prior to the expiration of the three-year period following the veteran’s discharge, is using educational benefits under chapter 33, of title 38, United States Code and remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school.

G. A member of the Maryland National Guard, as defined in the Public Safety Article of the Maryland Annotated Code, who joined or subsequently serves in the Maryland National Guard to: (i) provide a critical military occupational skill; or (ii) be a member of the Air Force Critical Specialty Code as determined by the National Guard.

H. For UMUC only, 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.

I. 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. ADDITIONAL PROCEDURES

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 has been claimed as a dependent on another person’s prior year tax returns or is a ward of the State of Maryland.

B. Financially Independent: For the purposes of this Policy, a financially independent student is one who provides 50% or more of their own living and educational expenses and has not been claimed as a dependent on another person’s most recent tax return.

C. Parent: A parent may be a natural parent, or, if established by court order recognized under the law of the State of Maryland, an adoptive parent.

D. Guardian: A guardian is a person so appointed by a court order recognized under the laws of the State of Maryland.

E. Spouse: A spouse is a partner in a legally contracted marriage.

F. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the law of Maryland.

G. 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.

H. 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 requirement.

I. Armed Forces of the United States: As defined in 38 U.S.C.A. §101(10) as the United States Army, Navy, Marine Corps, Air Force, and Coast Guard, including the reserve components thereof.

VII. IMPLEMENTATION

This policy as amended by the Board of Regents on February 17, 2017, and as further amended on July 1, 2017, shall be applied to all student tuition classification decisions effective Spring semester 2018 and thereafter.

3. Annotated Code of Maryland, Education Article § 15-106.4.
5. 38 U.S.C.A. § 3679(c).

Appendix D: Satisfactory Academic Progress (SAP) Policy for Financial Aid Recipients

Satisfactory Academic Progress (SAP) Policy for Financial Aid Recipients

SAP Policy versus Academic Standing Policy

The Satisfactory Academic Progress (SAP) Policy is different from the Academic Standing Policy.
The SAP Policy only affects eligibility to receive financial aid.
The Academic Standing Policy applies to all TU students and violations can lead to dismissal from the university. For more information on the Academic Standing Policy, see Academic Standards and Procedures in this catalog.

Cumulative Progress Standards (Effective June 2011)
Undergraduate and Graduate students must meet all four of these cumulative SAP standards to be eligible to receive most financial aid programs (including student and parents loans; state scholarships; Federal Work-Study funds; and federal, state, and institutional grants).

1. Minimum Cumulative Grade Point Average

<table>
<thead>
<tr>
<th>Cumulative Attempted TU and Transfer Units</th>
<th>Minimum GPA</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate Students with 1-29.5 attempted units</td>
<td>1.50</td>
</tr>
<tr>
<td>Undergraduate Students with 30-59.5 attempted units</td>
<td>1.75</td>
</tr>
<tr>
<td>Undergraduate Students with 60 attempted units and above</td>
<td>2.00</td>
</tr>
<tr>
<td>All Graduate Students</td>
<td>3.00</td>
</tr>
</tbody>
</table>

2. Minimum Course Completion Rate (Pace) = 67 percent
   - You must pass at least 67 percent of your cumulative attempted units.
   - Completion Rate Formula = Cumulative Completed Units / Cumulative Attempted Units.

3. Maximum Attempted Units for Undergraduate Students
   - You must complete all graduation requirements before you reach 150 attempted units.
   - If you reach 150 attempted units, your eligibility to receive aid will be suspended, but you may appeal to request aid for additional terms.

4. Maximum Developmental Course Units
   - If you reach 24 attempted developmental course units, you must appeal to request aid for additional terms.
   - If you reach 30 attempted developmental units, you will become ineligible to receive any additional aid for developmental courses, but could still be eligible for aid for non-developmental courses if you are meeting all the other cumulative SAP standards listed above.

Definition of Unit Terminology
- Attempted Units - include units for all accepted transfer courses and all TU courses you were still registered for as of each term's change of schedule deadline.
- Completed Units - include accepted transfer courses and courses completed at TU with an earned letter grade (A, B, C or D) or passed under the Pass/Fail provision.
- Uncompleted Units - include all Attempted Units not successfully completed. This includes all courses with any of the following grades: AU (Audit), W (Withdraw), I (Incomplete), U (Unsatisfactory), and F or FX (Failure).
- Repeating a passed course to earn a higher grade, will only count as Completed Units once. All other attempts will count as Uncompleted Units.

- Developmental courses include DVMT (Math), DVRD (Reading), and DVWR (Writing) courses.
- TU excludes developmental courses from the Completion Rate formula and Maximum Attempted Units calculations.

Tips on Avoiding SAP Violations
- If you officially drop a course before the end of the term's change of schedule deadline, it will not count as an Attempted Unit, and will not harm your completion rate.
- Remember that you reduce your completion rate every time you withdraw from a course after the change of schedule deadline, do not earn a passing grade, audit a course, or repeat a course that you have already passed.

Aid Disbursement Policy for Repeats of Passed Courses
1. Before we can disburse aid for any term, we have to count how many units you are taking that term, but we can only count units from courses that are eligible for aid.
2. To receive that term's aid disbursements, your total aid units for that term must meet the minimum enrollment requirements for each of your financial aid awards. For example, student loans require at least 6 aid units per term.
3. Federal aid regulations only allow students to receive aid for one additional repeat attempt of a passed course.
4. If you choose to repeat a course a second time after you have already passed it, TU must ignore that course when calculating your total aid units for that term.
5. In the context of this policy “D” grades will always be treated as passing grades.

Example:
- A student has already passed MATH 115 with a “C” grade, but repeats it two more times.
- During the term that he repeats MATH 115 for the second time, he also takes one other 3-unit aid-eligible course.
- Because we must exclude the MATH 115 units, he only has 3 total “aid units” for that term.
- If he has any aid that requires more than 3 units, we will have to cancel those aid disbursements for that term.

SAP Evaluation Process
Evaluation Cycle
- TU evaluates SAP at least once per year in June.

Suspension
- If you have violated any of the cumulative SAP standards, we will suspend your eligibility to receive financial aid for all future terms at TU.
- Suspended students are not eligible to receive any student or parents loans; state scholarships; Federal Work-Study funds; or federal, state and institutional grants.
Appendix E: Code of Student Conduct

I. Policy Statement: Towson University ("Towson" or "University") is dedicated to supporting and maintaining a scholarly community. To help protect the campus community and advance its educational mission, the University publishes a Code of Student Conduct ("Code") and imposes discipline upon Students found responsible for violating that Code. The purpose of this Policy (and associated procedures) is to ensure a fair and impartial disciplinary process. The Policy should not only deter dangerous behaviors or those contrary to the University's mission, but also assist Students to develop critical thinking and decision-making through engagement in the disciplinary process. The University's procedures associated with determining whether a violation of the Code occurred and identifying appropriate disciplinary action seek to provide Students with fundamental fairness, including notice of the charges and an opportunity to be heard, prior to the imposition of disciplinary action.

The University's policy is to promptly and thoroughly investigate allegations that a Student violated the Code. Upon receiving such allegations, the Office of Student Conduct & Civility Education ("OSCCE") conducts a preliminary review of the circumstances and reasonably available information. It does so to inform its decision whether there is sufficient evidence to support a reasonable belief the individual violated the Code. If there is not sufficient evidence, the University withdraws the charge(s) and takes no further action. If there is sufficient evidence, it proceeds with the disciplinary process described herein.

Students have the right to participate in the disciplinary process and may offer evidence and information consistent with relevant procedures. A Student may appeal the imposition of disciplinary action consistent with this Policy and procedures.

Upon finding that a Student has violated the Code, Towson imposes disciplinary action, including though not necessarily limited to, suspending or expelling the Student. It may also impose other disciplinary obligations upon Students found to have violated the Code (e.g., a meeting a Student must attend or an activity they must complete prior to being allowed to return to campus). As appropriate, the University will take reasonable efforts to impose discipline which effectively encourages and fosters the personal, educational, and social development of those Students found to have violated the Code.

When Students choose to accept admission to Towson, they are expected to maintain a high standard of conduct as outlined by this Code. Because the University establishes high standards for membership in the TU community, its standards of conduct, while falling within the limits of the law, may exceed federal, state, or local requirements.

II. Responsible Executive and Office:

Responsible Executive: Vice President for Student Affairs

III. Entities Affected by this Policy: All members of the University Community.

IV. Scope

1. The Code applies to all Students, Student Groups, and Student Organizations.

2. Each Student shall be responsible for their conduct under the Code for the period of time they meet the definition of Student.

3. This Code applies to behavior: (1) occurring in any University facility or on any University property; (2) occurring in connection with any University sponsored, recognized, or approved program, visit, or activity; (3) that adversely affects the University's pursuit of its mission or policies; or (4) that otherwise threatens the health or safety of any member of the University Community.

4. When there are pending criminal or civil charges:
   a. The University will pursue its disciplinary process independent of those pending charges, regardless of whether they are dismissed, dropped, or otherwise resolved.
   b. The OSCCE Director may approve Interim Administrative Action prior to the conclusion of a criminal or civil case.
   c. The OSCCE Director will determine whether to proceed with the disciplinary process or wait for the judicial process to conclude. This decision will be informed by the reasonably available evidence, nature of the charges, potential for harm to the University Community, location of the incident (on- or off-campus), and/or other relevant factors.

5. Campus disciplinary actions for allegations of off-campus Event-Related Misconduct may take place regardless of the existence, status, or outcome of any civil or criminal charges in a court of law related to the alleged misconduct.

V. Definitions

A. Censure is 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.

B. Conduct Resolution Meeting is an informal, non-adversarial meeting between the Responding Party and a University administrator designated by the OSCCE Director. The University offers an opportunity to participate in this meeting to all Student(s) charged with a violation of this Code.

C. Denial of Access means prohibiting a Student from coming onto designated University property.

D. OSCCE Director is the person designated by the President as responsible for the administration of the Code.

E. Discrimination is unequal treatment based on a legally protected status (e.g., race, color, sex, gender, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, veteran status, disability, religion, genetic information, homelessness, or any other legally protected class) that (i) is

Denied Appeals

- If your appeal is denied, you will remain permanently ineligible for financial aid at TU unless you continue to attend TU without aid and improve your overall record enough to meet all of the required cumulative SAP standards.

Appendix E: Code of Student Conduct

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Because the University establishes high standards for membership in the TU community, its standards of conduct, while falling within the limits of the law, may exceed federal, state, or local requirements.

II. Responsible Executive and Office: Vice President for Student Affairs

The Financial Aid Office will review the appeal and will e-mail the appeal decision to the student’s TU e-mail account.

III. Entities Affected by this Policy: All members of the University Community.

IV. Scope

1. The Code applies to all Students, Student Groups, and Student Organizations.

2. Each Student shall be responsible for their conduct under the Code for the period of time they meet the definition of Student.

3. This Code applies to behavior: (1) occurring in any University facility or on any University property; (2) occurring in connection with any University sponsored, recognized, or approved program, visit, or activity; (3) that adversely affects the University's pursuit of its mission or policies; or (4) that otherwise threatens the health or safety of any member of the University Community.

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   c. The OSCCE Director will determine whether to proceed with the disciplinary process or wait for the judicial process to conclude. This decision will be informed by the reasonably available evidence, nature of the charges, potential for harm to the University Community, location of the incident (on- or off-campus), and/or other relevant factors.

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C. Denial of Access means prohibiting a Student from coming onto designated University property.

D. OSCCE Director is the person designated by the President as responsible for the administration of the Code.

E. Discrimination is unequal treatment based on a legally protected status (e.g., race, color, sex, gender, gender identity or expression, sexual orientation, marital status, age, national origin, political affiliation, veteran status, disability, religion, genetic information, homelessness, or any other legally protected class) that (i) is
sufficiently serious to interfere with or limit individual's opportunity to participate in or benefit from a University program or activity; or (ii) adversely affects a term or condition of the individual's working, learning, and living environment at the University.

F. Event-Related Misconduct means misconduct (including, though not limited to, rioting, assault, theft, vandalism, or fire-setting) related to a University sponsored event, that results in harm to persons or property or otherwise poses a threat to the campus community or stable operation of the University.

G. Event-Related Misconduct Suspension or Expulsion means that, 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 Event-Related Misconduct must be supported by written findings signed by the Vice President for Student Affairs. A record of any Suspension or Expulsion for 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.

H. Expulsion or Expelled constitutes permanent separation of the Student from the University. Any Student who is Expelled shall not be entitled to any tuition or fee refund.

I. Faculty Member or Instructor means any person hired by the University to conduct classroom activities.

J. Fines are a monetary sanction imposed for certain Code violations. The severity of the incident, as well as a prior disciplinary record, may impact the amount of a Fine imposed. Failure to pay Fines may result in late fees or other limitations on a Student’s ability to register or attend classes.

K. Harassment means unwelcome conduct (including written or electronic communication) directed at a specific person(s), which is so severe, pervasive, or persistent that it interferes with or limits a person's ability to participate in, or benefit from the services, activities, or opportunities offered by the University.

L. Hearing Officer is a person identified by OSCCE to make decision regarding responsibility for alleged violations of this Code.

M. Hearing Board means those student, faculty, or staff members authorized by the OSCCE Director to determine whether a Student has violated the Code in cases where the discipline imposed may include Suspension, Expulsion, or Removal from On-Campus Housing.

N. Interim Administrative Action is action that is imposed by the University pending a final decision about a violation of this Code.

O. On-Campus Housing includes all residential buildings located on Towson University property

P. Organizational Dissolution is permanent withdrawal of recognition by the University, including denial of the use of University facilities or funds.

Q. Outcome Letter means the communication in letter form provided to the Responding Party upon the conclusion of the disciplinary process. This will include the decision of responsibility for any charge(s) made by the appropriate hearing body, any sanction(s) imposed, if appropriate, and information regarding the right and deadline to appeal.

R. Policy means the written regulations of the University as found in, but not limited to, the Code, Policies for On-Campus Housing, the Undergraduate Catalogue, the Graduate Catalogue, and policies found on the Towson University Policies Affecting Students page. www.towson.edu/Studentaffairs/policies/

S. Towson University’s Policy on Sexual Misconduct is the Policy addressing sexual misconduct and can be found at https://www.towson.edu/Studentconduct/sexualmisconduct/06-01.60-policy-on-sexual-misconduct.pdf

T. Preponderance of Evidence is the standard of proof used in disciplinary proceedings. This means that the evidence demonstrates that it is more likely than not that the conduct occurred and constitutes a violation of the Code.

U. Probation is a specified period of time during which any further disciplinary violation by a Student may result in Suspension, Expulsion, or Removal from On-Campus Housing.

V. Removal from On-Campus Housing means prohibiting a Student from residing in On-Campus Housing for a stated period of time or visiting On-Campus Housing. Any Student removed from On-Campus Housing shall not be entitled to any refund of housing costs.

W. Reporting Party is any person who believes that they have been the victim of a Student’s misconduct or any person who submits an allegation that a Student violated the Code.

X. Responding Party is any Student, Student Group, or Student Organization accused of violating the Code.

Y. Restitution means a monetary sanction imposed upon a Student, Student Group, or Student Organization whose Prohibited Conduct caused monetary loss or damage to the University. Fines may be imposed in addition to restitution. Failure to pay Restitution may result in limitations on a Student’s ability to register or attend classes. Restitution to third parties other than the University (including another Student) is not discipline the University imposes.

Z. Social Probation means excluding a Student Group or Student Organization from participating in certain activities, such as NCAA athletic events/practices, social events, or similar organizational events. Violations of the terms of Social Probation (or any other violation of this Code during the Social Probation period) will normally result in a Fine, Expulsion, Suspension, or Organizational Dissolution.

AA. Student includes all persons who are admitted to the University (whether or not they are currently enrolled in courses) to pursue undergraduate, graduate, professional, certificate, non-degree, or continuing studies. Persons who miss a Fall or Spring term and are required to submit an application for reenrollment are not subject
to the Code unless they are serving the term of a sanction (e.g., Suspension, etc.).

**BB. Student Appeals Committee** is a University Senate committee comprised of: (i) four elected tenured faculty members (with no two being from the same college), (ii) two administrators appointed by the President, (iii) two Students appointed by the President of the Student Government Associate, and (iv) the OSCCE Director. This committee is responsible for considering appeals of cases resulting in Suspension, Expulsion or Removal from On-Campus Housing.

**CC. Student Conduct Appellate Board** is a group comprised of: (i) four administrators and (ii) one Student. The board members are appointed by the OSCCE Director and the Director of Housing & Residence Life. The board is responsible for considering appeals of all cases, except those which may result in Suspension, Expulsion, or Removal from On-Campus Housing.

**DD. Student Group** is a number of persons (whether Students or not) who associate with each other but who have not complied with University requirements for registration as an organization. A Student Group also includes formerly-recognized student organization or groups which have lost recognition as a consequence of a decision by their governing entity or the University.

**EE. Student Organization** means a number of Students (or others) who associate with each other and have complied with formal requirements for University recognition.

**EF. Support Person** Both the Responding Party and Reporting Party, when the charges allege a violation of the Sexual Misconduct Policy, are entitled to be accompanied by a Support Person in meetings related to the investigative and disciplinary process. This includes informational meetings, Investigation meetings, conduct resolution meetings, and University hearings. A Support Person is someone who provides support, guidance, and/or advice to the individual. However, a Support Person cannot speak on behalf of the individual, directly participate in the proceedings, or submit any written requests (including appeals) on behalf of the individual. The Support Person also cannot serve as a witness in the context of an Investigation. A Support Person may be a family member, friend, faculty member, staff member, attorney, or other advisor/supporter. Should a Support Person not adhere to these expectations or attempt to play a direct and/or active role in any proceedings, the Hearing Officer or staff member, at their discretion, may order the excusal of the Support Person.

**GG. Suspension** involves (i) separation of the Student from the University for a specified period of time or (ii) prohibition upon a Student Group or Student Organization from engaging in all activities for a specified period of time. It may also include a Denial of Access. Any Student, Student Group, or Student Organization subject to Suspension shall not be entitled to any tuition or fee refund.

**HH. University Community** means Students, University Officials, visitors, and guests.

**II. University Hearing** is a type of disciplinary procedure intended to evaluate the responsibility of a Student(s) who is alleged to have violated this Code when the possible sanction(s) could result in Suspension, Expulsion, or Removal From On-Campus Housing (see section below for more information).

**JJ. University Official** includes any person employed by the University and performing assigned administrative, educational, professional, or paraprofessional responsibilities (including Student resident assistants and building managers).

**VI. Prohibited Conduct:**

The following misconduct is subject to disciplinary action:

1. Intentionally furnishing false or untruthful information to a University Official.

2a. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, or normal University operations, including University-sponsored activities or events.

2b. Off-campus conduct that is disorderly and disrupts others in the community.

3. Uncooperative behavior and/or failure to comply with reasonable instructions of University Officials acting in performance of their duties.

4a. Possession or use of alcoholic beverages by any person under 21 years of age.

4b. Providing or otherwise making available an alcoholic beverage to any person under 21 years of age.

4c. Consuming alcohol from an open container either on campus property at a location not approved by the University or on public property in an unlawful manner.

4d. Public intoxication.

5a. Possession or use of illegal drugs, unauthorized controlled substances, or drug paraphernalia.

5b. Sale, distribution (or intent to distribute), and/or manufacture of illegal drugs or controlled substances.

5c. Possession, sale, and/or distribution (or intent to distribute) of medication not in accordance with a medical doctor's prescription.

6. Causing physical harm to or unwanted physical contact with any person.

7. Threats of violence or placing a person in fear of imminent physical injury or danger.

8. Endangering conduct that imperils or jeopardizes the health or safety of any person or persons.


11. Acts that unreasonably invade the privacy of another person.
12. Any violation of the Policy on Sexual Misconduct (06-01.60).
13. Lewd, obscene, or indecent behavior.
14. Intentionally or recklessly damaging, destroying, defacing, or tampering with University, public, or personal property of another.
15. Theft of property or services. This includes, but is not limited to, attempted theft, conspiracy to steal, knowing possession of stolen property, misappropriation of another's property, extortion, blackmail, and embezzlement.
16. Unauthorized entry into, presence at, or use of University property, facilities, systems, or records.
17. Engaging in Event-Related Misconduct. See Definitions.
18. Violation of published Towson University regulations and policies.
19. Violation of state, federal, and/or local laws.
20. Violation of the University Policy on Weapons Prohibited (06-01.11).
21. Possession of explosives, fireworks, or pyrotechnic paraphernalia on campus.
22. Violation of the Policies for On-Campus Housing.
23. Violation of the Student Academic Integrity Policy (03-01.00).
24. 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 impliedly indicates the University's endorsement.
25. Retaliation against a person(s) for reporting or alleging misconduct (including violations of University policy or the Code) or participating in any related University process or procedure.
26. Violation of any disciplinary sanction imposed by a University Official.

VII. Interim Administrative Action

The Vice President for Student Affairs or designee may impose Interim Administrative Action for a reasonable period of time and prior to final resolution of the disciplinary charges. Such action may include emergency Suspension, Denial of Access, Removal from On-Campus Housing, changes to academic schedule or housing assignment, no contact orders, and/or other restrictions. A Student may request a meeting with a University Official to discuss the Interim Administrative Action. At that meeting, they may appeal the decision and present reasons why the Interim Administrative Action is not appropriate or reasonable under the circumstances. The University Official will then confer with the Vice President of Student Affairs before deciding the appeal.

1. Emergency Suspension
   a. Pending the outcome of the disciplinary process, the Vice President for Student Affairs, or designee, may order the emergency Suspension of a Student from some or all University activities, including Removal from On-Campus Housing. Such an emergency Suspension may become effective immediately without prior notice.
   b. An emergency Suspension may be imposed:
      i. To ensure the safety and well-being of members of the University Community; or
      ii. If the Student poses a definite threat of, disruption of, or interference with the normal operations of the University.
   c. In conjunction with the emergency Suspension, the University will issue a Denial of Access. A Student may be Suspended from and denied access to:
      i. The entire campus, or portion thereof, including classes; or
      ii. All other activities, events, or privileges for which the Student might otherwise be eligible; or
      iii. A specific activity, event, or privilege for which the Student might otherwise be eligible.
   d. After imposition of an emergency Suspension, the disciplinary process will proceed as soon as is practicable.

2. When there is evidence that a Student's ongoing contact with another Student(s) or member(s) of the University Community could pose a threat to the individual(s), or to the stability and continuance of normal University functions, the Vice President for Student Affairs, or designee, may issue an order of no contact between the Responding Party and said individual(s). This order of no contact prohibits making contact with another person(s), whether in-person, electronically, telephonically, in writing, or through a third party. When the disciplinary process concludes, OSCCE will re-consider the continued need for the order of no contact and may decide to lift it, if appropriate. In addition, OSCCE will consider requests to end orders of no contact on a case-by-case basis.

VIII. Sanctions

The following sanctions may be imposed upon Students and all Student organizations for violations of the Code:

1. Censure;
2. Probation;
3. Social Probation;
4. Suspension;
5. Expulsion;
6. Suspension or Expulsion for Event-Related Misconduct;
7. Suspension or Dissolution of a Student Group or Student Organization;
8. Financial Restitution;
9. Removal from On-Campus Housing;
10. Fines; and/or
11. Other sanctions (e.g., participation in and completion of an alcohol or drug education/treatment program, an anger management program,
or community service hours; completion of an academic, research, or educational activity, project, or workshop, etc.).

IX. Procedures

Due Process

A. Reporting

The University encourages prompt reporting of allegations that a Student, Student Group, or Student Organization violated this Code. Reports can be made by any person to OSCCE in person, via phone ((410) 704-2057), or electronically (online reporting form at www.towson.edu/reportit). Allegations of violations occurring within On-Campus Housing may also be referred to the Department of Housing and Residence Life.

Those reporting an allegation are normally expected to serve as a witness and to present relevant evidence during a University Hearing or Conduct Resolution Meeting.

B. Due Process

The purpose of these procedures is to ensure fundamental fairness to Students, including that the University fairly evaluates allegations of a Code violation. Among other things, this means that the Responding Party will receive notice of the charges against them, an opportunity to offer evidence (including identifying witnesses) in support of their position, and a chance to review (in advance) any documents or other information the University intends to consider.

Every Student has the due process right to:

- Notice of the charges against them (including the specific Code violation(s) alleged) and the circumstances surrounding the incident or alleged misconduct;
- Participate in a Conduct Resolution Meeting;
- Participate in a Hearing when (i) the charges allege a violation of the Sexual Misconduct Policy and/or (ii) potential discipline includes Suspension, Expulsion, or Removal from On-Campus Housing;
- Identify and present relevant evidence (including witnesses) in support of their position;
- Review, in advance of a Hearing or the imposition of disciplinary sanction, evidence the University intends to consider;
- Have a Support Person present during interviews, meetings, or Hearings;
- Notice about how to contact OSCCE to ask questions about the process, schedule a Conduct Resolution Meeting, etc.; and
- Appeal a finding of responsibility for a Code violation and/or a disciplinary sanction.

The University will act reasonably to ensure evidence is considered (or not considered) in a manner consistent with basic standards of fundamental fairness. Harmless deviations from the prescribed procedures shall not necessarily invalidate an outcome unless they caused significant prejudice.

C. Disciplinary Meetings and Hearings

OSCCE follows a consistent process based on allegations of a violation of the Code. As described in more detail below, this includes, as necessary, a Preliminary Review, Conduct Resolution Meeting, and Hearing. The processes applies to individual Students, Student Groups, and Student Organizations. More specific information about how the process applies to Student Groups and Student Organization is available at Paragraph D (below).

1. Preliminary Review:

OSCCE conducts a preliminary review by meeting with involved parties or witnesses, reviewing documents, or gathering other relevant information. The purpose is to evaluate whether there is sufficient information to form a reasonable belief that the conduct violated the Code. That office may then:

- Take no further action on the basis that there is insufficient evidence to create a reasonable belief that the behavior violated the Code; or
- Refer the matter for a Conduct Resolution Meeting or Hearing on the basis that there is sufficient evidence to create a reasonable belief that the behavior violated the Code.

2. Conduct Resolution Meeting:

OSCCE uses Conduct Resolution Meetings to help reduce the need for unnecessary investigation, meetings, hearings, or other proceedings. Such a meeting is intended as a non-adversarial discussion between the Responding Party and a University Official designated by the OSCCE Director. Prior to or at the Conduct Resolution Meeting, the Responding Party will receive (a) written notice of the specific charges (and the surrounding circumstances) and (b) general information about the relevant evidence available at that time.

At a Conduct Resolution Meeting, the University shall consider evidence that is reasonably expected to have probative value, including documents and witness statements (including hearsay). OSCCE will provide access to this information so that the Responding Party has a reasonable opportunity to review it and respond. During the meeting, the Responding Party may also identify other evidence or witnesses they believe likely to have relevant information.

In the event the Student is not entitled to or waives their right to a Hearing, the University Official will consider the evidence, apply a Preponderance of the Evidence standard, and determine whether the Student is responsible for violating the Code. Following the meeting, the Student will receive an outcome letter outlining the finding, any sanction(s) imposed, and their right to appeal the decision and/or sanction(s).

3. Hearing:
After a Hearing concludes, the Hearing Officer will submit

Hearings:

The following procedural guidelines apply to University advance of the imposition of any disciplinary action.

with a University Official to discuss potential sanctions in admit responsibility for some or all of the alleged violations of entitled to a Hearing. A Student may agree (in writing) to (i) 
h. The Responding Party will be given reasonable access to the evidence the University intends to consider, which shall be retained by OSCCE.

c. The Responding Party may 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 Responding Party fails to appear, this fact will be stated for the record and the Hearing will proceed.

d. The Responding Party may be accompanied by a Support Person.

e. The Hearing will be audio recorded.

f. While formal rules of evidence do not apply to a Hearing, the Hearing Official will admit relevant information into evidence if a reasonable persons would accept it as having probative value.

i. Relevant evidence may include, though is not necessarily limited to, documents, electronic records (e.g., email, photographs, videos, texts, social media posts, etc.), and witness testimony.

ii. Repetitious or irrelevant evidence may be excluded.

iii. Documentary evidence not made available to the Responding Party in advance of the Hearing will not be admitted or considered.

g. A Hearing Board, made up of individuals designated by OSCCE, will hear the evidence and make a determination whether a Responding Party is responsible for violating the Code. The Hearing Board will be composed of at least three individuals. The Hearing Board may question witnesses (including the parties), review evidence, and participate in deliberations.

h. OSCCE will designate one member of the Hearing Board to act as the Hearing Officer and preside over the matter. The Hearing Officer exercises control over the proceedings and makes decisions necessary to avoid needless consumption of time and achieve orderly completion of the Hearing. They may order the removal of any person (including the Responding Party) who disrupts a Hearing.

i. If a case is particularly complex or involves multiple parties, the OSCCE Director may appoint a Special Hearing Panel. Members of such a panel act as additional members of the Hearing Board throughout the Hearing.

j. After a Hearing concludes, the Hearing Officer will submit the Hearing Board’s report to the OSCCE Director. The report should summarize the facts, identify the evidence considered (including witness testimony), and provide a rationale for the Board’s conclusion(s) whether a Code violation occurred.

k. The Responding Party may view the Hearing Board’s written report by appointment with the OSCCE Director.

l. The Responding Party will receive an outcome letter from the Vice President for Student Affairs or designee. This letter identifies the basis for the determination of responsibility for a Code violation and the sanction(s) imposed.

D. Disciplinary Procedures for Student Groups and Student Organizations

A Student Group and/or Student Organization may be charged with violations of the Code. A Student Group or Student Organization may be held responsible for violations of the Code resulting from the actions of its members, if the actions: (i) arose out of activities sanctioned by or related to the Student Group or Student Organization; (ii) were encouraged, fostered, or condoned by the Student Group or Student Organization; (iii) were known or should have been known by members of the Student Group or Student Organization; or (iv) were activities that the Student Group or Student Organization could reasonably have prevented.

When one or more members of a Student Group or Student Organization are charged with a violation of the Code, the University may also charge the Student Group or Student Organization. It is not necessary for all members of a Student Group or Student Organization to approve or participate in misconduct for the University to pursue charges. A Student Group or Student Organization and its officers may be held collectively and individually responsible when violations of this Code occur.

In determining whether a Student Group or Student Organization is responsible for a Code violation, the University may consider, among other factors, whether the misconduct (i) would have occurred if the participants were not members of the Student Group or Organization; (ii) was encouraged, fostered, or condoned by the Student Group or Student Organization; (iii) could reasonably have been prevented.

When a Student Group or Student Organization is charged with a Code violation, OSCCE will follow its standard procedures, including (as needed) a Preliminary Review, Conduct Resolution Meeting, and/or Hearing. One spokesperson shall represent and speak for the Student Group or Student Organization at OSCCE proceedings. Any sanction listed in the Code may be imposed on a Student Group or Student Organization and/or individual members. Prior to the imposition of a sanction, any Student subject to Suspension, Expulsion, or Removal from On-Campus Housing based on the misconduct of a Student Group or Student Organization will be offered an individual Hearing.

The Vice President of Student Affairs (or designee) may direct the officers, leaders, or any identifiable spokesperson for a Student Group or Student Organization to take action
designated to prevent or end violations of this Code by the larger entity. Failure to make reasonable efforts to comply with such a directive shall be considered a violation of this Code.

X. Appeal Procedures

A Student, Student Group, or Student Organization may appeal a decision of responsibility for a Code violation and/or the associated sanction as follows:

• To the Student Appeals Committee if the misconduct subjects the individual or entity to Suspension, Expulsion, or Removal from On-Campus Housing; or

• To the Student Conduct Appellate Board if the misconduct subjects the individual or entity to any sanction other than Suspension, Expulsion, or Removal from On-Campus Housing.

The only valid basis for an appeal of a finding of Code violation or disciplinary sanction is:

• A material violation of due process rights;

• Evident bias in the decision of the individual conducting an investigation, Conduct Resolution Meeting, Hearing, or other proceeding;

• New information which was not available at the time of the original Hearing; and/or

• Imposition of an inconsistent or overly severe sanction.

The following requirements apply to appeals:

• Appeals must be submitted in writing to OSCCE by the deadline indicated in the outcome letter. Failure to appeal within the allotted time renders the original decision and/or sanction final and conclusive.

• In cases of an alleged violation of the Policy on Sexual Misconduct, a Reporting Party may submit an appeal.

• Appeals may not be submitted by third parties, including friends, family members, or attorneys.

• Sanctions will not be deferred while an appeal is pending absent good cause and approval by the Vice President for Student Affairs (or designee).

XI. Disciplinary Records

The University creates a disciplinary record for every enrolled Student. In most cases, the disciplinary record contains no information (i.e., it only records that the University imposed no discipline upon the Student).

When OSCCE receives an allegation of a Code violation, it adds that information to a Student’s disciplinary record. When a Student is found not responsible for an alleged violation of the Code, OSCCE excludes information related to that allegation from the Student’s disciplinary record. If a Student is found responsible for a Code violation, OSCCE retains information associated with the investigation, Conduct Resolution Meeting, Hearing, and/or Appeal for seven years. The University reserves the right to retain disciplinary records for longer periods of time when the sanction imposed is Suspension, Expulsion, or Removal from On-Campus Housing.

A Student may inspect and review their disciplinary records, subject only to reasonable restrictions regarding time, place, and supervision. Students are not generally entitled to copies of their disciplinary record. A Student may contact OSCCE to seek correction of erroneous information in their file.

OSCCE maintains disciplinary records in accordance with the Family Educational Rights and Privacy Act (FERPA) (20 U.S. C. § 1232g; 34 C.F.R. Part 99), which protects the privacy of Student education records. For more information about the University’s policy related to the release of Student education records under FERPA, please see http://www.towson.edu/registrar/grades/ferpa.html.

With certain exceptions, federal regulations (including FERPA) prohibit disclosing the outcome of disciplinary proceedings to anyone other than to the Responding Party and to appropriate University personnel. Notable exceptions include:

• Disclosure of the final results of the University’s disciplinary proceeding to a victim of an alleged crime of violence or of a non-forcible sex offense regardless of whether the University concluded a violation was committed.

• Disclosure to notify parents of Students under the age of 21 who are found responsible for violations of the Code related to the use or possession of alcohol or a controlled substance.

Updated July 26, 2018

Appendix F: Student Responsibilities and Rights

Responsibilities: The student is responsible for 1) observing all university and Graduate Studies policies, regulations, procedures and academic requirements, including specific requirements of the program; and 2) maintaining a high standard of academic integrity.

Rights: Students are entitled to privacy, expression, nondiscrimination, nonharassment and the opportunity to appeal, petition or contest university actions pursuant to the procedures referenced below.

Pursuant to the procedures set forth below, students shall have the opportunity: 1) to appeal their dismissal from Towson University; 2) to appeal grades; 3) to petition for an exception from academic policies; and 4) to contest disciplinary sanctions.

I. Graduate Student Appeals Process for Academic Issues

Students are to abide by the academic decision process. Under circumstances specified below, students may appeal these academic decisions. Appeals must be submitted in writing and include all documented evidence. Determinations regarding the student’s appeal are to be provided in writing to the student. Rationales for appeals may include:

• evidence of new information or insufficient consideration of all aspects of the situation

• evidence of bias in the decision making
• violation of policy in the decision-making process
• a flaw in the student’s right of due process

Academic Warning – The Registrar’s Office sends a notice of academic warning to graduate students whose GPA falls below the minimum required 3.00. Students may contact the Registrar’s Office for direction on how to correct the academic record, if possible. The warning itself will not be removed if the GPA is not restored to a 3.00.

Late Registration – Students are expected to register for courses in accordance with the date established in the academic calendar. The student is to contact the Registrar’s Office for approval of late registration. The Registrar makes the final determination regarding the late registration request based on the evidence, and in consultation with the student’s academic department and program director.

Late Withdrawal During the Academic Term – A student may petition for late withdrawal from courses because of documented health problems or verified circumstances beyond the student’s control. Students are to contact the Registrar’s Office for approval of late withdrawal. The Registrar makes the final determination regarding the late withdrawal request based upon documented evidence, and in consultation with the student’s academic department and program director. If approved, a grade of “W” will be recorded.

Retroactive Withdrawal After the Academic Term – Students may petition for retroactive withdrawal after the academic term because of documented health problems or verified circumstances beyond their control. Students are to contact the Registrar’s Office for approval of the retroactive withdrawal by the end of the following term. The Registrar makes a determination regarding the retroactive withdrawal request based upon the documented evidence, and in consultation with the student’s course instructor, academic department and program director. If approved, a grade of “W” will be recorded. When the student has a dispute with the determination made by the Registrar, the student may appeal to the Graduate Studies Committee. The decision of the Graduate Studies Committee is final.

Academic Dismissal for GPA Below the Minimum Requirement – A student may petition for removal of the academic dismissal because of a low GPA that resulted from documented health problems or verified circumstances beyond the student’s control. Students are to contact the Registrar’s Office to request removal of the academic dismissal by the end of the following term. The Registrar makes a determination regarding the removal of the academic dismissal based upon the documented evidence, and in consultation with the student’s academic department and program director. When students have a dispute with the determination made by the Registrar, they may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final.

Program Dismissal for not Meeting Program Requirements – Students are to abide by their academic department and program policies and procedures for meeting program requirements. The program director or academic department notifies the Registrar when students are dismissed from the academic program. When students have a dispute with the determination made by the academic program, they may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final. Students who initiate the appeal process are to do so within 30 days of initial notification of dismissal.

Graduation Deficiency – Students are to abide by their academic department and program policies and procedures for completion of requirements necessary for graduation. The program director or academic department notifies the Graduation Office when students have not completed the requirements necessary for graduation. When students have a dispute with the determination made by the academic program, they may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final.

Second or Third Attempts of a Course – Students are to abide by program, department and TU policies regarding repetition of courses. In those situations where academic program and department policies regarding course repetition are more stringent than TU policy, students are to abide by their academic program and department policy regarding petitioning for exceptions. Students must contact the Registrar’s Office to petition for exception to TU policy that states that courses for which a grade has been earned may be repeated only once. The Registrar makes the determination regarding the petition for a third attempt of a course based on documented evidence, and in consultation with the student’s academic department and program director. When students have a dispute with the determination made by the academic program or the Registrar, the student may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final.

Time Limit for Completion of Degree and Certificate Requirements – Students are to abide by TU policy for completion of degree and certificate requirements. Students are to contact the Registrar’s Office and provide documented evidence related to health problems or extenuating circumstances to petition for time extension. Petitions for time extensions beyond one year require documentation of substantive health problems or extenuating circumstances. The Registrar makes the determination regarding the extension based upon documented evidence, and in consultation with the student’s academic department and program director. When students have a dispute with the determination made by the Registrar, they may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final.

Exception to Conditional Admissions Procedures – The Director of Admissions, in consultation with the academic program director, can approve admission of students into a program who meet the qualifications for conditional admission of the academic program that are published in the Graduate Catalog. Students who seek admission to an academic program that do not meet the minimal qualifications for conditional admission must petition the Graduate Studies Committee for admission. A written rationale and documented evidence must be included in the petition. The decision of the Graduate Studies Committee is final.

Grade Appeals for a Particular Piece of Work – Students who feel an earned grade for a particular piece of work is unjust must address their disagreement first with the course instructor who is primarily responsible for assigning grades. When the student has a dispute with the determination made by the course instructor, the student may appeal first to the program director and/or the department chair as outlined in the department’s policies and procedures, and then the dean of the academic college. The decision of the academic dean is final. Students who wish to initiate the appeal process must do so by the end of the following term.
Grade Appeal for Grades as Outlined on the Course Syllabus – Students who feel an earned grade was inconsistent with the terms set forth by the instructor at the beginning of the term, normally outlined in the course syllabus, must address their disagreement first with the course instructor who is primarily responsible for assigning the grades. When students have a dispute with the determination made by the course instructor, they may appeal first to the program director and/or the department chair as outlined in the department’s policies and procedures, the dean of the academic college, then the Student Appeals Committee via the Division of Student Affairs. The decision of the Student Appeals Committee is final. Students who wish to initiate the appeal process must do so by the end of the following term.

Dismissal for Violation of Professional Standards – Students are to abide by the professional standards established within their academic programs and departments. The program director and academic department make the determination to dismiss a student for violation of professional standards based on documented evidence and in accordance with established policies and procedures of the program and department. When students have a dispute with the determination made by the program director and academic department, they may appeal to the dean of the academic college, then the Graduate Studies Committee. The decision of the Graduate Studies Committee is final. The student shall be notified in writing of the academic dismissal by mail to the student’s permanent address in PeopleSoft. Students who wish to initiate the appeal process must do so by the end of the following term.

II. 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, they are encouraged to make the suspicion known to a member of the faculty or university administration. Students should familiarize themselves with TU’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.

1. Team initiations.
   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 borrows facts, statistics or other illustrative materials.
        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 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.
       • 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.
Complicity in Academic Dishonesty - helping or attempting to g.

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

1. A. Procedures for handling cases.

This Policy will cover two types of academic integrity violations: course-related and non-course-related.

a. Course-related violations.

i. 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 Student Conduct and Civility Education. The letter should include:

1. nature of the charge/evidence against the student
2. (brief summary of the meeting with the student
3. faculty member's decision
4. right of appeal to the department chair

ii. If the student is subsequently found not responsible for the charge, the student may either:

1. remain in the course without penalty, or
2. 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.

b. Non-course-related violations.

i. 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 Student Conduct and Civility Education. The letter should include:

1. nature of the charge/evidence against the student
2. brief summary of the meeting with the student
3. chair or designee’s decision
4. right of appeal to the college dean

2. 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.

3. 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 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:

a. revision of the work in question and/or completion of alternative work, with or without a grade reduction
b. reduced grade (including “F” or zero) for the assignment
c. 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:
      i. failure of a comprehensive exam
      ii. dismissal from an academic program
      iii. dismissal from a Graduate program
      iv. 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 Student Conduct and Civility Education. 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 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:
      i. suspension from the university for a designated period of time
      ii. expulsion from the university
      iii. any sanctions listed in the Code of Student Conduct or Graduate Catalog

   • In the determination of penalties, the following factors may be considered:
      i. the nature and seriousness of the offense
      ii. the injury or damage resulting from the misconduct
      iii. the student’s prior disciplinary record
      iv. frequency of academic integrity violations


   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 Student Conduct and Civility Education 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 Student Conduct and Civility Education, 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.
III. 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, gender identity and expression, disability and sexual orientation. Sexual harassment (see following section) is considered a form of sexual discrimination.

Students may bring concerns about discrimination or unfair practices in education to the Fair Practices officer for investigation (Administration Building 211, 410-704-2361). After a student 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, or involves a grade dispute or other academic 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/odeo.

IV. 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. Sexual or gender harassment may range from offensive gender or sexual innuendos to coerced sexual relations. It can happen to both men and women.

Harassment occurs when a person in a position of control or influence uses authority in an attempt to gain sexual favors and thereafter threatens or punishes for refusal to comply. Harassment includes, but is not limited to, suggestive remarks about clothing or physical attributes; leering; unnecessary touching; subtle or direct requests for sexual favors; implied or overt threats; or a hostile sexual environment. Students may bring concerns about sexual harassment to the Fair Practices officer for investigation (Administration Building 211, 410-704-2361) consistent with applicable university regulations. For more information, visit www.towson.edu/odeo.
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