The Official Bulletin of
Quinnipiac University


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## Sustainability Initiatives

We, as members of the Quinnipiac Community, strongly believe it is our responsibility to work toward a more environmentally sustainable society. The University runs on 100 percent renewable electricity and single-stream recycling is standard. Campus buildings feature energy-efficient heating and cooling units, energy-efficient lighting fixtures, Green Guard carpeting and windows with energy-efficient thermal glazing. Our cleaning supplies are also environmentally friendly.

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Admission requirements, fees, rules and regulations and academic programs are updated in official bulletins of the University. The University reserves the right to change the contents of this catalog at any time.

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## Statements on Nondiscrimination and Compliance

Quinnipiac University has a strong commitment to the principles and practices of diversity throughout the University community. Women, members of minority groups and individuals with disabilities are encouraged to consider and apply for admission. Quinnipiac does not discriminate on the basis of race, color, creed, gender, age, sexual orientation, national and ethnic origin, or disability status in the administration of its educational and admissions policies, employment policies, scholarship and loan programs, athletic programs or other University-administered programs.

Quinnipiac is in compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, and inquiries should be directed to the Learning Commons or to the Office of Human Resources. Quinnipiac complies with the Student Right to Know and Campus Security Act (PL 103-542) and those reports are available from the Office of Public Affairs. Quinnipiac maintains all federal and state requirements for a drug-free campus and workplace; information on student drug and alcohol programs is published in the Student Handbook and employee information is distributed through the Office of Human Resources. Graduation reports are available upon request from the Offices of Admissions and Registrar. Reports on athletic programs are available from the Department of Athletics and Recreation.

## Title IX Policy Against Gender-based Discrimination and Sexual Misconduct

Title IX of the Education Amendments of 1972 prohibits discrimination based on sex in educational programs and activities that receive federal financial assistance. To ensure compliance with Title IX and other federal and state laws, Quinnipiac University has developed policies that prohibit discrimination and misconduct on the basis of gender, such as sexual misconduct, sexual violence, sexual harassment, intimate partner violence, stalking and any other gender-based harassment or misconduct.

Quinnipiac University is committed to providing an environment free from all forms of gender or sex discrimination and sexual misconduct. Members of the University community, guests and visitors have a right to be free from sexual harassment, violence and of gender-based discrimination and harassment. The policy is intended to define community standards and to outline the investigation and grievance process when those standards are violated.

These policies apply regardless of the complainant's or respondent's sexual orientation, sex, gender identity, age, race, nationality, religion or ability. Harassment or discrimination based upon an individual's sexual orientation may be considered gender-based and be subject to the policy. Also, prohibitions against discrimination and harassment do not extend to statements or written materials that are germane to the classroom or academic course of study.

Title IX inquiries may be referred to the Title IX coordinator at 203-582-8723.
The full policy and additional information can be found at: www.quinnipiac.edu/about/title-ix-discrimination-and-harassment-policy/

## Dear Students,

The essence of a university lies in its people and in its programs. We at Quinnipiac University have reason to be proud of our programs and all the members of our University community. We take care to ensure that the students who enroll at Quinnipiac are prepared to make their contributions as responsible professionals and community leaders in a culturally rich and diverse society.

As you look through the pages of the catalog,
 consider the three values upon which Quinnipiac University was founded: high-quality academic programs, a student-oriented environment and the fostering of a sense of community among all of the members of the Quinnipiac family. We continue to be committed to these important values and to providing the best possible living and learning environment for our students.

I welcome you to Quinnipiac University, and I look forward to seeing you on one of our three campuses.


John L. Lahey
President

## Accreditations and Professional Memberships

Quinnipiac University is accredited by the New England Association of Schools and Colleges, Inc., which accredits schools and colleges in the six New England states. Accreditation by the association indicates that the institution has been evaluated carefully and found to meet standards agreed upon by qualified educators. Quinnipiac also is accredited by the Board of Education of the state of Connecticut and is authorized by the General Assembly of the state to confer such degrees and grant such diplomas as are authorized by the board.

All programs in the Schools of Health Sciences and Nursing have been approved by appropriate state and national agencies or are in the process of accreditation. The physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). The occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE). The undergraduate nursing, master of science in nursing and doctor of nursing practice programs are accredited by the Commission on Collegiate Nursing Education (CCNE). The nurse anesthesia program is also accredited by the Council on Accreditation (COA) for nurse anesthesia programs. The graduate physician assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA). The pathologists' assistant program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The athletic training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE). The MSW program has been granted Candidacy status and is seeking initial accreditation with the Council on Social Work Education. The bachelor's degree program in radiologic sciences is accredited by the Joint Review Committee on Education in Radiologic Technology. The cardiovascular perfusion program is accredited by the Commission on Accreditation of Allied Health Education Programs.

Quinnipiac's undergraduate and graduate business programs are accredited by AACSB InternationalThe Association to Advance Collegiate Schools of Business. As a school of business with AACSBaccredited business programs, Quinnipiac meets or exceeds established standards, as determined by periodic AACSB peer group review. The AACSB quality standards relate to curriculum, faculty resources, admission, degree requirements, library and computer facilities, financial resources and intellectual climate. The BS in computer information systems program is accredited by the Computing Accreditation Commission of ABET Inc. (www.ABET.org). The civil, industrial, mechanical and software engineering programs will seek initial accreditation by the Engineering Accreditation Commission of ABET Inc. (www.ABET.org) at the earliest opportunity.

The State Bar Examining Committee has approved the undergraduate programs of Quinnipiac for prelaw education, and the American Bar Association has approved the legal studies bachelor's degree program.

Quinnipiac has received full approval from the American Bar Association to award the JD degree through the Quinnipiac University School of Law. The American Bar Association also has acquiesced in the offering by the Quinnipiac University School of Law of the Master of Laws in Health Law (the "Health Law LLM"). (Under its standards, the ABA does not "approve" post-JD programs such as the LLM, but only considers whether it will or will not "acquiesce" in such proposed programs at an accredited law school.) The Quinnipiac University School of Law is also a member of the Association of American Law Schools.

The master of arts in teaching program is fully accredited by the National Council for Accreditation of Teacher Education (NCATE) and the Connecticut Department of Education. The U.S. Department of Education recognizes NCATE as a specialized accrediting body for schools, colleges and departments of education. The educational leadership program is fully accredited by the CT State Department of Education and is aligned with the leadership standards of NCATE.

The Frank H. Netter MD School of Medicine is accredited by the Liaison Committee on Medical Education, and currently holds preliminary accreditation. Full accreditation is anticipated in 2017. The school is also authorized by the state of Connecticut to award the MD degree. The Frank H. Netter MD School of Medicine is a member of the American Association of Medical Colleges.

Students may review information on the various accrediting agencies and accrediting reports by contacting the Office of Academic Affairs.

Quinnipiac reserves the right to change any provisions of this catalog at any time.

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## 2015-16 Academic Calendar *excludes School of Law and School of Medicine

Fall 2015

| August 26-30 | Wed-Sun |
| :--- | :--- |
| August 31 | Monday |
| September 4 | Friday |
| September 7 | Monday |
| September 12 | Saturday |
| September 23 | Wednesday |
| September 26 | Saturday |
| October 9-11 | Fri-Sun |
| October 17 | Saturday |
| November 6* | Friday |
| November 14 | Saturday |
| November 23-28 | Mon-Sat |
| November 26-27 | Thurs-Fri |
| December 12* | Saturday |
| December 14-19* | Mon-Sat |
| December 21 | Monday |
| Dec 24-Jan 1 | Thurs-Fri |

January Term 2016*

January 4
January 18
January 22
January 26
Monday
Monday
Friday
Tuesday
Spring 2016
January 18
January 21-22
January 25*
January 29
January 30
March 14-19
March 25
April 1*
April 2-3
April 30
May 7
May 9-14
May 14
May 15
May 16
May 21-22
May 30
June 5
June 6-7
June 9-10
June 13-14
June 16-17
June 17-19

Monday
Thurs-Fri
Monday
Friday
Saturday
Mon-Sat
Friday
Friday
Sat-Sun
Saturday
Saturday
Mon-Sat
Saturday
Sunday
Monday
Sat-Sun
Monday
Sunday
Mon-Tues
Thurs-Fri
Mon-Tues
Thurs-Fri
Fri-Sun

New undergraduate student orientation and welcome weekend
Undergraduate and graduate classes begin
Last day for late registration/schedule changes
Labor Day—University holiday; no classes
All Saturday classes begin
Yom Kippur—University holiday; no classes
Open House for prospective undergraduate students
Parents and Family Weekend
Open House for prospective undergraduate students
Last day to withdraw from undergraduate and graduate classes with a grade of "W"
Open House for prospective undergraduate students
No classes
Thanksgiving holiday—University closed
Undergraduate and graduate classes end
Final examination period-undergraduate and graduate classes
Final grades due
University closed

Undergraduate and graduate classes begin
Martin Luther King Jr. Day—University holiday; no classes
Classes end; Final examinations
Final grades due

Martin Luther King Jr. Day—University holiday; no classes
New undergraduate student orientation
Undergraduate and graduate classes begin
Last day for late registration or schedule changes
Saturday classes begin
Undergraduate and graduate spring recess
Good Friday—University holiday; no classes
Last day to withdraw from undergraduate classes with a grade of "W"
Admitted Student Days
Undergraduate and Senior Award Ceremonies
Undergraduate and graduate classes end
Final examination period-undergraduate and graduate classes
Graduate Commencement
Law Commencement
Final grades due
Undergraduate Commencement
Memorial Day—University holiday; no classes
Junior Open House for prospective students
New Student Orientation, session one
New Student Orientation, session two
New Student Orientation, session three
New Student Orientation, session four
Reunion 2016

Summer Term 2016
Summer I
May 23-June 24 ( 5 weeks)
Summer II
July 11-August 12 (5 weeks)
May 23-July 8 (7 weeks)
University Closed Monday, July 4, 2016
The University reserves the right to revise this calendar.
*For the most up-to-date calendar information, go to www.quinnipiac.edu/academic-calendar

## 2016-17 Academic Calendar *excludes School of Law and School of Medicine

Fall 2016
August 24-2
August 29
September 2
September 5
September 6
September 10
September 24
October 8
October 12
October 14-16
October 22
October 31
November 4
November 12
November 21-26
November 24-25
December 10
December 12-17
December 19
Dec. 23-Jan. 2
January Term 2017
January 3
January 16
January 20
January 24
Spring 2017
Jan. 19-20
January 23
January 27
January 28
March 13-18
March 20
March 31
April 1-2
April 14
April 29
May 6
May 8-13
May 13
May 15
May 20-21
May 29
June 8-9
June 12-13
June 15-16
June 19-20
June 23-25
Wed-Sun
Monday
Friday
Monday
Tuesday
Saturday
Saturday
Saturday
Wednesday
Fri-Sun
Saturday
Monday
Friday
Saturday
Mon-Sat
Thurs-Fri
Saturday
Mon-Sat
Monday
Fri-Mon

Tuesday
Monday
Friday
Tuesday
Thurs-Fri
Monday
Friday
Saturday
Mon-Sat
Monday
Friday
Sat-Sun
Friday
Saturday
Saturday
Mon-Sat
Saturday
Monday
Sat-Sun
Monday
Thurs-Fri
Mon-Tues
Thurs-Fri
Mon-Tues
Fri-Sun

New undergraduate student orientation and welcome weekend
Undergraduate and graduate classes begin
Last day for late registration/schedule changes
Labor Day-University holiday; no classes
Online classes begin for fall 1
All Saturday classes begin
Open House for prospective undergraduate students
Homecoming
Yom Kippur-University holiday; no classes
Parents \& Family Weekend
Open House for prospective undergraduate students
Online classes begin for fall 2
Last day to withdraw from undergraduate and graduate classes ( 15 week) with a grade of "W" (for further details see Withdrawal from a Course p. 32)
Open House for prospective undergraduate students
No classes
Thanksgiving holiday-University closed
Undergraduate and graduate classes end
Final examination period-undergraduate and graduate classes
Final grades due
University closed

Undergraduate and graduate classes begin
Martin Luther King Jr. Day-University holiday; no classes
Classes end; Final examinations
Final grades due

New undergraduate student orientation
Undergraduate and graduate classes begin; online classes begin spring 1
Last day for late registration or schedule changes
Saturday classes begin
Undergraduate and graduate spring recess
Online classes begin spring 2
Last day to withdraw from undergraduate classes with a grade of "W"
Admitted Student Days
Good Friday-University holiday; no classes
Undergraduate Award Ceremony
Undergraduate and graduate classes end
Final examination period-undergraduate and graduate classes
Graduate Commencement
Final grades due
Undergraduate Commencement
Memorial Day-University holiday; no classes
New Student Orientation, session one
New Student Orientation, session two
New Student Orientation, session three
New Student Orientation, session four
Reunion 2017

May 22-June 23 (5 weeks)
May 22-July 7 ( 7 weeks)
Summer II
July 10-August 11 (5 weeks)
July 10-August 25 (7 weeks)
The University reserves the right to revise this calendar.

## About Quinnipiac University

Quinnipiac today is a thriving, three-campus university located in southern Connecticut. It offers more than 75 programs to 6,500 undergraduates and more than 2,500 graduate, medical and law students.

The University, founded in New Haven in 1929 with an emphasis on business, was known as the Connecticut College of Commerce until it changed its name in 1951 to Quinnipiac College. Soon thereafter, having outgrown its New Haven surroundings, the University moved to its 250 -acre Mount Carmel Campus in Hamden, Conn., 90 minutes north of New York City, two hours from Boston and eight miles from metropolitan New Haven.

In 2000, the name Quinnipiac University was adopted to better reflect the quality and diversity of the school's programs at both the undergraduate and graduate levels.

Over the years, Quinnipiac has experienced dramatic and steady growth in the quality and scope of its academic programs. The early focus on business has now expanded to include degree programs in health sciences, communications, education, engineering, law, medicine, nursing and arts and sciences.

In 2007, Quinnipiac dedicated its TD Bank Sports Center, the first of several buildings on its 250-acre York Hill Campus. The center houses separate arenas for the University's Division I men's and women's ice hockey and basketball teams. York Hill also contains residence halls for 2,000 students, the Rocky Top Student Center and fitness facility, and a 2,000-car parking garage.

A third 104-acre campus in nearby North Haven serves as home to the School of Education, School of Law, School of Health Sciences, School of Nursing and Frank H. Netter MD School of Medicine, as well as other graduate programs.

Throughout its history, Quinnipiac has remained true to its three core values: highquality academic programs, a student-oriented environment and a sense of community.

The University is easily reached via the Connecticut Turnpike (Interstates 95 and 91), the Merritt Parkway (Route 15) and Interstate 84.

## Quinnipiac University Mission Statement

An education at Quinnipiac embodies the University's commitment to three core values: high-quality academic programs, a studentoriented environment and a strong sense of community. The University prepares undergraduate and graduate students for achievement and leadership in business, communications, engineering, health, education, law, medicine, nursing and the liberal arts and sciences.

Quinnipiac University educates students to be valued and contributing members of their communities through a vital, challenging and purposeful educational program. Students engage real-world issues through practice and the consideration of different perspectives.

To fulfill its educational mission Quinnipiac:

- offers degree programs centered on effective practice that are strengthened by the integration of a liberal education;
- cultivates critical thinking, intellectual integrity, curiosity and creativity in the pursuit of knowledge;
- provides a variety of learning and service experiences to facilitate student achievement;
- maintains a strong commitment to a diverse and inclusive student body, faculty and staff;
- fosters an understanding of and respect for the multiplicity of human perspectives and belief systems;
- supports faculty teacher-scholars who are effective teachers and who engage in scholarship with valuable intellectual and practical results.


## A Student-oriented University

Quinnipiac is committed to making each student's experience a satisfying and rewarding one. It strives to do this in both personal and academic contexts. Students are represented on all key bodies involved in decision making, including the Board of Trustees.

The Student Government Association is involved in fundamental University issues, as well as ongoing campus events. Activity clubs, organizations, societies, fraternities, sororities and ethnic, religious, cultural and political groups all play important roles in the day-to-day life of the community.

In keeping with the value system at Quinnipiac, emphasis is on the individual, not on social or
economic standing. Students are selected solely on the basis of merit and qualifications, with major consideration given to the innate qualities of motivation and character.

As a result, the student body reflects a wide spectrum of racial, religious and economic backgrounds, personalities and lifestyles that provide diverse social and cultural experiences. The cosmopolitan student community represents 37 states throughout the United States as well as 23 countries abroad.

## Center for Excellence in Teaching and Service to Students

The Center for Excellence in Teaching and Service to Students encourages, supports and recognizes superior teaching and service to students at Quinnipiac University. The center serves as an important vehicle in helping the University achieve its educational mission, consistent with its three core values: high-quality academic programs, a student-oriented environment and a sense of community.

The center sponsors a variety of professional development programs and activities using its own role models and expertise within the faculty and staff, as well as external consultants and experts. It also sponsors workshops and seminars and hosts special recognition events. The annual Excellence in Service to Students Award and Excellence in Teaching Award reflect the highest recognition of excellence at Quinnipiac University.

The center is supported through the president's office and is guided by a rotating board of directors consisting of representatives from the faculty, staff and students.

## Center for Interprofessional Healthcare Education

The Center for Interprofessional Healthcare Education at Quinnipiac University strives to achieve the University's three core values: highquality academic programs, a student-oriented environment and a strong sense of community in the development of health care professionals who work collaboratively to provide evidence-based and coordinated patient or client-centered health care. The mission of this center is to develop, promote and measure the effectiveness of interprofessional learning opportunities for faculty and students that
lead to effective team-based practice.
Interprofessionalism is a process by which two or more professionals work collaboratively to critically examine issues in health care education and practice. The overarching purpose of the center is to develop opportunities for faculty, students and community partners to learn together to promote team practice that meets the challenges of future health care systems.

## Essential Undergraduate Learning Outcomes for the 21st Century

Students come to Quinnipiac University eager to develop the knowledge, skills and mindsets that lead to meaningful, satisfying career success. Recognizing the ongoing changes in the world around us, Quinnipiac University supports and broadens these individual aspirations through a rigorous educational experience. Students acquire important skills valued by employers, along with the aptitudes to creatively and responsibly solve problems and use technologies, including those not yet known or invented. We expect our students to become intentional learners who embody confidence and integrity, and who will emerge as informed leaders in their professions, in their communities and in their roles as global citizens in the 21st century.

Deep, disciplinary knowledge lies at the core of a Quinnipiac University education, complemented by a University commitment to prepare students for adaptability, achievement and leadership in a dynamic, unpredictable world. Through a balanced curriculum, Quinnipiac University students examine the forces that have shaped and continue to shape our world, and use this information to integrate their specific interests into the broader context of the local, national and global community.

Quinnipiac University graduates are able to consciously and decisively demonstrate a number of key outcomes essential to the life and practice of a responsible, educated citizen. Graduates acquire these outcomes through a purposeful integration of the University Curriculum, requirements within one's major and experiences beyond the classroom.

## Interpersonal Outcomes <br> Written Communication

An ability to think critically, clearly and creatively in written expression in areas of interest and expertise.

## Oral Communication

An ability to think critically, clearly and creatively in oral expression in areas of interest and expertise.

An ability to recognize, analyze and influence decisions and actions at the local, national and global community level, and to engage in the community as responsible citizens.

Diversity Awareness and Sensitivity
An understanding of and respect for the similarities and differences among human communities. This includes a recognition and appreciation for the unique talents and contributions of all individuals.

## Social Intelligence

An ability to work effectively with others, to understand and manage interactions, and to act ethically, constructively and responsibly to achieve individual and common goals.

## $\triangle \triangle$ Intellectual Outcomes

Critical Thinking and Reasoning An ability to recognize problems, and to acquire, assess and synthesize information to derive creative and appropriate solutions.

## 3

## Scientific Literacy

An ability to understand and apply scientific knowledge to pose and evaluate arguments based on evidence and to make decisions and express positions that are scientifically and technologically informed. A scientifically literate person is able to evaluate the quality of scientific information on the basis of its source and the methods used to generate it.

Quantitative Reasoning
An ability to represent mathematical information symbolically, visually, numerically and verbally, and to interpret mathematical models such as graphs, tables and schematics in order to draw inferences. Also, an ability to use arithmetical, algebraic, geometric and statistical methods to solve problems.

## Information Fluency

An ability to find and critically evaluate information from various media, to analyze it, and communicate outcomes in the process of solving problems in a changing and complex world. Also, an ability to use information and computer literacy skills to manage projects and conduct rigorous inquiry.


Creative Thinking
The capacity to combine or synthesize existing ideas, or expertise in original ways and the experience of thinking, reacting and working in an imaginative way characterized by a high degree of innovation, divergent thinking and risk-taking.

## - Visual Literacy

The ability to interpret visual messages and/or to create such messages in ways that advance thinking, decision-making and communications. Visual artifacts include, but are not limited to: electronic media, art, charts and graphs, diagrams, maps, metaphors, data, concept, information, strategy and compound.

## Personal Success Plans and ePortfolios

The personal success plan is a narrative that students create, reflect upon and revise throughout their undergraduate experience at Quinnipiac University. The plan promotes intentional and integrative learning and facilitates meaningful discussions between students and academic and nonacademic advisers about student growth and development as an undergraduate. The plan strengthens each student's ability to clearly
communicate knowledge, skills and expertise to graduate school admissions committees or prospective employers.

Electronic portfolios are personalized, integrative, web-based collections of academic and cocurricular activity. ePortfolios are multimodal and flexible; virtually any type of content can be posted and students customize the appearance. ePortfolios play an important role in a robust assessment strategy. Quinnipiac undergraduates utilize ePortfolios to document and assess student achievement of the essential learning outcomes and program learning outcomes as they progress and develop their individualized personal success plans.

## Academic Outcomes Assessment

Academic outcomes assessment at Quinnipiac University is based on objectives identified by faculty and administrators for specific academic and support programs. The process employs a variety of measurements to discover, as accurately as possible, whether the programs are achieving the student learning outcomes in areas such as general education and major programs of study.

The purpose of academic outcomes assessment is to produce feedback to the department, school/ college or administrative unit on the performance of the curriculum, learning process and/or services, thereby allowing each unit to improve program offerings. This type of assessment is not for the purpose of evaluating performance of an individual student, faculty member or staff member.

Measurements may be drawn from surveys, course evaluations, placement tests and a variety of other standardized or locally developed tests. For example, required course assignments and examinations may be used first as a basis for course placement or for assigning grades to a student, and then later used again in an outcomes assessment for an academic or support program. In these cases, the outcomes assessment is conducted as a process separate from and without influence on the course placement or grading process for individual students.

Whenever academic performances are used in outcomes assessment, confidentiality of individual student identities is strictly maintained. Outcomes assessment results for academic and support programs do not disclose analyses at the level of the individual student without written permission from the student.

## A Vibrant Intellectual Community

Quinnipiac University students participate in a vibrant intellectual community that extends beyond the classroom and emphasizes experiences that foster exposure to new ideas and spirited but civil discussion of controversial issues, undergraduate student research and creativity.

The University sponsors lectures and small group meetings with a variety of distinguished and accomplished leaders. Speakers in the past several years have included a former president of the United States, Nobel Prize winners, awardwinning authors, national media personalities and political candidates. Students and faculty plan, select specific topics, and participate in the University's common discussion theme program, Campus Cross Talk.

Undergraduate research is a high-impact educational practice that increases undergraduate student learning and success-both present and future. Recognizing this, Quinnipiac University is committed to supporting a variety of undergraduate scholarly pursuits across all academic disciplines. When engaging in undergraduate research, students experience the excitement of generating new knowledge or creative works and developing new insight into how to solve real-world problems. Furthermore, students who participate in undergraduate research may be more competitive for scholarships, internships, international opportunities, employment and admission to top professional and graduate programs. Given this, students at Quinnipiac are encouraged to become involved in undergraduate research and participate in a scholarly community of students and faculty, while learning more about their future professional fields and training using professional practices and techniques.

Quinnipiac students from all majors may apply and participate in the prestigious Quinnipiac University Interdisciplinary Program for Research and Scholarship (QUIP-RS) - a paid, eight-week, immersive summer research experience in which students commit to working full time with a faculty mentor and sharing their experience with fellow student researchers across the disciplines.

Student creativity is fostered in a variety of ways. Our theater program has an extensive community involvement element that includes students from many different majors. "Studio
work" is encouraged in the College of Arts and Sciences, while student films are produced by students who major or minor in the School of Communications. Student photography, art and poetry are featured in the University's studentedited literary magazine, Montage, which sponsors a yearly Creativity Fair. Teams of Quinnipiac students compete against students from other universities in intercollegiate competitions where creativity is valued.

## School of Law

The School of Law offers programs of day and evening courses leading to the JD degree.

A full complement of student organizations exists at the law school, including a nationally honored Student Bar Association. In the tradition of American law schools, the School of Law sponsors student-edited scholarly journals, the Quinnipiac Law Review, the Quinnipiac Health Law Journal and the Quinnipiac Probate Law Journal, which contribute both to student education and to legal scholarship. The law school also is host to two legal fraternities, Phi Alpha Delta and Phi Delta Phi. To contribute to the development of advocacy skills, the law school has a Moot Court Society and a Mock Trial Team. The law school also has a number of law associations such as the Black Law Students Association, the Women's Law Society, the Latin American Law Association, the Environmental Law Society, the International Human Rights Law Society, and the Sports and Entertainment Law Society.

The School of Law has several clinics and numerous externships through which students do pro bono work in the community and acquire practical legal skills.

## Frank H. Netter MD School of Medicine

The School of Medicine has been designed to be a model for educating diverse, patientcentered physicians who are partners and leaders in an interprofessional workforce responsive to health care needs in the communities they serve. Students from diverse backgrounds attain their highest personal and professional potential in a collaborative student-centered environment that
fosters academic excellence, scholarship, lifelong learning, respect and inclusivity. The school embodies the University's commitment to the core values of academic excellence, a student-oriented environment and a strong sense of community. Accordingly, the school values:

- excellence in education that places the student at the center of the learning experience, and nurtures the student's independence as a lifelong learner
- diversity and inclusiveness in all students, faculty and staff
- a learning environment that promotes the provision of holistic, patient-centered care
- interprofessional education and service-learning experiences to promote teamwork in the care of patients
- clinical partners who support and promote the school's vision, mission and values
- social justice and the education of physicians to address health care inequalities
- partnerships within our community that provide students with learning and service opportunities to improve the health of the community
- advancement and support of primary care education and health services research through the school's Institute for Primary Care
- advancement of global health through the school's Institute for Global Public Health by promoting community medicine, public health and international partnerships
- advancement of rehabilitation medicine, through the school's Institute for Rehabilitation Medicine by promoting interprofessional care, services and research programs especially for wounded military personnel
The four-year curriculum leading to the MD degree is comprehensive and integrated. Core biomedical principles are correlated temporally and contextually with behavioral, clinical and allied health sciences. The curriculum emphasizes active student learning designed to equip graduates with the tools to be effective lifelong learners. Learning occurs in a variety of settings: smallgroup conferences, case-based learning seminars, lectures, with patients, standardized patients and independent study.

The curriculum is holistic in scope; content such as prevention and wellness promotion, population health, complementary and alternative medicine, and the study of contemporary health
care systems are incorporated into discussions of the traditional diagnosis and treatment of medical diseases.

Each course has longitudinal themes that anchor the content in a pedagogically relevant and cohesive manner. These significant learning experiences shift the focus from "what is taught" to "what and how students learn." The longitudinal themes include medical informatics, biostatistics, epidemiology, ethics, nutrition and sociobehavioral science.

Students begin clinical experiences in their first year and assume increased clinical responsibility in their second through fourth years. They have opportunities to formally learn and hone clinical skills during the clinical arts and sciences course, which uses standardized patients and state-of-the-art simulation labs. Students also meet weekly with a primary care physician, seeing patients, practicing clinical skills, and learning how to work effectively with other health care team members. The first year follows an organ system approach to biomedical sciences, focusing primarily on normal human function. To increase the medical context of this approach, students learn the fundamentals of common diseases in each curricular area. Year 2 follows a pathophysiological approach to content, exploring topics in greater depth and with enhanced sophistication and understanding. Students are exposed to a broad array of human diseases and best practices for diagnosis and management.

Students are allowed to individualize their medical education by selecting a field of concentration for elective course work. The elective course work provides the foundation for a student's capstone project, an independent research project. Elective concentration areas may include health management, policy, economics, law, education (including interprofessional education), global health, communications, ethics, humanities, or the student may design a novel concentration area with the support of a faculty adviser.

The School of Medicine also offers an anesthesiologist assistant program. For details see www.quinnipiac.edu/gradanesthesiologistasst.

## Admissions

## Admissions Procedures

Consistent with the University mission, Quinnipiac welcomes inquiries from serious students of all ages who are interested in professional preparation in fields related to health sciences, business, education, engineering, communications, nursing, public service, and the theoretical and applied disciplines in arts and sciences. An education at Quinnipiac integrates technical, professional and liberal studies. The students who benefit most from Quinnipiac are those who are motivated for a life of professional service and prepared to undertake a program of studies that is broad in its cultural perspectives, while being focused in its technical and professional dimensions. Quinnipiac University seeks students who wish to pursue professional careers, including those who, as yet, are undecided on their fields.

Students interested in Quinnipiac University are urged to acquaint themselves thoroughly with Quinnipiac as early in their decision-making process as possible. A campus visit and admissions interview is strongly recommended. If a campus visit is not possible, prospective students are advised to meet with one of Quinnipiac's representatives when they visit the student's school, or to make arrangements for a telephone conference. The admissions office hosts on-campus interviews Monday through Friday year-round and group information sessions weekdays throughout the year and on Saturday mornings during the fall and spring semesters. Fall and spring open houses, Admitted Student Days (in late March or early April) and online chat sessions also provide opportunities to learn more about Quinnipiac. We welcome your interest. Please call our toll-free number, 800-462-1944 or 203-582-8600, visit our website www.quinnipiac.edu/visit, or email us at admissions@quinnipiac.edu.

## Admissions Process

Prospective freshmen are strongly encouraged to file an application as early in the senior year as possible, and arrange to have first quarter grades sent from their high school counselor as soon as they are available. Students applying for PT, PA or nursing should apply by Nov. 15. Students applying for admission into the physical therapy program
are asked to supply documentation of two clinical observations (acute care and rehabilitation). Students are encouraged to apply using the Common Application (links are provided at www.quinnipiac.edu/apply).

File review begins as applications become complete, and students are notified starting in the late fall. A $\$ 200$ matriculation fee and $\$ 350$ housing deposit are due by May 1. February 1 is the application deadline. Students who are placed on a waitlist are notified by June 1 of any decision. There is an early decision option (with an application deadline of Dec. 1) available for all majors for freshman applicants for the fall. See the website (www.quinnipiac.edu/apply) for details.

Transfer students should apply for admission by mid-November for the Spring (January) semester, or by April 1 for fall (August) entry. Students applying to athletic training, occupational therapy or nursing should apply by March 1. Official transcripts from all institutions attended must be provided. Most programs look for a minimum grade point average of 2.5 (some higher) for consideration. Those interested in the DPT and PA programs may only apply at the graduate level.

Quinnipiac works closely with the community and technical colleges in Connecticut and elsewhere, and recommends that students follow a transfer curriculum of study if their plan is to move to a four-year university. Students may wish to arrange an admissions appointment to discuss program requirements.

## Admissions Requirements

Admission to Quinnipiac University is competitive, and applicants are expected to present a strong college prep program in high school, along with official scores of all standardized tests taken (SAT and/or ACT ). The admissions staff looks for a B or higher grade point average in a challenging academic program through the senior year, and uses the highest individual scores on the SAT in critical reading, math and writing or the highest ACT composite score. The admissions website provides a range of information on the number of applicants and average scores, including ethnic and geographic information about the recent incoming class.

All freshman applicants for admission are expected to present:

1. A high school diploma from an approved secondary school or its equivalent.
2. A secondary school transcript showing as completed, or in progress, a college preparatory sequence including: English, four units; mathematics, three units (physical and occupational therapy, nursing, physician assistant and engineering applicants should have four years); science, three units (all health science and engineering applicants are expected to have four years including biology and chemistry; physical therapy applicants should also have physics); social science, two units; academic (college preparatory) electives, four units. Total academic units expected: 16. First quarter grades in the senior year should be sent as soon as they are available.
3. All official score results for the Scholastic Reasoning Test (SAT I) of the College Entrance Examination Board (CEEB) or of the American College Testing Program (ACT). The writing portion is optional.
4. A completed Quinnipiac University application, or the Common Application plus Quinnipiac Supplement together with a non-refundable application fee of $\$ 65$.
5. A personal statement or essay (250-word minimum).
6. An interview is recommended but not required.
7. A teacher or counselor letter of recommendation.

## Transfer Requirements

Transfer applicants must submit the documents listed above for freshmen with the following exceptions:

1. An official transcript from each post-high school institution attended, even if no courses were completed.
2. Applicants who graduated from high school more than five years ago or have successfully completed the equivalent of one year ( 30 cred its) of college study are not required to submit entrance examination scores.
3. Students seeking a second bachelor's degree need only submit transcripts of their college work and the application form.
4. The application fee for transfer applicants is $\$ 65$.

## International Student Admissions

Applications for undergraduate study from international students are welcomed. Upon application, international students are requested to submit English language descriptions of secondary schools, colleges and universities attended.

In addition, applicants from non-Englishspeaking countries also must submit the following documents:

1. Certified translations of all prior secondary and collegiate academic records.
2. Proof of English ability: Test of English as a Foreign Language (TOEFL). Information and registration forms can be found at www.ets. org/toefl. TOEFL Program, Educational Testing Service, Princeton, NJ 08540. A minimum score of 550 (paper) or 80 on the Internet-based TOEFL, or an IELTS score of 6.0 is required for admission.
3. Official documentation of financial support for undergraduate study and living expenses must be submitted to the admissions office before an I-20 can be issued to the student. The statement of financial support can be downloaded from the website.

## Advanced Standing/Placement

Credits earned prior to admission to Quinnipiac will be evaluated by the Office of Admissions and will then be referred to the dean's office for evaluation. Transfer credit evaluation begins once a student has been admitted, or by request to the Office of Admissions at 203-582-8612.

Quinnipiac University normally grants transfer credit for courses appropriate to the chosen curriculum completed with a grade of C or better at a regionally accredited postsecondary institution. In some cases, course work completed more than 10 years earlier may be disallowed. A student who has completed courses at an institution not granting degrees, or who has extensive experience in a specialized field, may request comprehensive examinations to help determine placement.

Advanced standing or placement will be considered for entering freshmen who have successfully completed college-level credit courses (usually with a grade of C or better on an official transcript) through a recognized college or university, or who have achieved an acceptable score on an appropriate examination of (1) the Advanced Placement Program of the College Entrance Examination Board, (2) the International Baccalaureate, or (3) the College Level Examination Program (CLEP).

## Tuition and Fees

## Summary of Undergraduate Cbarges

Tuition and Fees for 2015-16:
Full-time undergraduate students taking
$12-16$ credits per semester $\quad \$ 42,270$ per year
( $\$ 40,720$ tuition plus $\$ 1,550$ student fee)
(\$21,135 per semester)
Technology Fee:
First-year, full-time students
\$300
All other full-time students
\$650 per year
More than 16 credits
$\$ 965$ per credit or fewer than 12 credits

For tuition and fees associated with Business 3+1 program, "J" term, graduate programs, School of Law, the Frank H. Netter MD School of Medicine or QU Online, please visit the website at www.quinnipiac.edu/bursar.

A number of health science and engineering programs generally require students to take more than the traditional 12-16 credits. In addition, a number of courses have an additional fee-usually associated with the laboratory classes in the sciences. For more information about tuition and fees, please visit www.quinnipiac.edu/bursar.

Miscellaneous expenses (books, travel and personal) average $\$ 1,400$ per year.

The University offers a variety of payment plans to help you meet your educational expenses. These plans are available for the fall and spring terms, both on an annual and semester basis. Please note that payment plans are not available for the summer terms. The payment plan is not a loan program, and there are no interest or finance charges. The only initial cost to you is a small, nonrefundable enrollment fee per agreement.

Families are encouraged to enroll online at www.quinnipiac.edu/bursar-through "e-cashier." Once you have set up your account through this secure website, you can authorize your monthly payments to be electronically sent from your checking, savings or credit card account.

## Resident Fee (Room and Board)

The resident fee (room and board) is an allinclusive fee for students residing in on-campus housing. The resident fee for students living on the Mount Carmel Campus in traditional residence halls is $\$ 14,820$ per year. The resident fee for
students living on the Mount Carmel Campus in apartment-style residence halls (The Complex and The Hill) is $\$ 14,440$. The resident fee for students living on the York Hill Campus is $\$ 16,510$ per year for singles and $\$ 14,390$ per year for doubles. The resident fee for undergraduate and graduate students living in off-campus houses and Whitney Village is $\$ 15,000$ per year. The resident fee for graduate students living on Circular Avenue or Eramo is $\$ 11,510$ per year (single occupancy bedroom) or $\$ 14,200$ per year if married and renting the entire apartment.

All costs are based on the 2015-16 figures. The Office of Undergraduate Admissions and the University website (www.quinnipiac.edu) can supply financial information.

Quinnipiac requires that all students obtain a University ID card, known as the QCard. Various accounts are associated with the QCard, chiefly the required dining service and QCash.

Quinnipiac requires all undergraduate resident students, except those living in Whitney Village or off-campus housing, to subscribe to the required dining service. This operates as a prepaid debit account into which students are allocated a specified amount of money as part of their resident fee. The cards can be used to make purchases in the dining locations on each of Quinnipiac's three campuses. Any unused balance from the fall semester may be carried over to the spring (provided that the student is enrolled for the spring semester), but no carryover is permitted from spring to the following fall.

Quinnipiac also offers QCash, a prepaid debit account that can be used to make a variety of cashless purchases. QCash can be used at the campus post office, the bookstore, the dining areas on all three campuses, and for copy, laundry and vending machines. It also is accepted at many popular off-campus business establishments and restaurants. Students may open an account with a deposit of any amount; additional deposits may be made as needed throughout the semester. Balances are carried forward from semester to semester so long as the student is enrolled at Quinnipiac. Refunds of unused QCash are made upon a student's graduation (upon request) or withdrawal from the University.

Please visit www.quinnipiac.edu/qcard to find out more information about the QCard.

## University Laptop Program

All incoming students are expected to have a laptop that meets academic requirements and technical standards. Quinnipiac has a laptop program that is both cost effective and well supported. See page 42 for more information on the program.

## Financial Aid

Quinnipiac seeks to assist each of its students and his or her parents to receive the maximum federal, state and institutional financial aid for which they are eligible. Institutional financial aid is available to full-time undergraduate students demonstrating eligibility according to Quinnipiac application procedures and funding policies. Aid is provided as a "package" which may include grants, scholarships, campus employment (Work Study), and loans. It is the goal of Quinnipiac to coordinate aid eligibility so that a Quinnipiac education is within the means of each student and his or her family.

Quinnipiac's financial aid policy is built on the principle of supplementing student and family contributions toward the cost of attending college. This principle is rooted in the belief that primary responsibility for meeting college costs rests with the student and the family. Financial aid eligibility, therefore, is measured between the cost of attending Quinnipiac and the reasonable support expected from student earnings and savings and from family income, assets and resources. To help Quinnipiac stretch its funds to assist as many students as possible, financial aid applicants are expected to explore all sources of external support for which they might qualify. Check your high school, community and other affiliations for opportunities.

Students should apply for financial aid by filing the Free Application for Federal Student Aid (FAFSA) and the CSS Profile form for Quinnipiac need-based grant aid by March 1. All currently attending students who wish to apply for or renew their aid must file the FAFSA and the CSS Profile for renewal prior to April 1. Detailed information and links to both forms can be found on the website (www.quinnipiac.edu/finaid). All financial aid applicants are required to meet Quinnipiac's standards for satisfactory academic progress for financial aid recipients and applicants. The policy is published in the Student Handbook and is available online and from the Office of Financial Aid.

## Academic Scholarships

A variety of academic scholarships are awarded at the time of entry and are renewable. The value of most academic scholarships ranges from $\$ 5,000$ to $\$ 23,000$ per year. Consideration for all scholarships is given to students who have provided all application materials by Feb. 1. Visit the website (www.quinnipiac.edu/scholarships) for current academic scholarship award information as well as the criteria for renewal.

## Veterans Benefits

Quinnipiac University accepts all U.S. Department of Veterans Affairs (VA) Education and Vocational Rehabilitation benefits available to eligible veterans and dependents. In addition, Quinnipiac is a proud participant of the Yellow Ribbon program. Any student eligible and electing to utilize VA education benefits should apply for a Certificate of Eligibility (COE) via the VA Online Application (VONAPP) website at http://vabenefits.vba.va.gov/vonapp. The COE must be submitted to Quinnipiac's director of veteran and military affairs prior to the start of classes. For more information or questions concerning VA benefits, contact 203-582-8867 or visit the website at www.quinnipiac.edu/veterans.

## Military Tuition Assistance (TA)

Quinnipiac University has recently partnered with the Department of Defense to establish a Memorandum of Understanding (MOU), which provides eligible active and reserve military members the opportunity to receive TA from their respective service. To find out eligibility requirements, service members must visit their military installations' college office or visit their command career counselor.

## Reserve Officer Training Corps (ROTC)

## Air Force ROTC

Students at Quinnipiac University are able to take AFROTC classes at Yale University and receive commissions as second lieutenants.

The AFROTC program is available to Quinnipiac University students at Yale University's main campus in New Haven. Through the

AFROTC program, Quinnipiac University students, without paying extra tuition, can pursue a commission as an officer in the United States Air Force. The freshmen and sophomore courses carry no military obligation and are open to all students. Scholarships also are available for qualified students. These scholarships pay up to full tuition and fees, as well as money for books and a monthly tax-free stipend.

Students enroll in a four-year or three-year (if they join in their sophomore year) AFROTC sequence. Students commute to New Haven on the days listed below for AFROTC-specific classes and events. Up to 17 credits may be transferred to Quinnipiac and counted toward degree requirements as free electives.

Qualified students should contact the AFROTC office at 203-432-9431 or visit the website at yalecollege.yale.edu/content/air-force-rotc-yale.

## AFROTC Courses

USAF 101/102 "The Foundations of the USAF"Thursdays, 1-1:50 p.m. or Fridays, 10:15-11:05 a.m. USAF 201/202 "The Evolution of Air \& Space Power"Thursdays, noon-12:50 p.m. or Fridays, 11:15-12:05 p.m. USAF 301/302 "USAF Leadership Studies"Tuesdays, 8:30-11:20 a.m.
USAF 401/402 "National Security Affairs/Prep for Active Duty" Contact the ROTC department for class days/times. Leadership Laboratory-2-4 p.m. or Fridays 8-10 a.m.
Physical Training-Thursdays, 4:30-5:30 p.m. or Fridays, 6:30-7:30 a.m.

## Army ROTC

The Army ROTC program is available to Quinnipiac University students at the University of New Haven's campus in West Haven. The program is open to all physically qualified students who are U.S. citizens and meet other specific requirements. Successful completion of the program can qualify the student for a commission in the United States Army, Army Reserve or Army National Guard. For more information, contact the Army ROTC Recruiting Office at 203-931-2998.

## Academics

## Schools and Colleges

All Quinnipiac University programs fall within eight major academic areas:

- College of Arts and Sciences
- Frank H. Netter MD School of Medicine
- School of Business and Engineering
- School of Communications
- School of Education
- School of Health Sciences
- School of Law
- School of Nursing


## Undergraduate Degree Programs

Quinnipiac offers undergraduate programs leading to bachelor of arts or bachelor of science degrees.

## Bachelor of Arts (BA)

Advertising and Integrated Communications (p. 128)
Communications (p. 127)
Criminal Justice (p. 85)
English (p. 69)
Film, Television and Media Arts (p. 122)
Game Design and Development (p. 88)
Gerontology (p. 85)
History (p. 71)
Independent Majors (p. 61)
Interactive Digital Design (p. 124)
Journalism (p. 126)
Legal Studies (p. 71)
Liberal Studies (p. 180)
Mathematics (p. 74)
Philosophy (p. 78)
Political Science (p. 78)
Psychology (p. 81)
Concentrations:
Human Services
Industrial/Organizational
Public Relations (p. 129)
Sociology (p. 86)
Spanish Language and Literature (p. 75)
Theater (p. 89)

## Bachelor of Fine Arts (BFA)

Film, Television and Media Arts (pp. 122-123)

Bachelor of Science (BS)
Accounting (p. 103)
Athletic Training (p. 135)
Behavioral Neuroscience (pp. 65, 81)
Biochemistry (p. 66)
Biology (p. 63)
Biomedical Marketing (p. 118)
Biomedical Sciences (p. 139)
Chemistry (p. 66)
Computer Information Systems (p. 104)
Computer Information Systems and Accounting (p. 105)

Computer Science (p. 74)
Diagnostic Medical Sonography (p. 147)
Economics (p. 68)
Engineering, Civil (p. 106)
Engineering, Industrial (p. 107)
Engineering, Mechanical (p. 108)
Engineering, Software (p. 109)
Entrepreneurship and Small Business
Management (p. 111)
Finance (p. 114)
Health Science Studies (pp. 143, 180)
Online BS Completion Track (p. 144)
International Business (p. 115)
Management (p. 116)
Marketing (p. 117)
Microbiology and Immunology (p. 144)
Nursing (p. 171)
Online RN to BSN Completion Track (p. 173)
Accelerated BSN for Second-Degree Students (p. 172)

Occupational Therapy (see MOT, page 151)
Physical Therapy (see DPT, page 155)
Physician Assistant (entry-level) (p. 162)
Premedical Studies (p. 28)
Radiologic Sciences (p. 148)

## Certificate Programs

Certificate of Completion in Special Education (p. 216)

Export Marketing (p. 179)
Advanced Graduate Certificate in Social Media (p. 203)

Health Care Compliance (p. 200)
International Purchasing (p. 179)
Long-term Care Administration (p. 200)

## Graduate/Combined Degrees

## BA/MAT Program

Elementary Education (pp. 61, 210)
Secondary Education (pp. 61, 210)
Combined BA or BS/MS
Interactive Media (p. 203)
Journalism (p. 206)
Public Relations (p. 210)
Sports Journalism (p. 208)
Master of Arts in Teaching (MAT) (p. 210)

## Sixth-year Diploma in Educational <br> Leadership (p. 219)

Master of Business Administration (MBA)
MBA (p. 192)
MBA-CFA ${ }^{\circledR}$ (Chartered Financial Analyst Track) (p. 195)

MBA-Health Care Management Track (p. 194)
MBA-Supply Chain Management Track (p. 196)
Combined BA/MBA program (pp. 62, 197)
Combined BS/MBA program (p. 197)
Joint JD/MBA (p. 198)

## Master of Health Science (MHS)

Biomedical Sciences (p. 142)
Cardiovascular Perfusion (p. 221)
Medical Laboratory Sciences (p. 222)
Pathologists' Assistant (p. 225)
Physician Assistant (pp. 162, 227)
Radiologist Assistant (p. 230)

## Master of Science (MS)

Business Analytics (online) (p. 198)
Instructional Design (online) (p. 216)
Interactive Media (online) (p. 201)
Journalism (on campus and online) (p. 204)
Molecular and Cell Biology (p. 190)
Organizational Leadership (online) (p. 199)
Public Relations (p. 209)
Sports Journalism (on campus and online) (p. 206)
Teacher Leadership (online) (p. 218)
Combined BS in Athletic Training and Doctor of Physical Therapy (p. 155)
Five-year Master's Degree in Molecular and Cell Biology (p. 64)

Master of Science in Nursing (p. 239)
Family Nurse Practitioner (post-bachelor's)
Adult-Gerontology Nurse Practitioner (post-bachelor's)

Master of Social Work (p. 235)
Doctor of Nursing Practice (p. 241)
Adult-Gerontology Nurse Practitioner (post-bachelor's)
Family Nurse Practitioner (post-bachelor's)
Care of Populations (post-master's)
Nurse Anesthesia (post-bachelor's and post-master's)
Nursing Leadership (post-master's)

## Occupational Therapy Doctorate (Post-professional)

Occupational Therapy (p. 231)
BS to OTD bridge program (p. 234)
Entry-level MOT to OTD (p. 234)

## Entry-level Master of <br> Occupational Therapy (MOT) (p. 151)

Entry-level Doctor of
Physical Therapy (DPT) (p. 155)
Post-bachelor's DPT (p. 235)

## Entry-level Master's

Physician Assistant Program (pp. 162, 227)

## Juris Doctor (JD)

Master of Laws in Health Law (LLM)
Admission is through the School of Law. The School of Law has its own academic catalog and student services handbook, to which readers should refer for information about School of Law policies, procedures and requirements for academic and other matters. For information, go to www.quinnipiac.edu/law/.

## Medical Doctor (MD)

Anesthesiologist Assistant (MMSc)
Admission is through the Frank H. Netter School of Medicine. For information, go to www.quinnipiac.edu/medicine.

## University Curriculum

Students may consult the 2014-15 University Catalog for more information on the University Curriculum required of all bachelor's degree candidates who entered Quinnipiac University prior to Fall 2015.

## Mission Statement

A Quinnipiac education fosters in-depth learning, the gaining of disciplinary expertise (the major), and promotes an interdisciplinary understanding of the expertise in local and global contexts (the University Curriculum). In addition, a QU education inspires students to learn how to work independently both in and outside the classroom to gain a closer and more complex sense of themselves as citizens, intellectuals and human beings.
Through the University Curriculum, intentional learning is fostered by studying human cultures, artistic and literary expressions, the physical and natural worlds, and the forces that have shaped and continue to shape our world. Students develop a flexible and open mind, the capacity to learn from others, effective communication skills and the ability to influence potential solutions to global problems. Students demonstrate their abilities through classroom and civic engagement, in both their local and global communities. A student's education at Quinnipiac University is a single, reciprocal process with specialized education in the major integrated with general education, with each providing dimension to the other. In the way that the major leads a student to deep, disciplinary knowledge, general education leads a student to broad knowledge gained from multiple perspectives and in concert, they support the students' achievement as measured by the Essential Learning Outcomes. A Quinnipiac University graduate is a well-rounded individual who demonstrates knowledge of science, cultures, numeracy, the arts, history and society as well as an ability to apply learning to complex problems and challenges.

The requirements of the University Curriculum assure that all students receive a broad education that exposes them to different perspectives and ways of knowing, producing lifelong learners who can, upon graduation, become leaders in their professions, in the communities where they live, and in their role as informed citizens.

The University Curriculum also contributes significantly to the development of the Essential Learning Outcomes for the 21st Century that are expected for graduates of Quinnipiac University. For all bachelor's degree candidates entering Quinnipiac University during or after Fall 2015, the University Curriculum consists of 46 credits as outlined in the following curriculum structure.

## First-year Seminar (3 credits)

FYS 101 First-year Seminar

## Freshman Composition (6 credits)

EN 101-102 Elements of Composition I, II

## Quantitative Literacy ( 3 credits)

A mathematics course-MA 110 (Contemporary Mathematics) or higher.

## Breadth Requirement

The well-educated Quinnipiac graduate is one who has learned to read with critical curiosity, who is able to weigh contrasting evidence and arguments, and who can seek common ground in the midst of competing and polarizing points of view. In addition to writing and speaking with passion, understanding and prescience in a survey of diverse findings across multiple discourses, the Quinnipiac graduate is familiar with the artistic and aesthetic legacies of humankind. Thus, the successful Quinnipiac graduate is one who can revise and refine his or her judgment, considering the range of intellectual, aesthetic, ethical and civic responsibilities.

## Courses in the Sciences

## ( 7 credits, including one lab)

Courses offered in this category afford the student the opportunity to develop his/her knowledge in the context of a discipline that integrates the process of science, including experimental design, hypothesis testing, appropriately analyzing scientific data, and comprehending the development and significance of scientific theories.

The scientific tradition requires the completion of two courses (minimum of 7 credits). A student must complete a 4 -credit course in the natural sciences (biology, chemistry, physics, etc.) that includes a laboratory component. The other course is a 3- or 4-credit course that embodies the investigative experience.

Because of substantial duplication of course content, the following course pairs may not be taken in combination to complete the 7 credits required for the UC science requirement.
PHY 101/101L and SCI 101/101L
SCI 105/105L and SCI 161
BMS 118/118L and BMS 162
BIO 106/106L and BIO 161

## Courses in the Social Sciences ( 6 credits)

Courses that satisfy the distribution requirement for the social sciences are dedicated to exploring and critically analyzing social, economic and behavioral organization, the complexity of individual behavior and the interaction between the individual and society. Students are able to demonstrate the skills of critical inquiry appropriate to the discipline offering the course, including quantitative and qualitative methods of analysis.

## Courses in the Humanities (6 credits)

Courses in the humanities focus their inquiry on exploring what it means to be human through an examination of our ideas, values, ideals and experiences. They generally explore these human constructs and concerns through the intensive study of written texts and other objects that reflect human beings' efforts to create meaning in their lives. Humanities courses that satisfy the distribution requirement are dedicated to a broad exploration and intensive examination of the human experience. These courses provide students with the analytic skills necessary for active inquiry into existing sources of knowledge while engaging them in new ideas and developments in the respective discipline. Fundamental areas of the humanities include the study of history, literature, philosophy and law.

## Courses in the Fine Arts (3 credits)

Courses that satisfy the distribution requirement for the fine arts examine the visual or performing arts, helping students understand the creativity of human beings through the ages. Fulfillment of the requirement enables students to appreciate the arts and have knowledge of their modes and history. Students also develop a critical, aesthetic and creative intelligence essential to the educated citizen.

## University Curriculum Electives (9 credits)

Students take 9 credits of UC courses outside the major. Students continue to explore a variety of
fields outside their major area of study by selecting additional courses in the sciences, the humanities, the social sciences and the fine arts. These courses enable students to weigh contrasting evidence and carefully examine arguments to arrive at a considered judgment. Consistent with the University's commitment to writing across the curriculum, this distribution offers students diverse opportunities to read, write and speak with informed intelligence. Above all, these courses challenge students to refine their sensibility and critical acumen to meet the challenges of a complex and ever-changing world.

## University Curriculum Capstone ( $\mathbf{3}$ credits)

An integrative capstone experience that ties together the first-year experience, the general education curriculum, course work in a student's major, and co-curricular experiences at Quinnipiac.

## Policy for Students Who Fail FYS 101

Freshmen entering the University in the fall semester who withdraw from or fail to receive a passing grade for FYS 101 during that semester are given one chance to repeat the course during the first spring semester that they are enrolled at Quinnipiac. If they fail to complete the course successfully on a second attempt, they may not take FYS 101 again. They may not withdraw from the course on the second attempt. The failing student receives no credit for FYS 101, the failing grade (F) remains and he/she must substitute 3 credits from any other UC-designated course to count toward required general education credits.

## FYS 101 Policy for Transfer Students

A student who transfers to Quinnipiac with less than sophomore standing (fewer than 27 credits) shall enroll in FYS 101 in his/her first semester at Quinnipiac. Students who transfer to Quinnipiac with 27 or more credits must substitute any UC-designated course for FYS 101, to count toward the general education credits needed to graduate. They also will complete a series of self-guided online modules by the start of their second semester at Quinnipiac, designed to ensure students successfully complete their remaining general education requirements and prepare for the integrative capstone experience.

## Academic Honors

For a full list of academic awards and honor societies, visit the website at www.quinnipiac.edu/awardshonors.

## Dean's List

Students who excel in scholarship by earning a grade point average of at least 3.5 with no grade lower than C are recognized by being placed on the dean's list. Full-time students must complete at least 14 credits in a semester, with at least 12 credits that have been graded on a letter grade basis (A through C) to be eligible. Part-time students must complete at least 6 credits during a semester.

## Degrees with Honors

Students who have demonstrated superior scholarship and who have attended Quinnipiac for at least 60 credits immediately prior to graduation are eligible to receive degrees with honors. Designation is based on grade point averages as follows:

$$
\begin{array}{ll}
\text { Summa Cum Laude } & 3.90-4.00 \\
\text { Magna Cum Laude } & 3.70-3.89 \\
\text { Cum Laude } & 3.50-3.69
\end{array}
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## University Honors Program

The University Honors Program has been developed to foster the needs and interests of our most academically talented and committed students. The program is founded on the University's three core values-high-quality academic programs, a student-oriented environment and a strong sense of community.

Honors students participate in small seminar courses with instructors dedicated to working cooperatively to mold a unique learning environment. This student-centered approach supports increasingly independent learning and also engages students in the larger campus as well as regional, national and world communities.

Honors students are encouraged to actively participate in and contribute to campus culture through lectures, book discussions and unique events that enhance the distinctive learning opportunities available in the University environment. Quinnipiac honors students have access to a special space on campus-the honors
student lounge, which includes a small collection of books, informal seating, coffee and a kitchen that facilitates studying, conversation and honors committee meetings. In addition, honors students have the opportunity for off-campus learning experiences in nearby areas such as Boston, New Haven and New York City.

Honors students take a minimum of 21 credits designated at the honors level as part of their existing University Curriculum or major courses; the program does not add additional credit requirements to the students' major work, and preserves freedom to pursue electives and minors.

## Admission

Each year, the honors program welcomes incoming first-year students with strong academic records. Entry to the program is by application. Students who have received their acceptance to Quinnipiac may apply for admission to the honors program in February and will learn of their status before May 1. Students also may apply after the February deadline and, if accepted, will be admitted on a wait-list basis. Interested students may inquire with the director or the admissions office at any time during the admissions process and into the summer. After their first or second semester, students with strong records of achievement and a demonstrated desire to share their intellectual curiosity and engagement with others may apply to join the program.

For details please see the website, www.quinnipiac.edu/honors-program

## Service Learning Courses

Course offerings designated SL in the catalog indicate classes or sections of classes that integrate meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility and strengthen communities. The SL designation helps faculty advisers and students identify service learning courses to plan and prepare for registration. Quinnipiac University is a member of Connecticut Campus Compact. Campus Compact is a national coalition of college and university presidents dedicated to promoting community service, civic engagement and servicelearning in higher education.

Service learning is not volunteerism; nor is it an internship. Service learning is a curriculum-
based initiative bringing together faculty, students and community organizations. Service Learning courses incorporate the following basic principles:

- Engagement is fostered through service projects with a community partner.
- Reflection on the experience of working on the community project is both an academic and personal process.
- Reciprocity is promoted by addressing real community needs.
- Dissemination means that previous courses serve as models of best practices for new courses.
The purpose is to assist community organizations by providing situation-specific student resources in activities consistent with the goals of a specific course. Through Service Learning, community organizations are more able to meet their objectives, faculty are more able to demonstrate key course concepts, and students are more able to relate course theory with actual situations and practices. For details, see the website (www.quinnipiac.edu/service-learning).

A Service Learning Certificate is available to students who complete three or more Service Learning designated courses or two courses plus a learning experience (see p. 44 for details).

## Writing Across the Curriculum

Since 2000, Quinnipiac University has adopted a writing-across-the-curriculum (WAC) approach to teaching writing at the undergraduate level, an effort that has been generously supported by the Davis Educational Foundation. Writing is used extensively throughout the University Curriculum and in the undergraduate majors to promote good critical thinking and communication skills for all students.

The WAC program hosts a biennial conference on critical thinking and writing in the disciplines on the Quinnipiac campus, and sponsors a journal, Double Helix, that publishes faculty scholarship from across the globe that is focused on critical thinking in and across the disciplines.

The University endorses the position taken by the National Commission on Writing for America's Families, Schools and Colleges that good writing is a "threshold skill" for employment virtually anywhere in the professions. Our nationally recognized WAC program provides students with the opportunity to develop their ability to write at the same time they are acquiring knowledge and
skills in their chosen profession. Our intention is to enable the connection between writing and learning to be a lifelong habit that students will rely upon to enhance both their personal and professional lives.

## Course and Credit Requirements

Each course is measured in credits. Each credit normally requires satisfactory completion of a 50 -minute class period, or its equivalent, per week for a semester. The usual load is five courses. A student with a superior academic record may secure permission to take more than the normal course load. Conversely, a student who enters with deficiencies may be allowed to take only three or four courses.

Regular class attendance is expected. A student whose attendance is unsatisfactory may be forced to withdraw from a course at the discretion of the instructor and consistent with Quinnipiac's withdrawal policy.

So far as is practicable, final examinations are regarded as part of the regular work for undergraduate courses.

In courses for which a final examination would serve no useful purpose, a term essay or personal conference, problem-solving exercise, or other assignment may be substituted; work on the substitute exercise may take place during the final examination period.

In some cases, faculty members may exempt from the final examination students whose work is of high quality. Conditions governing exemptions are determined by the faculty of the school concerned.


## Grading System

Achievement in a particular course is indicated by a letter grade that is translated into grade points for the student's record. Final grades are issued by the registrar at the close of each semester. Midsemester standings are issued to first-year students in 100-level courses, apprising them of their progress.

Grade points earned in a course are determined by multiplying the point value of the letter grade (shown in the table below) by the number of credits of the course. A cumulative average is obtained by dividing the total number of grade points by the total number of credits taken at Quinnipiac.

## Scale of Grades

| Letter Grade | Numerical Range | Grade Pt. Value |
| :--- | :--- | ---: |
| A | $93-100$ | 4.00 |
| A - | $90-92$ | 3.67 |
| B + | $87-89$ | 3.33 |
| B | $83-86$ | 3.00 |
| B - | $80-82$ | 2.67 |
| C + | $77-79$ | 2.33 |
| C | $73-76$ | 2.00 |
| C - | $70-72$ | 1.67 |
| D | $60-69$ | 1.00 |
| F | $0-59$ | 0.00 |

## Requirements for Graduation

Degrees are awarded three times a year: January, May and October.

Commencement exercises are held in the spring. Students may participate in the ceremony provided that: 1) they are within 6-8 credits (two courses) of their degree; 2) they are enrolled in summer school; and 3) they have a minimum 2.0 quality point average. Though faculty advisers assist each student in the selection of courses, the responsibility for fulfilling the requirements of the program and all Quinnipiac University program and departmental academic requirements of study rests with the individual student.

## For the Bachelor's Degree

1. The satisfactory completion of at least 120 credits, of which the final 45 must be taken at Quinnipiac University. (Certain majors in the School of Business and in the School of Health Sciences require the completion of more than 120 credits; see specific departmental requirements.)
2. Completion of the University Curriculum common to all bachelor's degree programs.
3. The satisfactory completion of the specific course standards and requirements of a student's chosen major (see curriculum descriptions).
4. A grade point average of at least 2.0 , with at least that average maintained during the final 60 hours of study, and any other GPA requirements imposed by the school, department or program.
5. School of Business students must complete a minimum of 50 percent of the business courses required for the degree at Quinnipiac (exclusive of 6 credits of economics).
6. Up to 6 credits of workshop courses and/ or physical education courses may be applied toward the degree requirement.
7. Recommendation by the faculty.

## Majors

A student's major must be approved in advance by the department chair, and the student must follow the prescribed course of study leading to the completion of this major. At least one-half of the courses in a major must be taken at Quinnipiac University. The sequence of courses in this catalog represents the most common sequence taken by
students and the sequence recommended by the department or program. Course sequences are not intended to be rigid. Students who wish to alter them should obtain permission from their adviser or department chair.

## Dual Majors

A student may request to major in two areas of study in the same school or college. He or she must fulfill all department requirements in both areas, complete all school requirements in the school granting the degree and be recommended by the faculties of each major department. The student receives one diploma.

## Dual Degrees

A student may earn two undergraduate degrees in two separate schools provided (a) all requirements for each degree are completed successfully, and concurrently (b) all pertinent requirements of Quinnipiac and of the departments and schools involved are completed successfully, and (c) both degrees are conferred concurrently.

## Second Degree

A second bachelor's degree may be earned, provided a minimum of 45 additional credits in residence have been earned, and all requirements have been satisfied.

## Minors

The purpose of a minor is to provide students with the opportunity to pursue an interest in a field outside of their major. Minors generally consist of six courses within a discipline or set of related disciplines with a progression of course levels. If a minor requires additional prerequisite courses, these courses are clearly indicated in the description of the minor within the University Catalog.

A student may earn a minor in an area of study concurrently with the major degree but not subsequently. Normally credits counted toward the requirements of the major may not be used to meet the requirements of a minor. Each individual school/college may have additional policies on meeting minor requirements, which are listed in the University Catalog. Completed minors are noted on student transcripts.

The University is committed to allowing all students the opportunity to complete a minor. However, this is dependent on early declaration of a minor and flexibility, including the necessity to take additional courses beyond degree requirements. To ensure sufficient time to complete a minor, students should submit an application to declare a desired minor prior to the end of their sophomore year.

To have a minor appear on their transcript, students should apply to declare a minor prior to their senior year. Applications to declare a minor may be obtained in the dean's office of the school/ college offering the minor, which will refer the student to the designated adviser for the minor. The adviser will indicate on the application for the student the number of semester hours and the specific courses required. At least one-half of the credits needed for a minor must be taken at Quinnipiac. Under special circumstances a dean, with the permission of Academic Affairs, may suspend the admission of new students into a minor for an academic year.

The following is a list of approved minors:
Accounting (p. 103)
Anthropology (p. 87)
Asian Studies (p. 91)
Biology (p. 65)
Biomedical Sciences (p. 141)
Business (p. 100)
Chemistry (p. 67)
Computer Information Systems (p. 105)
Computer Information Systems for
Communications Students (p. 105)
Computer Science (p. 75)
Criminal Justice (p. 87)
Dispute Resolution (p. 72)
Economics (p. 68)
English (p. 70)
Entrepreneurship and Small Business Management (p. 111)

Finance (p. 114)
Fine Arts (p. 90)
French (p. 76)
Game Design and Development (p. 90)
Gerontology (p. 87)
Global Public Health (p. 92)
History (p. 71)
History and Philosophy of Science (p. 93)
Interactive Digital Design (p. 125)
International Business (p. 116)

International Studies (p. 94)
Irish Studies (p. 94)
Italian (p. 76)
Journalism (p. 126)
Management (p. 117)
Marketing (p. 118)
Mathematics (p. 74)
Media Studies (p. 127)
Microbiology and Immunology (p. 146)
Middle Eastern Studies (p. 95)
Music (p. 90)
Philosophy (p. 80)
Political Science (p. 80)
Psychology (p. 82)
Public Relations (p. 129)
Scriptwriting (p. 124)
Sociology (p. 87)
Spanish (p. 76)
Sports Studies (p. 95)
Studies in the Law (p. 72)
Theater (p. 91)
Theater Design and Production (p. 91)
Women's and Gender Studies (p. 96)

## Prelaw

Students interested in attending law school must have a BA or BS degree and have taken the Law School Admission Test (LSAT). No single prelaw course of study is required or recommended. Several broad objectives of prelegal education, however, have been set forth by the Association of American Law Schools.

Students should take a range of courses that provide fundamental skills and understanding of language, the ability to think and write clearly and succinctly, logical reasoning and analytical skills, and an appreciation of social, political and economic foundations and complexities.

Toward this end, every prelaw student should carefully choose, with the assistance of his or her academic adviser and/or the prelaw adviser, courses that hone those skills listed. Students or graduates who have an interest in law school should contact Quinnipiac University prelaw adviser at 203-582-3688, CLA-1, room 331, for further information and should join the Prelaw Society to learn more about the LSAT and law school admissions and financial aid.

## Premedical Studies

The premedical studies designation is designed for students who are interested in health professions that include, but are not limited to, medicine (allopathic and osteopathic), dentistry, physician assistant, pharmacy, optometry, chiropractic, physical therapy, podiatry and veterinary medicine. Admission to graduate programs in the health professions normally requires additional courses outside of the chosen major. This additional study can be accomplished through the premedical studies program, which provides undergraduate students with the appropriate educational background necessary to meet the application requirements (including course work required to prepare for standardized entrance examinations) of the different graduate programs in the health professions.

The premedical studies program must be declared in addition to another degree and is NOT a stand-alone program.

Students should seek advice directly from the Prehealth Advising Office. In addition to helping students to select courses, the director of prehealth advising and faculty advisers from the Health Professions Advisory Committee can advise students on extracurricular activities to meet the specific expectations for the field of interest. These activities include participation in basic/applied research; clinical work; volunteer work; experiences that develop interpersonal skills, maturity and a genuine interest in medicine (i.e., clinical exposure and philanthropic activities); leadership experiences/effective teamwork; computer literacy; and opportunities to develop communication and interview skills. The committee also writes letters of evaluation for eligible individuals applying to professional school programs.

For more information, please contact the director of prehealth advising at 203-582-8874.

## Grade Requirements

Many professional schools require a minimum grade point average to apply for admission. Completion of the requirements of the premedical studies program does not guarantee acceptance to graduate programs, as it is only one criterion among many that are used in determining admission. As such, the premedical studies program has the following minimum GPA requirements:

- Overall Grade Point Average (GPA) 3.0
- Science GPA 3.0

Even though a student may be in the premedical studies program, they must meet the GPA and course requirements upon graduation to have this designation appear on their transcripts with their degree. The premedical studies program designation will not appear on transcripts if the GPA and course requirements are not met at graduation.

## Course Requirements

All courses listed in this section may count toward both the major (if applicable) and the premedical studies program.

## Required Courses

(All Courses Required for a Minimum of 44 Credits)
Students must complete all of the listed required courses, as they are the minimum prerequisites for application to most medical schools and form the basis of standardized admission tests (Medical College Admission Test, Dental Admission Test, Optometry Admission Test and Pharmacy College Admission Test).

Course

Credits

Biology 101/101L or Biology 150/150L 4
Biology 102/102L or Biology 151/151L 4
Chemistry 110/110L
Chemistry 111/111L
Chemistry 210/210L
Chemistry 211/211L 4
Physics 110/110L 4
Physics 111/111L 4
Biochemistry (i.e., CHE 315/315L) 4
Mathematics 141
Recommended Elective Courses
Psychology or Sociology
Genetics (i.e., BIO 282/282L or BIO 382 or BIO 471/471L)
Cell Biology (i.e., BIO 346/346L or BIO 568)
Anatomy and Physiology (i.e., BIO 211 and 212)
Students are encouraged to check the specific prerequisite course requirements of any health professions program to which they intend to apply. The selection of additional courses, especially those emphasizing critical reading and writing should be at the discretion of the student in consultation with the student's academic and prehealth advisers.

Many professional schools recommend additional elective course work in preparing for admission. Course work in the humanities and social sciences
provide breadth, and science electives provide a more extensive background for subjects covered by the standardized admissions tests.

Students should refer to the Association of American Medical Colleges (AAMC) online database Medical School Admission Requirements (MSAR ${ }^{\circledR}$ ) for full information regarding the required and recommended course work for medical school. Additionally, MSAR content information can be found on the AAMC website.

## Transfer Students

Students who transfer to Quinnipiac University and want to pursue the premedical studies program still need to have completed all of the prerequisite courses. Although Quinnipiac University may transfer the credits for courses taken elsewhere and not the grades, for the premedical studies program, grades from required and/or elective courses from other institutions will be used to ensure a GPA of at least 3.0 based upon all premedical studies courses. The overall GPA for transfer students will be calculated as for all other transfer students (based only on the courses completed at Quinnipiac University).

## Advanced Placement Credits

Some health professions schools accept AP credits provided that applicants replace courses for which AP credit has been granted with a course in the same discipline at a higher level. Other schools, including many medical schools, do not accept AP credits as a replacement for prerequisite science courses. Students are encouraged to check with the specific AP policies and course requirements of any graduate health profession program to which they intend to apply.

## Study Abroad

## Education Abroad

Quinnipiac students participate in semester, shortterm, and faculty-led programs abroad in various countries such as Ireland, Australia, Costa Rica, Spain, Italy, China and South Africa to name a few. Administered by the Department of Cultural and Global Engagement, study abroad programs promote a deeper level of understanding of the world by providing an opportunity to live and learn in a new culture. All students are advised to plan early for study abroad and to discuss with their academic adviser to determine whether they can fulfill their graduation requirements through a study abroad program. Students also must attend an information session in the semester prior to the study abroad experience.

For more information, contact the DCGE or visit www.quinnipiac.edu/omge.

## Semester Abroad Policies

1. Students must maintain a minimum GPA of 3.0.
2. Students must not have any existing or pending conduct sanctions.
3. The study abroad program must be preapproved by the Quinnipiac University Department of Cultural and Global Engagement.
4. Students must maintain full-time status (12-16 QU credits) while abroad. Some countries limit enrollment to 12 QU credits.
5. Students studying abroad are required to obtain approval from their academic advisers and respective dean(s) for all courses listed on the Study Abroad Course Preapproval Form. In addition, nursing and health science students are required to sign a statement of understanding prior to receiving approval to study abroad.
6. The cost of study abroad includes, but is not limited to: a registration fee, Quinnipiac's full-time tuition and residence fees (less the dining service fee) and an obligatory overseas emergency medical insurance and security assistance fee. If the cost of the study abroad program exceeds the sum of Quinnipiac's tuition and housing, the difference will be paid to Quinnipiac by the student. The student is also responsible for paying any refundable security deposits, program application fees and/or program withdrawal fees. Additional expenses
include but are not limited to: airfare, visas, meals, academic materials, lab fees, Internet usage, public transportation, personal travel, etc.
7. Students are required to live at the study abroad program residence facility.
8. Students who receive financial assistance at Quinnipiac may apply their financial aid for study abroad, including federal aid, state grants, college grants and scholarships. Work study cannot be applied.
9. Withdrawal from a program initiated by the student, Quinnipiac, the program affiliate and/or the host institution will result in a loss of fees and tuition in accordance with Quinnipiac's refund policy. Depending on the circumstances of the withdrawal, the student may be subject to action based on Quinnipiac's Student Conduct System.
10. For Quinnipiac students studying abroad, the credits and grades for approved courses taken abroad become part of the student's academic transcript and all grades are included in the calculation of the student's GPA. Grades are the exclusive prerogative of the faculty members teaching the courses. If students have questions about grading in any particular course, they must consult the faculty member teaching that course. Quinnipiac will not change grades issued by another institution.
11. Students may not take classes for a pass-fail grade. 12. Students who have not completed the Study Abroad Course Preapproval Form and complied with policy and procedure will not receive transfer credit and will be ineligible to study abroad through Quinnipiac University.

## Short-term Study Abroad Policies

1. Students must maintain a minimum GPA of 3.0 and must not have any existing or pending conduct sanctions.
2. The short-term study abroad program must be preapproved by the Department of Cultural and Global Engagement.
3. Students shall be limited to two courses taken abroad during their short-term program. Students are not exempt from the Undergraduate Summer Credit Policy as outlined in the Course Schedule and Registration Bulletin, which prohibits students from taking more than 7 credits during the summer. If more courses are requested, then the student must file a variant procedure with the dean of their college or school.
4. Students may be eligible to apply for financial aid if they are enrolled in 6 credits. Please inquire with the Financial Aid Office for further information.
5. Students studying abroad are required to obtain approval from their academic advisers and respective dean(s) for all courses listed on the Study Abroad Course Preapproval Form.
6. A grade of "C" or better will be accepted for transfer credits for all short-term study abroad programs. No letter grade is given for these credits. If the short-term program course grades are less than C , the credits are not accepted at Quinnipiac University.
7. Students who have not completed the Study Abroad Course Preapproval Form or complied with Quinnipiac Study Abroad policies and procedures will not receive transfer credit and will be ineligible to study abroad through Quinnipiac University.
8. When studying through a Quinnipiac-approved short-term study abroad program, the student is required to pay the program cost directly to the program or affiliates. The student is responsible for paying Quinnipiac's obligatory overseas emergency medical insurance and security assistance fee. Payment must be given to the Office of Multicultural and Global Education by set deadlines. This fee will be paid for the duration of the program. Failure to make the required payments will disqualify a student from receiving transfer credit.

## Quinnipiac in Cork, Ireland

All Quinnipiac students also have the opportunity to study at University College, Cork, in Ireland for a semester, academic year or summer term. Through this direct program, students are encouraged to fully participate in the programs and courses offered by UCC. For more information, visit the UCC website: www.ucc.ie/international.

## Faculty-led Programs

Quinnipiac faculty members also plan courses with a travel component to various countries during the January term, spring break, and summer terms. Some of the countries visited include Canada, Costa Rica, Dominican Republic, various European countries and South Africa. Students interested in participating in a Quinnipiac faculty-led course abroad should contact the Department of Cultural and Global Engagement.

## Field Studies

During summer, winter and spring recess, Quinnipiac offers faculty-led field trips for credit to sites in the United States and abroad. Field studies trips, to carefully selected locations, are designed to take advantage of the unique educational opportunities made possible by direct contact with other cultures. Pre-trip orientation and on-site instruction are provided by the faculty.

## Washington, D.C. Semester Programs

Washington, D.C., semester programs are multi-disciplinary, experiential learning programs bringing students from around the nation and the world to a variety of programming, including semester-length internships, research projects and two-week seminars in the national capitol. Students in any major may apply. Students may choose between Quinnipiac's affiliated institutions -American University and the Washington Center. Both offer modules that focus on students' particular areas of interest, such as American politics, economic policy, journalism, international development and the arts. Occasionally students have the opportunity for two-week inter-term and summer seminars. All students must complete an independent research project related to their experience in the program.

To be eligible, Quinnipiac students must have a minimum GPA of 3.00 and not be under judicial sanctions. Students must pay full-time Quinnipiac tuition for the semester or single course in Washington, D.C. An additional fee (based on the cost difference between Quinnipiac tuition and the program sponsor's fee) is assessed each student who selects a Washington semester program whose costs exceed Quinnipiac's tuition. Students receiving financial aid at Quinnipiac may apply their aid to the Washington, D.C., semester; this includes federal aid, state grants, and college grants and scholarships. Additional scholarships from the affiliated programs or other sources may also be applied to tuition or housing costs. For details about the programs and application deadlines, please contact the director of the program at 203-582-8686.

## Quinnipiac in LA Program

The Quinnipiac in Los Angeles program is offered during the fall and spring semesters as well as during the summer, giving undergraduate and graduate students the experience of working and studying in the nation's second largest city. QU in LA is open to all University students.

The program emphasizes experiential learning and is designed to enhance Quinnipiac's professionally oriented education. It is intended to expand Quinnipiac's career development programs, which prepare students to be contributors in the workplace from day one; meet the interests of students who want to experience and understand first hand the unique working environment of Los Angeles and the West Coast; and enable students to have internships, career practicum experience, a sense of independence and autonomy as part of our academic culture. For more information, go to www.quinnipiac.edu/quinla.

## Quinnipiac University Policies

## Harassment and Discrimination Policy

Quinnipiac University values diversity, multiculturalism and respect for others. The University is committed to providing a safe and respectful educational experience and work environment free from discrimination and harassment on the basis of an individual's race, color, religion, gender, age, marital status, national origin, ancestry, physical or mental disability, sexual orientation, gender identity or expression, genetic information or any other characteristic protected by law. This commitment is articulated and confirmed in the University's Strategic Plan for Inclusiveness, Multiculturalism and Globalism in Education (IMaGinE), which is available for review by visiting the IMaGinE MyQ website.

Students, faculty or staff who are found to have violated the Harassment and Discrimination policy are subject to the appropriate disciplinary process. Any form of retaliation against anyone who has reported harassment or a discriminatory act is strictly prohibited.

Students who believe they have experienced or witnessed an incident of discrimination or harassment should immediately contact the Dean of Students Office:

- Dean of Students Office and University Title IX Coordinator, 203-582-8723
- School of Law, 203-582-3220
- Frank H. Netter School of Medicine, 203-582-7968
Faculty and staff members who believe they have experienced or witnessed an incident of discrimination or harassment should immediately contact Human Resources or the Office of Academic Affairs:
- Human Resources, human resources business partner, 203-582-5257
- Academic Affairs, 203-582-5226

The Dean of Students Office and/or Human Resources coordinates with the chief diversity officer regarding how to access and utilize the support services that are available to the University community in these circumstances.

## Withdrawal from a Course

A student may withdraw from a course offered in a traditional semester ( $15-$ week) format up to the end of the 10th week of classes. For courses offered during the summer or in accelerated or other nontraditional formats, the withdrawal period extends up to the completion of 60 percent of the scheduled class sessions.

## Repeat of Courses with Grade of $F, D$ or $C$ -

A student who fails a required course must repeat that course. When the student earns a passing grade for the failed course, that grade and those credits are calculated in the student's cumulative average. The student's transcript will continue to display the failed course as part of the student's complete academic record. A student who fails an elective course may repeat that course to earn a passing grade. The passing grade and credits become part of the student's cumulative GPA; the record of the failing grade remains on the transcript.

Though the D grade normally is a passing grade, it is the prerogative of each department to set higher grade requirements in certain major courses. When such departmental requirements exist, students are so informed by their respective departments.

Courses with C- or D grades may be repeated only if the course is a foundation for further study
or meets a specific graduation requirement. If a C or D grade is repeated, no credits are added, but the most recent grade in the course applies.

## Procedure to Appeal a Final Grade

Faculty members are the most appropriate judges of how students perform academically. Therefore, this appeal process applies only in cases in which a student believes her/his final grade was determined in an arbitrary, capricious or prejudicial manner.

In such a situation, the student must first try to resolve the matter with the faculty member assigning the grade. If the matter cannot be resolved, the student should contact the chairperson of the department offering the course. If, after consulting with the student and faculty member, the chairperson is unable to mediate a mutually agreeable resolution, the student then contacts the associate dean of the division/school/college offering the course. If after consulting with the student, faculty member and chairperson, the associate dean is unable to mediate a mutually agreeable resolution, the student can request the formation of an appeal committee.

The request for an appeal committee must be in writing and include a description of why the student believes her/his final grade was determined in an arbitrary, capricious or prejudicial manner, and all relevant evidence (e.g., course syllabus, exams, projects, etc.). The associate dean will appoint a three-member faculty committee composed of two from within the department offering the course and a full-time faculty member of the student's choosing. In the absence of a student preference, the associate dean will appoint the third faculty member from another department within the college or school. If the associate dean is unable to appoint two faculty members from within the department, he/she will appoint two or more faculty members from outside the department, with the student having the option of choosing one full-time faculty member. The faculty member assigning the grade and the chairperson may not participate in this decision process.

After consulting with the student and faculty member, and reviewing the evidence, the appeal committee will forward to the associate dean a written final determination that either allows the grade to stand or requires the faculty member to recalculate the grade, with chairperson oversight.

After the faculty member submits the recalculated grade, the chairperson will document the nature and date of any changes and forward the documentation to the associate dean. The associate dean will notify the faculty member, department chair and student of the final resolution.

The student must submit her/his written request for an appeal committee to the associate dean within 45 calendar days from the start of the semester following the semester for which the grade was given. It is expected that within the 45-day period, the student, faculty member, department chairperson and associate dean will work cooperatively to resolve the matter. If the chairperson is the faculty member who assigned the grade, the student will contact the associate dean after failing to resolve the matter with the faculty member. If the faculty member who assigned the final grade is unavailable during the semester following the semester for which the grade was assigned, the above process begins with the chairperson. The appeal process will be completed by the end of the semester within which it is initiated. Only final grades may be appealed.

## Academic Good Standing Policy for Undergraduate Students

## (Revised for May 2015)

## Credit and GPA Requirements

To be in academic good standing at Quinnipiac, undergraduate students must meet both minimum grade point average and completed credit requirements.

A student fails to meet academic good standing requirements if his or her:
a) cumulative GPA is below 2.0
b) semester GPA is below 2.0 in any two consecutive semesters.
Any first-time, full-time student or first-time, full-time transfer student earning a GPA less than 2.0 in his or her first semester will be placed on Academic Warning. Students on Academic Warning are required to follow the same requirements as those on Academic Probation.

In addition to the GPA requirements, all students must complete course work over a period no longer than 150 percent of their program length to maintain the satisfactory academic progress stan-
dards of the University. For example, a full-time student enrolled in a four-year degree program must successfully complete an average of 10 credits per semester registered.

A part-time student must complete an average of 6 credits per semester registered. Some individual degree programs have higher GPA and credit requirements for students to maintain program eligibility. Consequently, students should consult the program description in the catalog for the requirements of their individual program.

The academic good standing requirements for transfer students are based on the number of credits accepted for transfer. For example, students who enter Quinnipiac with 20 transfer credits are considered to have completed two semesters and are subject to the requirements of a third-semester student during her/his first semester at Quinnipiac. However, minimum GPA is based only on courses completed at Quinnipiac.

Students should also know that failure to meet the academic good standing requirements may result in the loss of financial aid and or scholarship, and may affect their eligibility for campus housing. Also, individual programs may have other academic requirements to remain in good standing in the specific program. Students should refer to the program section of the catalog for information regarding individual program requirements.

## Sanctions

Any student who fails to achieve any of the requirements above is subject to one of the following sanctions:

## Academic Probation

Probation serves as an official notification of deficiency that requires students to promptly address their deficiency(s). After the close of the previous semester, the Office of Academic Affairs notifies students of their probation. Prior to the start of each semester, students on probation and their academic advisers are notified about this sanction through Retention Alert; advisers and probationary students also are directed toward resources that support the Improvement Plan process. Before the end of the first week of classes, students on probation must submit an electronic copy of their Improvement Plan to their academic adviser and the Learning Commons. In their Improvement Plan, they should reflect on their past semester,
and indicate how they will improve their academic performance to remedy their academic deficiencies. Probationary students must meet with their adviser within the first two weeks of the next semester to have the adviser approve or amend the plan. Approved plans are forwarded to both their school/college dean's office and the Learning Commons. Probationary students must meet personally with their adviser a second time during preregistration to discuss their progress in meeting the goals of their Improvement Plan and their course selection for the next semester. Additionally, probationary students must email their adviser with a progress update every two weeks during their semester on probation. The Learning Commons has a variety of programs to support students on probation. Students on probation may register for courses in the usual fashion. However, students on probation must attend and successfully complete an Advanced Learning Tutorial with an academic specialist at the Learning Commons during their probationary semester. These meetings provide students support and strategies to assist them in correcting their deficiencies. Normally, students are not permitted to appeal probationary status. However, students who failed to achieve the completed credits requirement for documented medical reasons may appeal a probation decision.

Students on probation or credit deficient at the close of the semester may use summer or winter classes to regain good standing to the degree this action follows existing academic policies. To remediate a deficiency in GPA, students must take a course offered by Quinnipiac University and comply with existing policies regarding summer and winter courses. To remediate credit deficiency with courses taken at another university, students must comply with the policy regarding study at another institution, which can be found in the University Catalog. If they are able to remediate their deficiency, they must appeal the change of academic status through the office of the associate vice president for retention and academic success no later than the Friday of the first week of the subsequent semester. Appeals should be made in person and should include acknowledgement of current status, actions taken to remediate current status, and discussion of changes intended for the next semester. A change in academic status will not be made without a successful appeal. A successful appeal will result in a notation to the student's transcript
that indicates a new standing of Academic Warning, which is discussed below. Appeals to reinstate financial aid may also be addressed during this appeal process.

## Suspension

Students who have serious or repeated deficiencies are subject to suspension. Suspended students must leave Quinnipiac for a period of one semester. Suspended students are required to use this period of suspension to review their academic goals and to improve their academic skills. To facilitate this review and reflection, suspended students are assigned an academic specialist with whom to work during their suspension. Suspended students are encouraged to work closely with Learning Commons staff and other resources to prepare for their return to Quinnipiac. Additionally, credit will not be given for courses taken during the suspension period. Suspended students may return to Quinnipiac after the completion of the suspension period; in the semester of their return, they will be on Academic Warning and subject to its requirements. Further, suspended students are expected to work with their advisers or their associate deans for course selection prior to their return. Students returning from suspension and intending to enroll in summer or J-term courses that might contribute to their program must meet with their adviser or their associate dean before doing so.

## Dismissal

Students with serious or repeated academic deficiencies are subject to dismissal from Quinnipiac. After a period of at least one year, dismissed students who have demonstrated academic achievement elsewhere may file a new application for admission to Quinnipiac.

## Procedures

Decisions regarding probation, suspension and dismissal are made by the Academic Deficiency Review Committee (Deficiency Committee). The Deficiency Committee is composed of five faculty members (appointed by the deans of the academic schools) and the Registrar and Learning Commons staff, who serve on an exofficio basis. With the exception of the first-time, full-time students and first-time, full-time transfer students as noted above, students are usually placed on probation
after their first deficient semester. Individual students may be continued on probation for subsequent semesters if they make progress in addressing their deficiency. However, students who are deficient after a total of three semesters on probation, two semesters after the freshman year, or two semesters after transferring to Quinnipiac are suspended or dismissed. Any student who has a GPA below 1.2 after two semesters is dismissed. Suspended and dismissed students may appeal their sanction to the Academic Appeals Committee, consisting of a representative from Academic Affairs, undergraduate school and college deans or their designee (an associate dean), and two students appointed by the student government president.

The Appeals Committee may change a suspension or a dismissal to a lesser sanction. All notifications of decisions and meeting times of the Deficiency and Appeals committees are sent to the permanent address of affected students by Federal Express or first class mail (probation notices only). It is the responsibility of students to be sure they can be contacted and, if necessary, respond promptly to committee notices.

## Academic Warning

In an effort to support academic success, the University places under review students whose previous academic performance indicates a risk to academic success. Students whose semester grade point average is less than 2.0 and students who have successfully appealed a change in probationary status, as noted above, will be placed on review. While this review is not an official notification of deficiency and these students are not on probation, both conditions may indicate a challenge to academic success. Like those students on probation, however, students under review are contacted by Academic Affairs just after the close of the semester. Prior to the start of the next semester, these students and their academic advisers are reminded of the low semester GPA and directed toward resources. Following a discussion of their academic record with their academic adviser or an academic specialist, students will be asked to develop an Improvement Plan and to meet regularly with an academic specialist. This review semester is intended to help students regain their momentum toward academic success.

## Math and English Requirements

Full-time students are expected to have completed EN 101, EN 102 and MA 110 (or their equivalent) by the end of three semesters. Part-time students are expected to have met these requirements by the time they have completed 30 credits. Students may not withdraw from EN 101 or EN 101 Intensive. The first time a student fails to complete EN 101 or EN 101 Intensive successfully, a grade of "U" is issued. Each additional unsuccessful attempt at EN 101 or EN 101 Intensive results in a grade of "F." For more information, please review the course description.

## Policy Regarding Study at Another Institution

Quinnipiac University is committed to having its students take courses that best fit their required curricula at the appropriate academic level. Once undergraduate students have matriculated at Quinnipiac, they normally are not allowed to take courses for credit elsewhere. If there is a compelling reason, the University will accept up to two courses for transfer credit from an accredited institution, assuming grades of "C" or better. To receive credit, the course must be preapproved by the appropriate dean based on an official course description provided by the student. Ordinarily, permission to take a summer or intersession course elsewhere is not given if a) the course if offered during the same period by QU Online, or b) if the course is offered during the same period on the Quinnipiac campus and the student is residing in the State of Connecticut. If either of these two requirements is inappropriate for an individual student, he/she may petition for an exception from the dean through the University's Variant Procedure process. Once a student has completed (or transferred) a total of 48 credits, he/she will not be permitted to take a course at a junior or community college offering two-year terminal degrees. Students must take their final 45 credits at Quinnipiac. Students who study abroad during the summer or winter intercession are exempt from the two-course limit.

Quinnipiac University has different policies that apply to courses taken elsewhere through its approved Study Abroad and Washington Semester programs.

## Ouinnipiac University Grievance Policy

The Quinnipiac University Grievance Policy is an umbrella policy to cover any type of grievance that is not considered under a separately defined policy. Redress for any grievances covered by the following policies must be pursued according to the procedures specified in those policies.

- Appeal of an academic suspension or academic dismissal from the University (University Catalog, Student Handbook)
- Appeal of an academic suspension or academic dismissal from an individual degree program (individual program requirements as stated in the University Catalog)
- Appeal of a final grade (University Catalog)
- Appeal of an academic integrity sanction (Student Handbook)
- FERPA complaints (Student Handbook)
- Appeal of a student conduct sanction (Student Handbook)
- Appeal of the decision to return after a mandatory medical leave of absence (Student Handbook)
- Grievance procedure for issues regarding disabilities (Student Handbook)
- Complaints of inappropriate noise (Student Handbook)
- Title IX Discrimination and HarassmentGrievance Procedures for Students (Student Handbook)
- Financial aid appeal (financial aid website)

When a student has a complaint not covered by one of the above policies and procedures, he or she is encouraged to discuss the matter first with the parties involved. If the matter cannot be resolved informally at this level, then the student may file a written, formal complaint according to the following procedures.

A student grievance originating in any of the school or administrative units is handled by the chair or director responsible for the unit in which the grievance originates. Therefore, the written formal complaint should be submitted to the responsible chair or director within five business days of the failed attempt at an informal resolution. The chair or director should make a decision regarding the grievance within 10 business days of receiving the written complaint.

A written appeal may be submitted within five business days either to the school dean exercising jurisdiction over that academic department or to the vice president/dean of students or designee for nonacademic matters. The dean will inform the student within 10 business days of his or her decision. The dean's decision is the final decision.

## Leaves of Absence

Leaves of absence may be arranged for one or two semesters through the registrar, subject to departmental and school approval. At the conclusion of the leave of absence, the student receives automatic readmission to the University. The granting of a leave of absence guarantees readmission to the major in which the student is enrolled when applying for a leave and permits the student to graduate by complying with the degree program requirements in effect when the leave is taken, provided that the courses are still offered. If requirements for graduation are changed after a student is first admitted to Quinnipiac, the student can choose to follow either the former or the new requirements. During the leave of absence, Quinnipiac retains the student's deposit until completion or withdrawal.

If a student takes a leave of absence and later is suspended, dismissed, placed on warning for unsatisfactory academic performance (including academic integrity sanctions), or suspended or expelled as the result of a judicial decision, the sanctions take precedence over the leave of absence and stand as a matter of record. Any academic warning becomes operative at the time of return to the University. A mandatory medical leave of absence takes precedence over a voluntary leave of absence and the student must comply with the terms of the medical leave.

Leaves of absence are not granted for the purpose of allowing a student to study at another university. In general, courses taken at another institution while a student is on a leave of absence will not be transferred in for credit at Quinnipiac.

Students who do not return after the specified leave of absence period will be administratively withdrawn and will be required to reapply for admission in order to return to the University. In such instances there is no guarantee of readmission.

## Military Leaves

Students in the military reserves who are enrolled when they are called to active duty, can choose:

1. Withdrawing from courses with a full tuition refund or tuition credit, in accordance with institutional and federal government guidelines.
2. If a student has completed at least 50 percent of the course work and upon recommendation of his/her dean, the student may elect to take incompletes and make special arrangement for course completion with individual instructors. Students needing to take a military leave should contact the director of veteran and military affairs at 203-582-8867.

Students are eligible to return within one year following active duty. However, the degree requirements may have changed, and they may be required to comply with degree program requirements in effect at the time of their return to the University.

## Medical Leaves of Absence

Students who wish to withdraw from the University during an academic term for medical reasons (i.e., physical or mental health conditions that necessitate their absence), may request a medical leave of absence.

The student must provide supporting documentation of the medical condition from his or her treating physician to the director of health and wellness or designee, who will review the documentation with the appropriate University staff and with the University's consulting medical professional, if warranted. A medical leave of absence may be granted for one or two semesters although, under special circumstances, the University may agree to extend the leave beyond two semesters. Upon conclusion of the medical leave, the student must provide supporting documentation from his or her treating physician to the director of health and wellness or designee that confirms the student is fit to return. This documentation will be shared with the appropriate University staff, including the University's consulting medical professional, if warranted. The student will be advised of the outcome of this review and whether he or she is cleared to return, with or without a reasonable accommodation.

## Involuntary Medical Leaves of Absence

The University may place a student on an involuntary medical leave of absence in situations where it determines, after conducting an individualized and case-by-case assessment, that there is a significant risk that the student will harm himself/herself or another, and that the risk cannot be eliminated or reduced to an acceptable level through reasonable accommodations. The director of health and wellness will make this decision, and the director or the director's designee will promptly notify the student's parents, legal guardians or emergency contact accordingly. The director or the director's designee also will make arrangements to remove the student immediately from the University.

Once the leave begins, in the interim, pending an evaluation by a University consulting medical professional, the director of counseling services and the coordinator of learning services or their designees will conduct an individualized assessment and case-by-case determination as to whether and what reasonable accommodation(s) can be made to allow the student to participate in the educational programs at the University and to continue to attend his or her classes while seeking treatment. The student must undergo an evaluation with one of the University's consulting medical professionals, which will be arranged and paid for by the University. The student must release all relevant medical information from his or her treating physician to the University's consulting medical professional prior to the evaluation. The results of the evaluation will be reviewed by the director of counseling services and the associate vice president for student affairs or their designees, and a decision will be made whether the student may return to the University immediately, with or without a reasonable accommodation, or whether the leave will be extended. If the leave is extended, the director of counseling services and the coordinator of learning services or their designees will conduct an individualized assessment and case-by-case determination as to whether and what reasonable accommodations can be made to allow the student to participate in the educational programs at the University and to continue to attend his/her classes while continuing to seek treatment.

In the event the leave is extended, the student must undergo a second medical evaluation shortly
before the expiration of the extended leave with the University's consulting medical professional, at the student's expense, before returning to the University. The student must release all relevant medical information from his or her treating physician to the University's consulting medical professional prior to the evaluation. The results of the evaluation will be reviewed by the director of health and wellness or designee, and a decision will be made whether the student may return to the University immediately, with or without a reasonable accommodation, or whether the leave will be extended. If the leave is extended, the director of health and wellness and the coordinator of learning services or their designees will conduct an individualized assessment and case-by-case determination as to whether and what reasonable accommodation(s) can be made to allow the student to participate in the educational programs at the University and to continue to attend his/ her classes while continuing to seek treatment. If the student is permitted to return, the director of counseling services and the coordinator of learning services or their designees will conduct an individualized assessment and case-by-case determination as to whether and what reasonable accommodation(s) can be made to allow the student to participate in the educational programs at the University upon his or her return.

A student who has been placed on involuntary medical leave of absence is subject to the same policies as a student granted a voluntary leave of absence regarding financial aid and financial obligations as stated in the University's refund policy.

## Appeals

Students may appeal the decision to return following an involuntary medical leave of absence in writing to the vice president and dean of students. All information submitted, including the results of the evaluations, become part of the student's health record and will be considered confidential.

## Withdrawal from the University

Students considering withdrawal from the University must meet with their academic adviser or department chair to explore the available alternatives. If withdrawal is a student's final decision, he/she must meet with the dean of his or her school.

Honorable release is granted when all financial obligations to Quinnipiac University have been met. The refund policy is available in the bursar's office.

A student receiving aid for education for the Veterans Administration must consult with the registrar and comply with Veterans Administration regulations. A student holding a Stafford Loan or Nursing Student Loan must have an interview in the financial aid office to ensure a clear understanding of repayment obligations. For details, see www.quinnipiac.edu/bursar.

If a student plans to withdraw and later is suspended, dismissed, placed on warning for unsatisfactory academic performance (including academic integrity sanctions), or suspended or expelled as the result of a judicial decision, the sanctions take precedence over the withdrawal and stand as a matter of record. Any academic warning becomes operative in the event that the student is readmitted to the University.

## Administrative Withdrawal

Students are administratively withdrawn by the University if they have not registered for classes by the end of the drop/add period of any semester, if they have not returned to the University when the approved period of leave of absence has expired, or if they have not returned at the time specified after academic or disciplinary suspension and the period of suspension has not been extended.

Students who have been administratively withdrawn from the University must reapply for readmission. Readmission to the University is not guaranteed. A student who is granted readmission to the University may not be guaranteed readmission to the major in which he or she was enrolled at the time of administrative withdrawal. All students who are readmitted after an administrative withdrawal must comply with degree program requirements in effect at the time of readmission.

## Readmission

Students who are not on an official leave of absence and who wish to return to Quinnipiac University must apply for readmission through the admissions office. Any student who has been away from the University for two full semesters must reapply for admission. Official transcripts of any colleges attended while the student has been away from Quinnipiac must be provided. The admissions office, the academic affairs office and
the dean of student's office will determine the student's eligibility for readmission.

A student who is granted readmission to the University may not be guaranteed readmission to the major in which he or she was enrolled at the time of administrative withdrawal. All students who are readmitted after an administrative withdrawal must comply with degree program requirements in effect at the time of readmission.

## Student Records Policy

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. These rights include:

1. The right to inspect and review the student's educational records within 45 days of the day Quinnipiac University receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. A Quinnipiac official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Quinnipiac official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that he or she believes are inaccurate, misleading or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the University to amend a record should write to the Quinnipiac official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If Quinnipiac decides not to amend the record as requested by the student, the University will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when he or she is notified of the right to a hearing.
3. The right to provide written consent before Quinnipiac discloses personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent.

One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by Quinnipiac University in an administrative, supervisory, academic, research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom Quinnipiac has contracted (such as an attorney, auditor or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, Quinnipiac also discloses educational records without consent to officials of another school in which a student seeks or intends to enroll.

## Public Notice Designating Directory Information

 Quinnipiac University designates the following information as public or "Directory Information" under FERPA, that is, information that can be made available to the general public by Quinnipiac without the student's prior consent: NameAddress
Telephone number
Email address
Date and place of birth
Secondary school
Hometown or city at the time
School or college
Major field of study
Degree sought
Weight and height of athletic team members
Expected date of completion of degree
requirements and graduation
Degrees and awards received
Honor societies
Dates of attendance
Full- or part-time enrollment status
Previous educational agency application for admission filed or institution attended
Participation in officially recognized activities and sports
Name and address of parent or guardian
Photo images from ID cards

A student may refuse to permit the designation as "Directory Information" of any or all of the personally identifiable information listed above, except to school officials with legitimate educational interests and others as indicated. To do so, a student must make the request in writing to the Office of the Registrar by 5 p.m. on Friday of the first week of classes of the semester. Once filed, this request becomes a permanent part of the student's record until the student instructs Quinnipiac University, in writing, to have the request removed.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Quinnipiac University to comply with the requirements of FERPA. The name and address of the office that administers FERPA are: Family Policy Compliance Office U.S. Department of Education 400 Maryland Avenue, SW Washington, DC 20202-5920


## Student Resources and Services

## Department of Public Safety

The Department of Public Safety provides the following services for the campus community:

- Patrol of the campus 24 hours a day, seven days a week. All security staff members receive yearly in-service training. The two main campus entrances (New Road and Mount Carmel Avenue) are staffed 24 hours/day, 365 days a year.
- Response to all requests for assistance, including all emergencies; assistance at medical emergencies; investigation of all complaints; and completion of written follow-up reports.
- Regular checks of all residential and academic buildings.
- Escort service (walking escort) 24 hours a day, seven days a week.
- Security for all student and Quinnipiac campus events.
- Maintenance of a working relationship with local law enforcement agencies and other emergency service agencies on matters related to the security and safety of the campus.
The Department of Public Safety can be reached at 203-582-6200.


## Learning Commons

The Learning Commons is a group of academic programs that provide support to members of the Quinnipiac community. On the Mount Carmel Campus, the Learning Commons is located in the north wing of the Arnold Bernhard Library. On the North Haven Campus, the Learning Commons is located on the second floor of the School of Law Center. The Learning Commons offers the following support services:

## Peer Academic Support

At Quinnipiac, the work a student does with his or her professor is complemented by a strong peer support system.

- A peer tutoring program, certified by the College Reading and Learning Association, provides individual tutoring for the great majority of 100 -level courses, many 200- and 300-level courses and supports many of the graduate degree programs. Students meet with peer tutors on an appointment basis to address material in
a specific course. Tutors also can help students improve study skills, time and task management and academic goal-setting.
- A peer fellow program, developed from the supplemental instruction model by a certified coordinator, provides weekly study groups for various classes. Trained in group dynamics and Socratic questioning, peer fellows attend each class meeting, develop a weekly agenda with the professor, and meet with interested students to work on topics and challenges.
- Peer Advisers are trained to help students with pre-advising needs. These include support with the Personal Success Plan, as well as access to and help with students' program assessments and other information necessary for an informed meeting with one's academic adviser. Successful students themselves, our peer advisers can help students navigate the various resources of the Quinnipiac community.


## Support for Students with Disabilities

At Quinnipiac, we recognize that people learn differently. Following the guidance of the Americans with Disabilities Act of 1990 and Section 504 of the 1973 Rehabilitation Act, the coordinator of learning services and the learning services specialist meet individually with students who choose to disclose a disability, assisting them in meeting the academic challenges they face.

## Opportunity for Students who come to English as a Foreign Language

Many of Quinnipiac's students bring with them another language, one in which they have been doing the bulk of their thinking and learning. In their journey to master academic English, we offer individual tutoring. Students work with a professional tutor who in turn communicates with students' advisers and professors. Students can work individually or in groups on writing, speaking, conversation and other aspects of academic English.

## Professional Academic Support

Students can work with one of our learning specialists to address their academic goals and challenges. Working closely with students' professors and other support staff, Quinnipiac's learning specialists provide students with opportunities to improve their academic choices.

Students can develop an improvement plan, work on problem solving, discuss new learning strategies, and many other topics necessary to students embracing academic challenge. Our academic specialists also work with students who have been referred to our services by their faculty through Quinnipiac's Retention Alert program. This program helps direct individual students to appropriate academic support during the semester and facilitates dialogue among those working to support the student. Academic specialists also work with faculty to bring learning skills into the classroom.

## Research and Writing Institute

Since 2000, Quinnipiac has adopted a Writing-Across-the-Curriculum (WAC) program to encourage critical thinking through writing. This concept is carried further in the writing done in the majors, which is supported through our Writing in the Disciplines (WID) program. The Research and Writing Institute, which manages the training for WAC and WID, is located in the Learning Commons. A resource to faculty, the institute works with other academic units to promote thinking through writing.

## University Laptop Program

Faculty design their courses with the expectation that students will have computer technology in the classroom when requested. For that reason, all incoming students must have a laptop that meets our academic requirements and technical standards. To facilitate this need, Quinnipiac offers a laptop program that is cost effective and exceptionally well supported both on and off campus. The recommended laptops are configured so that they meet the core needs of academic programs and are a key part of the campus computing infrastructure, designed to support new teaching and learning.

## Technology Assistance

All incoming students are required to have a laptop computer readily available to them with no exceptions. Information Services annually recommends a specific hardware and software laptop configuration that meets or exceeds these technical standards (specific information on the most current program can be found at www.
quinnipiac.edu/laptop-technology). By selecting the recommended laptop, students will receive exceptional service and support on and off campus. Students who elect to bring their own laptops to campus (other than the recommended ones) also will be afforded technology assistance often of a less comprehensive nature due to the many possible variations of alternatives. Ultimately, it is the responsibility of the student to perform in the classroom.

Although laptops meet the vast majority of student needs, for those disciplines that require more specialized hardware or software, the University has more than 350 computers in 12 computer laboratories throughout the campus. The University maintains a secure and advanced data network that connects all University computers on all three Quinnipiac campuses. Students, faculty and staff are able to access this secure network through wired and wireless access. Wireless access is found across all three campuses, including the residence halls, classrooms, athletic fields and public areas.

The Arnold Bernhard Library is open 24 hours a day during the academic year, and contains more than 100 publicly available computers, as well as the Technology Center, where faculty and students can receive computer repair services and help with equipment and software for capturing and processing digital audio, images and video. The library also provides an extensive collection of online bibliographic databases and full text journals for use in the library or remotely through the campus network.

## Department of Cultural and Global Engagement

Quinnipiac University fosters respect for each individual by honoring the differences inherent among people. As an intellectual community of learners and scholars, we recognize and appreciate our common humanity. Acknowledging that we live in a pluralistic society, we have a genuine desire to ensure that all members of the Quinnipiac community feel empowered to express their own individuality. These principles underscore our central mission of teaching and learning and are vital to achieving national prominence and excellence in education. They also serve as the foundation for promoting the economic, social
and cultural well-being of our community, our nation and beyond.

The associate vice president for academic affairs and chief diversity officer oversees the Department of Cultural and Global Engagement and engages the campus and surrounding community to help define, enable and foster an inclusive campus culture that embraces the diversity of identities, ideas and values that embody Quinnipiac University. For more information, please contact the office at 203-582-7987.

Other departments located within the Department of Cultural and Global Engagement include: the Albert Schweitzer Institute and Office of Religious Diversity.

The Department of Cultural and Global Engagement promotes and sustains multicultural and global education by mentoring and advising students, facilitating transformative cultural experiences, preparing students to be responsible global citizens and enhancing creative and critical thinking through local and global academic engagement.

We believe in working in the intersection of internationalization and multicultural education, which provides creative opportunities for faculty, staff and administrators to:

- help students understand multiculturalism and social justice in a global context
- develop intercultural skills
- broaden attitudes and experiences for students such as study abroad, global service learning and courses with a travel component
- examine values, attitudes and responsibilities for local/global citizenship
- see how power and privilege are shifting the local/global context
- prepare students to cooperate and compete in a multicultural and global workplace.


## Multicultural Education

Multicultural education provides advocacy for the cultivation of a sustainable campus environment that is supportive of a diverse student body. This area:

- works collaboratively with academic and administrative units to foster intercultural dialogue and programming
- delivers academic and social mentorship for underrepresented students to live, work, lead and succeed in a multicultural and global world
- assists multicultural student organizations in leadership development to enhance their active engagement and participation in the University community
- offers programming that enhances students' understanding and appreciation of various, ethnic, racial, sexual orientation, socioeconomic class and other cultural identities
- offers transitional support for incoming students of color, first generation and international students
- provides opportunities for students and faculty to learn about, embrace and celebrate diverse ethnic, racial and cultural identities.


## Global Education

Global education promotes, supports and develops a wide range of international and intercultural opportunities for all members of the community. This office:

- provides international experiences through education abroad
- maintains a supportive and stimulating environment for international students, faculty and staff
- hosts events and programs to increase the international activities at Quinnipiac.
See p. 30 for Study Abroad information.


## International Service Programs

## International Service Programs

Many Quinnipiac academic programs have developed one- to two-week programs that take place during winter, spring or summer break. These trips enable students to put their knowledge into use while providing service to developing countries around the world. The programs are coordinated with the College of Arts and Sciences and the Schools of Business, Communications, Education, Health Sciences, Nursing and Law. For more information, contact the Department of Cultural and Global Engagement at 203-582-3596.

## International Students

The Department of Cultural and Global Engagement provides services for the international student population at Quinnipiac University. The department organizes on- and off-campus programs and events that are open to both international and domestic students. Services are provided from the time of acceptance through completion of
the program, and many times extend beyond the program end date. Services include preparation of documents for visa issuance and work authorization, as well as workshops on employment, taxes and immigration procedures. Additionally, the department hosts a comprehensive orientation program each semester to prepare incoming international students and scholars for life and study at Quinnipiac University. For more information, contact the Department of Cultural and Global Engagement at 203-582-8425 or via email at international.student@quinnipiac.edu.

## Albert Schweitzer Institute

The Albert Schweitzer Institute at Quinnipiac University is inspired by the ideals and example of 1952 Nobel Peace Prize Laureate, Dr. Albert Schweitzer. The Institute conducts educational programs on a global basis and focuses on health, humanitarian service and peace efforts. The institute's programs include:

- conferences and speakers on peace at the United Nations and on campus
- motivating young people to serve the community and the environment as a way of life
- increasing public awareness of Schweitzer's philosophy and its potential for a more peaceful, sustainable world.
The Institute, located adjacent to the campus at 660 New Road, houses the offices of its staff as well as the Albert Schweitzer museum, which consists of artifacts from Schweitzer's collections and other humanitarian exhibits along with a small conference room named after Schweitzer's daughter, Rhena.


## Office of Religious Diversity

The Office of Religious Diversity provides spiritual and pastoral counseling, worship, sacraments and celebratory activities. Religious leaders representing the Catholic, Protestant, Jewish and Muslim faiths are on staff. They are the spiritual representatives at University gatherings such as Commencement. They strive to create an environment that will enhance religious and spiritual awareness. For more information, contact the Department of Cultural and Global Engagement at 203-582-7987.

All Jewish events are held at the Peter C. Hereld House for Jewish Life located at 560 New Road. For more information, contact the rabbi at 203-582-8206.

## Experiential Learning Certificates

## SQUID Certificate Program

SQUID stands for Scholars at Quinnipiac University Integrating Difference. This certificate program, offered through the College of Arts and Sciences, is designed to acknowledge the effort students have made to learn about the broad variety of human experience. Students in any undergraduate program who are interested and who complete three SQUID-designated courses of their choice are eligible to achieve a certificate from the College of Arts and Sciences that reflects the commitment they have made to diversify their college curriculum. Many students seek out opportunities to learn about people in societies who have been historically underrepresented and underprivileged. Interested students should contact the director of the program at 203-582-3724.

## Albert Schweitzer Certificate for Ethics and Responsibility

This certificate program, affiliated with the Albert Schweitzer Institute, enables students to be recognized for their service to others in keeping with the ideals of the 1952 Nobel Peace Prize Laureate, Dr. Albert Schweitzer. Students earn points toward this certificate through directed academic engagement and volunteer activities. To earn the certificate, eligible students take preapproved courses or those that have a servicelearning designation, and participate in a variety of service-based activities. Examples of these activities include an alternative spring break opportunity, a semester-long internship program with a service organization on or off campus, assuming a leadership role in a campus organization or off-campus non-governmental organization.

Given the strong interest by potential employees, graduate schools and professional schools in ethical behavior and concern for others, this program is structured to help a student easily demonstrate his or her dedication to these important values.

## Service Learning Certificate

Interested students who meet the requirements are eligible to receive a certificate from the Committee for Service and Service Learning. This certificate reflects the commitment the student has made to experiential and service learning techniques and opportunities in designated service learning courses.

To earn a Service Learning Certificate, students must successfully complete (with a grade of C or better) three or more service learning (SL) designated courses at Quinnipiac or two Service Learn-ing-designated courses along with a service experience or service trip with a reflection component. An application form, which contains a list of eligible service learning designated courses and instructions can be downloaded from the Service Learning web page. Refer to Blackboard for a list of the service learning courses that are offered in each semester. The SL designation helps faculty advisers and students identify service learning courses to plan and prepare for registration. Each student who applies and completes the requirements of a Service Learning Certificate receives their certificate at an end-of-the-year celebration, and is invited to service learning events during the school year. For details, see the website (www.quinnipiac.edu/service-learning).

## Division of Student Affairs

## Mission

The Division of Student Affairs is committed to a student-centered environment that supports and challenges each student to explore opportunities for personal and professional success. Student affairs educators collaborate with faculty, staff, administration and the greater community to enhance the collegiate experience. The staff cultivates rich co-curricular experiences and provides quality services to advance the interpersonal and intellectual development of all students. The division prepares students to be active learners and responsible citizens in the 21st century.

## Career Development

Quinnipiac University offers an array of career services specifically geared to students in each of the schools. These services include: individual career counseling and advising sessions; assistance with resume/cover letter writing and other job search correspondence; interview practice and preparation; connections with alumni and employers; career fairs, panels and workshops; job and internship listings and strategy sessions; graduate school information; and school-specific career information. Please contact the career development office in the
appropriate school for further information and view the career development website: www.quinnipiac.edu/career-development.

## Transitional Services for Underrepresented Students

Quinnipiac is committed to ensuring that underrepresented students (international students, students of color and first-generational students) have a successful educational experience. For further information and assistance, please contact the Department of Cultural and Global Engagement at 203-582-8425.

## Counseling Services

Counseling is available to undergraduate, graduate and medical students at no cost. The counseling department is open Monday through Friday, from 9 a.m. to $5 \mathrm{p} . \mathrm{m}$. The office is located in the Health and Wellness Center on Bobcat Way on the Mount Carmel Campus. Counseling services also are available on the North Haven Campus by appointment. To schedule an appointment, students must complete an intake form, which is available online or in the office. The telephone number for the office is 203-582-8680. If you have additional questions, please contact the director of counseling at 203-582-3087.

## Community Service

The Office of Community Service offers a number of opportunities throughout the year to engage students in local community service. Activities include publishing a directory of local nonprofits, alerting the community to specific nonprofit requests for service and working with faculty to develop service learning courses and projects. The office also organizes special service events including the Bobcat Builders Program, Fall Service Series and an end-of-the-year food drive.

The Office of Community Service offers alternative break programs that engage students in community service during spring break in a variety of national locales. Students also may work with a local nonprofit or elementary school through the University's work-study employment program.

Many student clubs and organizations perform service including Community Action Project and

Habitat for Humanity. Students interested in regular community service opportunities are highly encouraged to join a student organization.

## Student Health Services

## Mount Carmel Campus

Located in the Health and Wellness Center on Bobcat Way, Student Health Services is staffed by registered nurses 24 hours a day, seven days a week while students are in residence. A physician, board certified in both emergency and internal medicine, is available 30 hours per week, Monday through Friday. The highest priority of the staff is meeting the emergent health needs of the student population and providing ongoing health education opportunities as an integral part of the college experience. All questions should be directed to Student Health Services at 203-582-8742.

Services are available only to students who have completed the student health services requirements:

1. online personal form
2. online personal immunizations
3. physical examinations

The Student Health Services Physical
Examination Form must be downloaded and taken to your health care provider for completion. The results of a pre-entrance physical examination that was administered by a licensed advanced practice nurse, a physician assistant, a DO or an MD no more than one year before entrance to Quinnipiac must be mailed to the SHS office. These forms serve as a basis for health counseling and for decisions about physical activities in which students can engage. Students who do not comply are not permitted to register, including preregistration for the second semester. The information provided becomes the basis for the student's confidential medical record within Student Health Services.

All charges for referrals, diagnostic procedures and lab work will be billed directly to the student at his/her home address. Quest Diagnostic Laboratory is the default laboratory where all specimens are sent unless the student advises the health care provider otherwise. Student Health Services does not participate in third-party billing. To process bills for insurance reimbursement follow the instructions on the bill.

Required immunizations are:

- Meningitis immunization (required of anyone living in campus-owned housing)
- Two MMR (measles, mumps and rubella)
- TB screening, per guidelines listed on the form
- Two Varicella (or proof of the disease)
- Vaccination against Hepatitis B is strongly recommended and may be required by certain clinical programs.
Quinnipiac University, along with Gallagher Student Health, has developed a health insurance plan especially for students. The plan provides coverage for illnesses and injuries that occur on and off campus and includes special cost-saving features to keep the coverage as affordable as possible.

This is a hard waiver program, which means that all students MUST maintain major medical insurance. A student may waive health insurance coverage if he or she presents evidence of other health insurance under a plan that provides benefits equal to or greater than the Quinnipiac University Student Health Insurance Plan. Students must document evidence of coverage and make an online waiver decision by the waiver deadline of June 15. For additional information regarding the plan, please visit: www.gallagherstudent.com.

A nominal fee is charged for gynecological exams. Routine services and supplies are provided without charge. Prescriptions may be taken to local pharmacies to be filled at the usual and customary fee. Students have the option to purchase some medications through Student Health Services.

A student driver is available, weather permitting, Monday through Friday for the following types of student transport:

1) two pharmacy runs each day
2) certain local medical appointments

Advanced scheduling of student driver appointments is necessary and the student driver is unable to stay with the student during his/her appointment.

Class excuses are not issued to students. Students who are ill are expected to contact their respective professors to inform them of their illness. Professors may phone Student Health Services to verify this information and will be told the student was or was not seen by a professional staff member. Particulars of student visits are not shared unless a student completes a release of
information form. Parents or legal guardians are notified of serious illness and emergencies at the discretion of the professional staff.

For additional information, visit the Student Health Services website at https://myq.quinnipiac.edu. Click on the Student Life tab at the top of the page.

## York Hill Campus

Student Health Services also operates the York Hill Campus Health and Wellness Center, located on the first floor of the Rocky Top Student Center. The center is open eight hours a day to serve students living on the York Hill Campus. A health care provider under the direction of the Student Health Services medical director is available. Again, services are available only to those students who have submitted the required information as outlined above. Allergy injections and gynecological exams are provided on the Mount Carmel Campus only.

## Department of Campus Life

In supporting the mission of Quinnipiac University, the Department of Campus Life aims to offer students exceptional programs, services and opportunities that enhance the academic experience while developing independent thinkers and effective leaders in college and beyond.

## The core values of the <br> Department of Campus Life are:

Supporting a strong sense of community by...

- Creating an environment that values a diverse student body.
- Maintaining facilities that sustain the growth of group collaboration and peer interaction.
- Transitioning students into the University through the orientation program.
- Offering a wide range of social and educational programming.
- Advising more than 110 student organizations.

Promoting critical thinking by...

- Exposing students to new, unique and diverse experiences.
- Meeting regularly with students to pose questions, raise concerns and provide guidance.
- Encouraging and evaluating students' personal and group goals.
- Helping students analyze multiple points of view on a local and global scale.
- Engaging students in a comprehensive leadership development program.
Fostering individual responsibility by...
- Educating students on appropriate and inclusive methods of communication.
- Helping students develop their character and ethical compass.
- Holding students accountable for their decisions and actions.
- Encouraging students to be mindful of their personal health and well-being.
- Modeling compassion and empathy in relationships with peers, students and colleagues.

The Department of Campus Life is located on the Mount Carmel Campus in the Carl Hansen Student Center, room 202, and the fourth floor of the Rocky Top Student Center on the York Hill Campus and can be reached at 203-582-8673.

## Clubs and Organizations

The Department of Campus Life is available to assist all student organizations and campus groups in program development and implementation of cocurricular activities. The staff, in conjunction with other student affairs personnel, provides a support system to foster personal growth and social competency through the development of group activities.

Additional information and guidelines for organizations, as well as procedures for initiating new clubs, are available at the Quinnipiac University Student Handbook and in the Department of Campus Life. All policies and guidelines pertaining to organizations are subject to the interpretation of the Department of Campus Life, upon consultation with the vice president and dean of students.

The following list represents organizations that exist and are active on campus. For a detailed description of each organization, refer to the Quinnipiac Student Handbook available online.

Student organizations are listed according to the following categories:

Academic
Arts and Entertainment
Cultural, Spiritual \& Identity
Government and Program Boards

Fraternity and Sorority Life
Multimedia
Political \& Advocacy
Recreational
Service
Spirit
Student Media
For a complete list of student organizations, please go to www.quinnipiac.edu/student-organizations.

## Campus Dining

Several dining options are available for students, faculty, staff and visitors, including two dining halls on Mount Carmel Campus: the Dining Hall (Cafe Q), which is located in the Carl Hansen Student Center, and the Bobcat Den, which is located on Bobcat Way; plus the North Haven Dining Hall, on the North Haven Campus; and the Rocky Top Dining Hall on the York Hill Campus. All of Quinnipiac's dining facilities are operated by Chartwells Dining Services.

## Mount Carmel Dining Hall

The Dining Hall, also known as Cafe Q, on the Mount Carmel Campus, is open for breakfast, lunch, dinner and snacks for all students and members of the Quinnipiac community. The hours are Monday through Thursday, 7:15 a.m. to 9 p.m.; Friday, 7:15 a.m. to 7 p.m.; Saturday, 9 a.m. to 7 p.m. and Sunday, 9:30 a.m. to 7 p.m. Menus can be found on MyQ under Campus Offices/Dining or by going to www.dineoncampus.com/quinnipiac/. The facility also includes rooms that may be converted to private dining rooms for receptions and special meetings.

## Rocky Top Dining Hall

The Rocky Top Dining Hall, also known as the York Hill Cafe, is located on the second floor of the Rocky Top Student Center and features five culinary stations for students and visitors to enjoy. Each meal is prepared to order. Choose from the deli, salad bar, pizza kitchen, home-cooked meals and Outtakes Cafe with to-go salads and sandwiches. The dining hall is open Monday through Friday, 9 a.m. to 9 p.m.; and SaturdaySunday, from 10 a.m. to 7 p.m.

## Bobcat Den

Located on Bobcat Way on the Mount Carmel Campus, the Bobcat Den is a place where students, faculty, staff and their guests gather to relax and socialize. The Bobcat Den is open Monday through Wednesday, 11 a.m. to 11 p.m.; Thursday, 11 a.m. to midnight; Friday, 11 a.m. to 1 a.m.; Saturday, 4 p.m. to 1 a.m.; and Sunday, 4 to 11 p.m. Students can grab a quick bite, meal-to-go or late-night snack from the deli or grill.

## North Haven Dining Hall

Our North Haven Campus features a full-service dining facility, open Monday through Friday, from 7:30 a.m. to 2 p.m. Students can pick up a quick snack or beverage or sit down for a complete meal from the various stations and salad bar. The dining facility offers plentiful seating and a great view of the pond. Grab-and-go snacks and beverages are available from the North Haven Outtakes Cafe, which is open Monday through Thursday, from 1 to 7 p.m.; and Friday, 1 to 5 p.m.

## Dining Service Options

Resident students on the Mount Carmel and York Hill campuses are required to be on a meal plan. A predetermined amount of food dollars is automatically put on the student's account at the beginning of each semester and can only be used at on-campus dining locations (Mount Carmel Dining Hall, the Bobcat Den, and the dining halls at York Hill and North Haven). Unused food dollars will be carried over from the fall to spring semester; however there is no carry-over between academic years, nor may the unused balance from the fall semester be used to reduce the room and board portion of the spring semester's invoice. If there is a remaining balance at the end of the spring semester, it will be cleared from the student's account. Please note, however, that funds deposited to the supplemental dining service (the Blue and Gold service and the Legend service) will be subject to the same terms and conditions as funds deposited to QCash. No funds may be transferred from the required dining service or from the supplemental dining service to QCash or vice versa.

## Carl Hansen Student Center

This multipurpose facility located on the Mount Carmel Campus provides opportunities for the Quinnipiac community to come together in a relaxed atmosphere. The Carl Hansen Student Center is home to Quinnipiac's main dining hall and a variety of services and functions which include:

## Banking

TD Bank operates a full-service branch on the first floor of the Carl Hansen Student Center. The branch is equipped with a 24 -hour automated teller machine that is part of the Cirrus, NYCE and PLUS networks. The branch is staffed with two representatives who are available to provide a full range of products and services Monday through Wednesday, 8:30 a.m. to 5 p.m.; Thursday and Friday, 8:30 a.m. to 6 p.m.; Saturday, 8:30 a.m. to 2 p.m. The representatives can be reached by phone at 203-287-5109.

TD Bank's main office is located at 2992 Dixwell Avenue in Hamden (near the old Town Hall and Brown Stone House Restaurant). The telephone number for the office is 203-287-4991.

## Bookstore

The bookstore, open to the Quinnipiac community and the public, is located in the rotunda of the Carl Hansen Student Center, between the post office and the bank. The bookstore carries textbooks, general books, school supplies, licensed merchandise, insignia giftware, greeting cards, snacks, as well as health and beauty aids. The store hours are Monday through Thursday, 9 a.m. to 7 p.m.; Friday, 9 a.m. to $4: 30$ p.m.; Saturday, noon to 4 p.m. The bookstore is closed on Sundays.

## Campus Reservations

## (Events and Scheduling)

The Office of Events and Scheduling is located in the Facilities Administration Building on the Mount Carmel Campus and is responsible for managing the room reservation system (EMS) along with the University events calendar (Master Calendar). All requests for University space on the Mount Carmel, North Haven or York Hill campuses must be submitted via the room reservation system.

## Commuter Lockers

There are commuter lockers conveniently located on the second floor. Lockers are available at the beginning of the academic year on a first-come, first-served basis. Interested commuter students should contact Campus Life or fill out a Commuter Locker Request Form, which can be found on Do You QU, under the Campus Life profile page.

## Campus Information Center

The Information Center is centrally located on the first floor of the Carl Hansen Student Center near the main entrance. It is a resource for the Quinnipiac community and visitors. The Information Center, staffed by student employees, is open Monday through Friday and some weekend hours. Student staff members are available to provide information pertaining to campus events and directions for procedures unique to student activities.

## Office Locations

The Carl Hansen Student Center is home to several offices for student organizations such as the Student Government Association, the Student Programming Board, Quinnipiac University After Dark, student media groups and fraternity and sorority life. The newly expanded student center offers a multipurpose programming space, student media, a fraternity and sorority life suite, a student organization and graphic arts suite, as well as several meeting rooms.

## Post Office

The main post office, located on the first floor of the Carl Hansen Student Center, is open Monday through Thursday, 11 a.m. to $4: 45$ p.m. All resident students are assigned boxes.

## Rocky Top Student Center

The Rocky Top Student Center serves as the living room for the York Hill Campus. This lodgeinspired design, which uses 10 different types of wood, instantly transports students and community members with expansive vistas of New Haven and Long Island Sound. It is easy to marvel at the attention to detail in every aspect of the Rocky Top Student Center as students are surrounded by 293 representations of the Quinnipiac mascot.

Similar to the Carl Hansen Student Center, the

Rocky Top Student Center aims to provide opportunities for the Quinnipiac community to come together in a relaxed atmosphere and also offers a variety of services and functions for all members of the Quinnipiac community which include:

## Banking

The Rocky Top Student Center at York Hill Campus has an ATM for use during normal business hours.

## The Den

The Den at Rocky Top is the largest space in the building and can be reserved for functions of up to 125 people. The space traditionally features large tables perfect for a dinner event, but can also be converted to accommodate a dance floor or informational fair.

## Office Locations

The fourth floor houses additional offices for the Department of Campus Life, the Office of Residential Life, Athletics Fitness and Wellness, as well as an organizational suite for student use and two conference rooms.

## Post Office

A post office, located in the Rocky Top Student Center, is open Monday through Thursday, 11 a.m. to $4: 45$ p.m.; and Friday, 11 a.m. to 4 p.m.

## Public Safety

York Hill Public Safety offices are located on the first floor of the Rocky Top Student Center and students can call or drop in to address any questions or concerns.

## Student Health Services

Student health services are available on the first floor of the building. Refer to pp. 45-46 for further information.

## Technology Counter

The Technology Counter (Computer Help Desk), located on the second floor, provides technology assistance and repair for students with questions or issues. The desk is staffed Monday through Thursday from noon to 10 p.m.; Friday, 8 a.m. to 4 p.m., and Saturday and Sunday, noon to 4 p.m.

## Residential Life

Living on campus is one of the most impactful experiences a student will have during college. Students have the unique opportunity to live with students from a variety of diverse backgrounds.

The Department of Residential Life is committed to excellence in the development of a living-learning environment that contributes to student success. The department is guided by four core values: community, engagement, inclusion and integrity. All professional and paraprofessional staff work to develop and implement programs and policies that create a community conducive to this philosophy.

Quinnipiac housing is guaranteed for three years for incoming freshmen. More than 4,000 students live in University housing, which includes traditional residence halls, suites, townhouses, apartments and single-family homes. For the convenience of our students, Residential Life offices are located on the Mount Carmel Campus in the Student Affairs Center and on the York Hill Campus in the Rocky Top Student Center.

## University Housing Options

The University offers a variety of student housing options. Students progress toward more independent living from year to year.

## First-year Residential Experience (FYRE)

 All first-year students participate in the first-year residential experience program or FYRE. The program is designed to help first-year students transition into college life at Quinnipiac. The FYRE program provides students with a shared experience focused around the department's core values. The program works to help first-year students build meaningful relationships with other residents in their hall and lasting connections with the University. Staff members are specifically trained to assist students with transitional issues as they adjust to college life. The program is housed on the Mount Carmel Campus.
## Sophomore Program Initiative (SPIN)

The sophomore program initiative, also known as SPIN, provides a residential living environment that supports intellectual and interpersonal growth, co-curricular involvement and the ongoing development of students by developing intentional
connections between students, faculty and staff, self-reflection and student participation in the Quinnipiac community.

Sophomores can choose between a variety of suite-style housing options or apartments. Each suite or apartment includes a shared common room and bathroom. The program is housed on the Mount Carmel and York Hill campuses.

## Junior/Senior Housing

Juniors can choose to live on the York Hill Campus in apartment-style housing offered in the Crescent or Westview. Apartments provide two to four bedrooms, a furnished living room, oversized bathroom and a kitchen. Seniors may select from available apartment-style housing at Eastview, Whitney Village, Townhouses and Universityowned houses. Most seniors have single bedrooms and all have an extended housing contract. Students living in University-owned houses are minutes away from the Mount Carmel and York Hill campuses.

## Graduate Housing

Graduate housing is available on a first-come, first-served basis. Students have single bedrooms in our University-owned houses or apartments located in Hamden, Connecticut.

## Fraternity and Sorority Life

Currently, more than 27 percent of Quinnipiac undergraduate students belong to one of the 17 campus fraternities/sororities. The Office of Fraternity and Sorority Life is committed to advancing fraternities and sororities through intellectual and interpersonal development within the Quinnipiac University community and beyond. The office is guided by a set of shared values, known as "Pillars," which shape all community programming and initiatives from the new member experience through Commencement.

The Pillars are:

- Leadership through strength of character
- Growth through intellectual excellence
- Service through civic engagement
- Community through diversity and inclusion

Staff in the Office of Fraternity and Sorority Life offer advisement, programming and experiences that are intended to complement the numerous occasions for leadership and
involvement provided by individual chapters and their respective governing councils. These experiences afford opportunities to gain proficiency in QU Essential Learning Outcomes.

Women have the opportunity to join one of eight National Panhellenic Conference (NPC) sororities, one National Pan-Hellenic Council (NPHC) sorority, or one National Association of Latino Fraternal Organizations (NALFO) sorority, which are governed by the Quinnipiac Panhellenic Council.

Governed by the Interfraternity Council, men have the opportunity to join one of seven NorthAmerican Interfraternity Conference (NIC) fraternities. The fraternity and sorority community also hosts chapters of the Fraternal Values Society and Order of Omega. Students are encouraged to seek membership at any point in their undergraduate career.

For more information call 203-582-8673 or email FSLife@quinnipiac.edu.


## Athletics and Recreation

Quinnipiac recognizes the importance of athletics and recreation in student life. The University supports 21 highly competitive, Division I intercollegiate teams, as well as an extensive campus recreation program. The campus recreation program, which provides access to fully equipped fitness centers consists of intramurals, physical education classes for academic credit, aerobics and many leisure-time offerings. For specific program information, email athletics@quinnipiac.edu.

## Athletics

NCAA Division I intercollegiate athletic teams for men include baseball, basketball, cross-country, ice hockey, lacrosse, soccer and tennis. Women compete in acrobatics and tumbling, basketball, cross country, field hockey, golf, ice hockey, indoor and outdoor track, lacrosse, soccer, tennis, rugby, softball and volleyball.

Quinnipiac has full memberships in the following NCAA Division I conferences:

- Metro Atlantic Athletic Conference (MAAC)
- ECAC Men's and Women's Ice Hockey
- National Acrobatics and Tumbling Association
- USA Rugby


## Spirit Groups

Several spirit groups lend their support to athletic teams. The Quinnipiac Pep Band, Boomer the Bobcat (mascot), Sideline Cheer, Ice Cats and several dance groups (Dance Company, Dance Fusion, Kickline, Step to Perfection) perform at a variety of athletic events.

## Campus Recreation

## Intramural Program

The Quinnipiac intramural program offers a variety of competitive sports activities in a recreational setting. Participants have freedom of choice, equality of opportunity and responsibility for sharing in the planning, supervision and administration of their sports programs. Participants create their own teams, select their level of competition and vie for coveted championship T-shirts. Nearly 75 percent of the student body participates in one or more intramural activities.

The intramural program has work-study
positions available for referees and statisticians. Intramural offerings include:

- Basketball (5-on-5 and 3-on-3)
- Dodgeball
- Flag football
- Ice Hockey
- Kickball
- Soccer (indoor and outdoor)
- Tennis (men's, women's and mixed doubles)
- Ultimate Frisbee
- Volleyball (4-on-4 and 6-on 6)
- Wiffle ball
- Open skate (ice hockey)

For more information about intramural sports, visit the website at www.quinnipiac.edu/fitness.

## Fitness Classes and Programs

Campus Recreation offers a full schedule of free lunchtime and evening activities taught by certified student instructors. Activities include a variety of the latest trends including: Spinning ${ }^{\circledR}$, BodyBlade ${ }^{\circledR}$ Boot Camp, Sculpting, Yoga and Pilates.

Classes usually begin during the second week of the fall and spring semesters. Classes are not scheduled during summer. The schedule is available to the Quinnipiac community via MyQ as well as at the Fitness Centers.

For more information about fitness and aerobics classes, visit www.quinnipiac.edu/fitness.

## Open Recreation

"Open Rec" hours are scheduled in both the Recreation Center and the dance studios on Mount Carmel Campus. Quinnipiac community members are encouraged to walk or jog on the track; and to play basketball or volleyball in the Recreation Center or use the mirrored dance studios to rehearse. Hours are posted beside the entrance doors of each facility.

## Athletic and Recreation Facilities

## TD Bank Sports Center

The TD Bank Sports Center is a state-of-the-art, 185,000-square-foot facility featuring separate arenas for Quinnipiac University's NCAA Division I men's and women's basketball and ice hockey teams. The two arenas at the sports center are connected by a three-story structure featuring a common lobby and ticket box office, the University Club, administrative and team offices,
professional-style locker rooms with student athlete lounges, conference and meeting rooms, athletic training and equipment rooms, and a strength and conditioning center. The TD Bank Sports Center is located on Quinnipiac's 250-acre York Hill Campus on Sherman Avenue, less than a mile from the Mount Carmel Campus.

## Burt Kahn Court/Gymnasium

This hardwood floor facility located in the Athletic and Recreation Center on Mount Carmel Campus serves as the competitive site for Quinnipiac home volleyball games. The gymnasium also is occasionally used for intramurals and "open recreation."

## Recreation Center

The Recreation Center on Mount Carmel Campus has four multipurpose tennis/basketball/volleyball courts. Curtains between each court allow for a variety of activities to take place simultaneously.

## Fitness Centers

There are three fitness centers at Quinnipiac University. One is located in the Athletic and Recreation Center on the Mount Carmel Campus; another is located in the Rocky Top Student Center on the York Hill Campus. Both have a full line of strength equipment, free weights and cardiovascular equipment including:

- Adaptive motion trainers
- Bicycles (recumbent, upright)
- Elliptical
- Free climbers/steppers
- Treadmills

The third fitness center is a satellite space on the North Haven Campus, with a few pieces of cardio equipment and free weights. The fitness centers are open to all members of the Quinnipiac community. Prospective users must complete an online waiver. All freshman and transfer students attend an orientation outlining the rules and regulations of the facilities. After the orientation session, a validated Quinnipiac ID must be presented for entrance to the facility.

## Dance Studios

Aerobics, fitness classes, dance groups and many other campus groups all share the University's four studios. The mirrored studios each contain
state-of-the-art stereo equipment for professional and student use. Each studio also is equipped with audio and video systems. Equipment for all scheduled activities and classes is provided. Mats, steps, power bars and hand weights usually are available in the aerobic studio equipment storage area.

Quinnipiac community members may drop in during free time to use the studios for exercising or rehearsals.

## Indoor Track

The suspended track encircles the four Recreation Center courts on the Mount Carmel Campus. Students and staff may walk and jog upstairs while games and practices are being conducted downstairs. Nine laps of the track equal one mile.

## Cardio Corners

Three of the four corners of the indoor track on the Mount Carmel Campus have been outfitted with various pieces of cardiovascular equipment. Each corner (approx. 2,800 square feet) has treadmills, elliptical, steppers and bikes. The fourth corner is designated as the "stretching" corner and is outfitted with multipurpose mats, stability balls and light weights.

## Spinning ${ }^{\circledR}$ Room

There is a Spinning ${ }^{\circledR}$ room located in fitness centers on both the York Hill and the North Haven campuses. There is an online bike reservations process for each facility. Use of this room is available during classes only.

## Outdoor Venues and Fields

Quinnipiac's outdoor athletic facilities consist of athletic fields for softball, baseball, field hockey, soccer, lacrosse, touch football and basketball, as well as six lighted tennis courts. A hitting wall and basketball court are adjacent to the Recreation Center. An artificial turf field is utilized by the Quinnipiac field hockey and lacrosse teams, in addition to intramurals.

## Sports Equipment

Quinnipiac supplies most recreation equipment, such as volleyballs, basketballs and tennis rackets. Equipment may be signed out at the reception desk with a Quinnipiac ID.

## Campus Resources

## Quinnipiac University Libraries

The Arnold Bernhard Library on Quinnipiac's Mount Carmel Campus and the Edward and Barbara Netter Health Sciences Library on the North Haven Campus serve the undergraduate and graduate populations of the University and provide support for the Quinnipiac University School of Law.

Approximately 48,000 square feet in size, the Arnold Bernhard Library provides 600 seats, 16 group rooms, a 30-seat instructional facility, more than 60 public computers terminals and wireless connectivity. In addition to the group study rooms, students can select from individual study carrels, tables, soft seating and rocking chairs with magnificent views when they visit the facility. Supporting this facility are the combined staffs of the library, academic technology, and media services. The Arnold Bernhard Library building also houses the clock tower, the executive suite, the Provost suite, Learning Commons, the Offices of Administrative Services, the Bursar, Registrar and Procurement.

The Edward and Barbara Netter Health Sciences Library is the primary library for Quinnipiac University's Schools of Medicine,

Nursing and Health Sciences. The library is equipped with 17 public computer workstations, printers, scanners, copiers, study carrels and plenty of soft seating, which provides spectacular views of the North Haven Campus.

Each library offers a large variety of webbased resources, including ebooks, ejournals and databases as well as print volumes, microforms and audiovisual materials.

## Bioanthropology Research Institute

Quinnipiac's Bioanthropology Research Institute, administered through the College of Arts and Sciences, provides research opportunities for students and faculty in a variety of disciplines. Research projects, field experiences and international course work provide unique opportunities to experience current and ancient cultures. Research projects often lead to publications and presentations at professional conferences. The field of bioanthropology naturally crosses many disciplines, including both science and arts. The Bioanthropology Research Institute has formal relationships with international research groups such as Centro Mallqui in Peru as well as with many well-known domestic and international museums.

Students should contact the College of Arts and Sciences for more information.


## Bristol-Myers Squibb Center for Science Teaching and Learning

The Bristol-Myers Squibb Center for Science Teaching and Learning at Quinnipiac University is a network of scientists, engineers and educators working in collaboration to advance the art of STEM (science, technology, engineering, math) education from kindergarten to the university level.

The center's vision is to increase the pool of STEM-focused corporate and education professionals. Its mission is to:

- provide Connecticut educators and preservice teachers with professional development opportunities to strengthen STEM teaching and learning
- promote inquiry education and support state curriculum frameworks
- encourage students to pursue STEM careers

The center draws on the expertise and support of:

- Quinnipiac's departments of Biological Sciences and Chemistry and Physical Sciences
- Quinnipiac's School of Education
- statewide K-12 school districts
- various governmental partners, including the

Department of Environmental Protection

- Quinnipiac Future Teachers Organization

In recent years, the United States has fallen far behind other developed nations in its preparation of students for careers in science, math and technology (ranking 15th in math and 9th in science worldwide), as well as failing to provide basic science literacy to its citizens. In response to this desperate need, the B-MS Center develops and delivers:

- professional development experiences for $\mathrm{K}-12$ teachers in proven techniques of integrated STEM instruction
- summer, after-school and one-day programs for $\mathrm{K}-12$ students that increase their exposure and interest in STEM subjects and their possible connected careers
- programs for K-12 parents, counselors, administrators and community partners that support students in their STEM course college preparation and career
The B-MS Center is currently offering the following activities:
- STEM Teacher Professional Development (STPD)
- K-12 science curriculum unit development
- STEM teaching and learning best practices, including team project-based learning, science inquiry-based learning, "flipping the classroom" and metacognition
- "Engineering is Elementary" workshops
- Summer Teacher Opportunities of Research in STEM
- Quinnipiac University Engineering, Science and Technology (QUEST) programs for K-12 students
- Health Science Professions Summer ProgramHigh School
- "Farm River" Environmental Science ProgramMiddle School
- "Pathways to Nursing" After School ProgramHigh School
- Summer High School Opportunities of Research in STEM-High School
- STEM Career Connections (SCC)
- video conferences offering support in the preparation for STEM college courses and careers for $\mathrm{K}-12$ students
- K-12 parents, counselors, administrators and community partner workshops offering strategies to support students in their pursuit of STEM college courses and careers


## Clarice L. Buckman Center and Theater

This building houses science laboratories, faculty offices, classrooms, and a 177-seat theater for lectures and theater performances.

## Terry W. Goodwin '67 Financial Tecbnology Center

Quinnipiac University created its own state-of-the-art Wall Street trading room with the Terry W. Goodwin '67 Financial Technology Center in the Lender School of Business Center. The 2,000 square-foot center allows students to make real-time investment decisions and learn how the financial markets work by managing a real-life student portfolio. Software installed in the center's 53 computer workstations allows students to access real-time financial data, practice analytical finance methods, conduct trading simulations, analyze economic databases and develop financial models.

## Ireland's Great Hunger Institute

Ireland's Great Hunger Institute is a scholarly resource for the study of the Great Hunger, also known as An Gorta Mór-the Famine that devastated Ireland from 1845-52. Through a strategic program of lectures, conferences, course offerings and publications, the institute fosters a deeper understanding of this tragedy and its causes and consequences. For more information about the institute, please contact the director at 203-582-4564.

## Ireland's Great Hunger Museum

Ireland's Great Hunger Museum, Músaem An Ghorta Mhóir, is home to the world's largest collection of visual art, artifacts and printed materials relating to the Irish Famine. The museum is located at 3011 Whitney Avenue, near Quinnipiac's Mount Carmel and York Hill campuses and is open to the public. Its collection focuses on the famine years from 1845-52, when blight destroyed virtually all of Ireland's potato crops for consecutive years. The crop destruction, coupled with British governmental indifference to the plight of the Irish, who at the time were part of the United Kingdom, resulted in the deaths of more than 1 million Irish men, women and children and the emigration of more than 2 million to nations around the world. The 4,750 -squarefoot museum offers publications, lectures, concerts and other events designed to educate the general public, scholars, researchers, artists and students about the richness of Irish culture and the high quality of its visual arts in particular. Visit www.ighm.org for more information.

## Lender School of Business Center and Ed McMahon Mass Communications Center

This state-of-the-art building contains case study rooms, two local area network (LAN) rooms, classrooms, an executive conference center, faculty and dean's offices-all of which are linked by a highly sophisticated computer network.

This building also houses the Ed McMahon Mass Communications Center, a first-class digital media production facility providing students with a spacious, professional-level high-definition television (HDTV) studio, a Pro Tools audio
studio, a wireless, multiplatform newsroom with the Associated Press wire service and ENPS newsroom management system, advanced nonlinear digital video editing systems, a 4 K edit facility, a production lab for interactive multimedia design, website development, digital imaging, a remote media production resource depot and a screening room with HD video projection and theater-quality sound and more than 50 iMac stations running the latest applications for digital media production. Two cable television channels originate from the McMahon Center, providing the campus with student-produced programming from the Q30 student television organization as well as other cablecasts.
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## College of Arts and Sciences

## Robert W. Evans College of Arts and Sciences Center 203-582-8730 (central office)

## Administrative Offices <br> Dean

Associate Dean
Associate Dean
Assistant Dean
Director of Student Advising
Director of Career Development

## Departments/Programs

Department
Biological Sciences
Chemistry and Physical Sciences
Economics
English
History
Legal Studies
Mathematics and Computer Science
Modern Languages
Philosophy and Political Science
Psychology
Sociology, Criminal Justice and Anthropology
Visual and Performing Arts

## Graduate Programs

MS in Molecular and Cell Biology
Other Programs
Anthropology
Asian Studies
Behavioral Neuroscience
Computer Science
Criminal Justice
Dispute Resolution
Fine Arts
Game Design and Development
Gerontology
Global Public Health
History and Philosophy of Science
International Studies
Irish Studies
Middle Eastern Studies
Music
Philosophy
Prehealth Advising
Prelaw Advising
Sports Studies
Studies in the Law
Theater
Women's and Gender Studies

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## Mission Statement

The faculty and students of the College of Arts and Sciences share a belief in the value of a comprehensive college education - an education that requires foundational study in the natural sciences, social sciences, humanities and fine arts, as well as a concentration in one of 20 majors. A degree in arts and sciences helps students build fulfilling and meaningful lives and is a strong basis for a preprofessional education. Careers in the 21 st century require great creativity, critical thinking and fine writing. The ability to think is more important than any narrow job preparation. The arts and sciences curricula require demanding study while providing extensive faculty support in small classes and laboratories.

Whether a student is pursuing a bachelor of science or bachelor of arts degree, he or she is part of a learning community in which students and faculty are makers of knowledge, not simply receivers and dispensers. Faculty and students study and experience a society increasingly defined by global, scientific and cultural awareness and a diversity of populations. The course of study provides ample opportunity for students to participate in internships that help to bridge their education and its application. The college also offers programs that connect directly to professional preparation, including the five-year master of arts in teaching program, taught in conjunction with the School of Education.
Most importantly, students in the arts and sciences engage in an exciting, well-rounded program of study that is both fulfilling and rewarding.

## General Requirements

The requirements for the bachelor of arts and bachelor of science degrees are qualitative and quantitative. Completion of 120 credits with a grade point average of C or better is not in itself sufficient to qualify for graduation. In addition to the general Quinnipiac requirements, eligibility for most bachelor of arts and bachelor of science degrees also requires the satisfactory completion of both arts and sciences requirements and those in a major or field of concentration. Specific major requirements are noted below under the individual departmental or area descriptions. Students should be cautioned that an average of C , or 2.0 , in the student's major is a minimum requirement for each major and that
some departments may require higher standards as noted.

Of the 120 credits required for the bachelor's degree, only 6 credits of workshop courses and/or physical education courses may be applied. Primary responsibility for knowing and completing all course requirements rests with the student.

## University Curriculum and College of Arts and Sciences Requirements

The College of Arts and Sciences offers two tracks: the liberal arts track and the sciences track. Students on either track are required to pursue a balanced program of study, as described below.

## Liberal Arts Track

The requirements listed below apply to students who are pursuing a BA or BS in computer science, criminal justice, economics, English, game design and development, gerontology, history, independent majors, legal studies, mathematics, philosophy, political science, psychology, sociology, Spanish or theater.

Students, in consultation with their advisers, select courses to satisfy the UC requirements in conjunction with their major and College of Arts and Sciences requirements.

The College of Arts and Sciences requirements for this track include:

- one course outside the major in the social sciences
- one course outside the major in the humanities
- one course outside the major in the fine arts
- three 300-level courses outside the major
- one foreign language through the 102-level (chosen from ARB 102, CN 102, FR 102, GR 102, HBR 102, IT 102, JP 102 or SP 102)
A student pursuing a double major is exempt from these College of Arts and Sciences requirements, with the exception of the foreign language requirement.

Some courses may be used to satisfy more than one requirement. For example, a sociology major could use a 300-level English course to satisfy two requirements-the outside-the-major requirement in the humanities and one course in the non-major $300-\mathrm{level}$ courses. A minimum of 72 credits must be taken from outside the student's major.


## Sciences Track

The requirements listed below apply to students who are pursuing the BS in biochemistry, biology, chemistry or behavioral neuroscience.

Students, in consultation with their advisers, select courses to satisfy the UC requirements in conjunction with their major requirements in the natural sciences. In contrast to students in the liberal arts track, students are advised to enroll in their science core in the first semester of their freshman year.

Whatever their intended major, students in the sciences track should understand that many of their introductory courses are available only as sequential, fall/spring offerings. For example, BIO 101 General Biology I and CHE 110 General Chemistry I are offered only in the fall, and BIO 102 General Biology II and CHE 111 General Chemistry II are offered only in the spring. Further, advanced courses absolutely require the introductory courses as prerequisites.

Because of these curriculum considerations, students are well advised to review the suggested four-year curriculum for their major in the University Catalog, as well as take full advantage of the recommendations of their faculty adviser.

## Academic Advising

The College of Arts and Sciences has a program that places every student, upon matriculation, with an individual faculty adviser who can best help him or her form a personalized academic plan. An outcome of each academic adviser's individualized guidance is that students come to understand the relationship between a particular discipline and a range of satisfying careers. Students also learn how an arts and sciences major can prepare them especially well for a life of consequence and meaning. Although the primary responsibility for setting academic goals and selecting courses rests with the student, the academic adviser fosters an ongoing conversation that cultivates self-reflection and development.

Students who enter the College of Arts and Sciences with a declared major are matched with a faculty adviser in that department. Each undeclared student works individually with an academic adviser to design a plan that is uniquely tailored to his or her needs and interests. During the preregistration period each semester, all students in arts and sciences meet with their academic advisers before selecting and registering for courses.

## Career Development

In the College of Arts and Sciences, the career development office works with students to explore majors and career interests through individual consultations and group sessions, guide them through a career development process, and provide coaching for resume preparation, employment interviews and graduate school applications. Students can participate in experiential learning through community service as well as internships, part-time and summer employment.

## Degrees in Arts and Sciences

## Bachelor's Degrees

Behavioral Neuroscience
Biochemistry
Biology
Chemistry
Computer Science
Criminal Justice
Economics
English
Game Design and Development
Gerontology
History
Independent Majors
Legal Studies
Mathematics
Philosophy
Political Science
Psychology
Sociology
Spanish Language and Literature
Theater
For information about graduate studies, please refer to p. 190.

## Independent Majors

The College of Arts and Sciences offers independent majors. A student may design a unique major program to fit his or her individual goals. The responsibility for the planning of such a program rests with the student proposing it, and a proposal for an independent major must contain suitable justification and a coherent curricular plan. The proposal must be submitted to the dean for approval and also must have the approval of a three-member faculty committee, chosen by the student, which will work with the student to plan the program. Independent major proposals should be submitted no later than the first semester of the junior year.

## Five-year Master's Degree in Molecular and Cell Biology

The Department of Biological Sciences offers a five-year master's degree program in molecular and cell biology (non-thesis). Refer to page 64 for details.

Five-year Arts and Sciences BA/MAT Program in Elementary Education
This program, leading to a master of arts in teaching degree, is designed for any arts and sciences major who maintains a strong undergraduate academic record (GPA of 3.0 or above is preferred). Students should make contact with the MAT program director as early as possible for advisement. Students majoring in a science should seek guidance through the chair of the Department of Biological Sciences or Department of Chemistry and Physical Sciences and the MAT program director upon admission to Quinnipiac University.

## Five-year Arts and Sciences BA/MAT Program in Secondary Education

 This program, leading to a master of arts in teaching degree, is designed for Quinnipiac students who wish to earn Connecticut certification to teach biology, chemistry, English, history/social studies, mathematics or Spanish in the middle grades or secondary level. A student interested in entering this program should contact the MAT program director as early as possible for advisement.

## Five-year Arts and Sciences <br> BA/MBA Program

This program, leading to an MBA, is designed for outstanding arts and sciences majors at Quinnipiac University. As an undergraduate, a student should make early contact with the dean of arts and sciences for specific direction. Students interested in pursuing the $\mathrm{BA} / \mathrm{MBA}$ option are strongly encouraged to declare the general business minor early in their undergraduate program to ensure they have an adequate foundation for graduate business course work. Additional information on this program appears on page 197.

## Minors

In addition to major programs, a student may apply to have a minor recorded on his or her transcript. The College of Arts and Sciences offers minors in: anthropology, biology, chemistry, computer science, criminal justice, dispute resolution, economics, English, fine arts, French, game design and development, gerontology, history, Italian, mathematics, music, philosophy, political science, psychology, sociology, Spanish, studies in the law and theater. Interdisciplinary minors in Asian studies, global public health, history and philosophy of science, international studies, Irish studies, Middle Eastern studies, sports studies and women's and gender studies also are available (see p. 91). Arts and sciences students may complete a minor in one of the other schools to explore areas of interest in a preprofessional field while still obtaining the benefits of a flexible arts and sciences education. To declare a minor, a student should see the department chairperson or the faculty member listed for information/advising.

## Department of Biological Sciences

Bachelor of Science in Biology
Premedical Studies
Five-year Master of Science in Molecular and
Cell Biology
Minor in Biology
The mission of the Department of Biological Sciences is to provide students with the breadth and depth of knowledge in biology that will allow them to: 1) incorporate the biological sciences and its scholarly methodologies into the broad perspectives of an arts and sciences education and their own individual lives; 2) continually reconstruct a worldview that is consistent with the current state of scientific knowledge; 3) appreciate the unity of knowledge across disciplinary boundaries, and the ways in which the various fields of knowledge enlighten and illuminate one another; 4) become useful and productive contributors within their chosen professions; 5) continue learning independently throughout their lives; 6) assess, from a critical and analytic perspective, the state of knowledge within a variety of biological subdisciplines, and 7) have at their fingertips the intellectual tools to formulate readily testable hypotheses, design sound experiments, analyze and evaluate data, and draw legitimate conclusions.

## General Information

Programs in the Department of Biological Sciences provide scientific training as part of an arts and sciences education and develop an understanding of the nature of biological systems. Courses furnish a broad scientific background for advanced study in various biological and medical areas. Students may be admitted to advanced standing by obtaining satisfactory grades in the Advanced Placement Tests or the College Level Examination Program of the College Entrance Examination Board. Students in all majors in the Department of Biological Sciences must achieve a science GPA of 2.25 (a minimum grade of "C-" is required in all courses with a "BIO" or "BMS" designation), and an overall GPA of 2.0 to qualify for graduation.

A score of 4 in the AP biology exam is required to receive credit for BIO 150-151 although taking BIO 150 and BIO 151 is highly recommended by the department, regardless of the AP biology score.

A score of 3 on the AP biology exam will result in credit being granted for BIO 105-106. BIO 105-106 meets the needs of students in non-science areas, but not students in the biology majors.

## Bachelor of Science in Biology

The BS program in biology provides students with a biological and physical science foundation on which they can build a graduate degree in natural science or enter the fields of medicine, dentistry, veterinary medicine, podiatry or education. Those choosing to end their formal education with the bachelor's degree will have a sufficient level of sophistication in biological science to assume a variety of positions with research institutions, governmental agencies or industry.

| Biological | Science Core Requirements (15 credits) |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| BIO 150/150L | General Biology with lab | 4 |
| BIO 151/151L | Molecular \& Cell Biology \& Genetics with lab 4 |  |
| BIO 152/152L | Ecological \& Biological Diversity with lab | 4 |
| BIO 298 | Research Methods | 3 |
| Physical Science Core Requirements (24 credits) |  |  |
| CHE 110/110L | General Chemistry I with lab | 4 |
| CHE 111/111L | General Chemistry II with lab | 4 |
| CHE 210/210L | Organic Chemistry I with lab | 4 |
| CHE 211/211L | Organic Chemistry II with lab | 4 |
| PHY 110/110L | General Physics I with lab | 4 |
| PHY 111/111L | General Physics II with lab | 4 |

## Biology Electives

Students must take a minimum of one course from each category: Molecular and Cellular; Organismal; Physiology; Experiential Learning (with a biological component). Co-requisite courses must be taken simultaneously.

## Molecular and Cellular Electives

BIO 240 Cell Communication 3
BIO 282/282L Genetics with lab
BIO 317/317L Developmental Biology with lab
BIO 346/346L Cell Physiology with lab
BIO 365 Cancer Biology
BIO 382 Human Genetics
BIO 471/471L Molecular Genetics with lab
Organismal Electives
BIO 323/323L Invertebrate Zoology with lab
BIO 328/328L Human Clinical Parasitology with lab
BIO 352/352L Botany with lab
BIO 353/353L General Ecology with lab
BIO 358/358L Human Ecology with lab

BIO 375/375L Physiological Models for Human Disease 4
BIO 383 Evolution
Physiology Electives
BIO 211/211L Human Anatomy \& Physiology with lab 4
BIO 212/212L Human Anatomy \& Physiology with lab 4
BIO 329 Neurobiology 3
BIO 350 Cardiovascular Physiology 3
Experiential Learning (Biological Component)
BIO 385 Experiential Inquiry in Biology 1-4
BIO 498 Independent Study 1-4
BIO 499 Independent Study 1-4
Students choose courses and follow a curriculum determined in consultation with their adviser. The recommended curriculum for the completion of the requirements for the BS in biology follows.

## Recommended Curriculum <br> Fall Semester, First Year

BIO 150/150L General Biology I with lab (for majors) 4
CHE 110/110L General Chemistry I with lab 4
EN 101 (UC) Freshman Composition 3
MA 141 (UC) Quantitative Literacy 3
FYS 101 First-year Seminar 3
Total 17
Spring Semester, First Year
BIO 151/151L Molecular and Cell Biology \& Genetics 4
CHE 111/111L General Chemistry II with lab 4
EN 102 (UC) Freshman Composition 3
UC University Curriculum 3
Total 14
Fall Semester, Second Year
BIO 298 Research Methods in Biology 3
BIO 152/152L Ecological \& Biological Diversity 4
CHE 210/210L Organic Chemistry I with lab 4
UC UC Elective 3
Total 14
Spring Semester, Second Year
BIO Biology elective*
CHE 211/211L Organic Chemistry II with lab 4
UC University Curriculum 3
Open electives 6
Total 16-17
Fall Semester, Third Year
BIO Biology elective* 3-4

PHY 110/110L General Physics I with lab 4
UC University Curriculum 3 Open electives 6

Total 16-17

## Spring Semester, Third Year

BIO Biology elective* 3-4
PHY 111/111L General Physics II with lab 4
Open electives 6
UC University Curriculum 3
Total 16-17
Fall Semester, Fourth Year
BIO Biology elective* 3-4
UC University Curriculum 3
UC UC Capstone 3
Open electives 4
Total 13-14
Spring Semester, Fourth Year
UC University Curriculum 6
Open electives 8
Total 14
Minimum number of credits required for graduation: 120
*Some biology courses have no laboratory component and are 3 -credit rather than 4 -credit courses.

Initial placement in the English and mathematics courses is determined by examination and an evaluation of high school units presented. Students intending to pursue graduate or professional studies (medicine, dentistry, osteopathy or veterinary medicine) are advised to complete at least one semester of calculus. A minimum of MA 141 is required for graduation. BIO 150/150L, BIO 151/151L and BIO $152 / 152 \mathrm{~L}$ are required for graduation. Students intending to pursue studies in professional health care fields are advised to complete additional courses chosen in consultation with their adviser.

## Independent Study in Biology

1. Students may take a maximum of 4 credits of Independent Study/Research (BIO 498 or BIO 499, not a combination of the two courses) to be counted toward the biology electives (Experiential Learning Component).
2. Students may take an additional 1-4 credits of Independent Study/Research to meet the maximum of 8 credits allowed. The additional 4 credits can be applied only to the "open/free electives."

## Honors in Biology

1. An overall quality point average of 3.0 or better is required. An average of 3.5 in biology is required.
2. Students should announce in writing their intention to pursue honors in biology to both the department chair and academic adviser, no later
than May 1 in the spring term of their junior year.
3. Departmental honors students are required to take BIO 399H (Honors Research in Biological Sciences).
4. The student is responsible to obtain a sponsor for his or her project prior to the May 1 deadline.
5. Successful completion of a senior research project is required. The project must include: a) a written proposal; b) the actual completion of an approved research project under the supervision and sponsorship of a full-time faculty. member in the Department of Biological Sciences; c) the presentation of the outcome of the research project in the written format approved by the department; d) and a seminar presentation of the outcome of the research project.
6. Evidence of excellence in speaking and writing skills must be documented by term papers, English theme papers, oral presentation(s) and grades, as determined by the committee.
7. The actual granting of honors in biology is determined by all the full-time faculty in the Department of Biological Sciences.
A list of the department faculty and their research interests is available in the department office.

## Premedical Studies Program

Students majoring in biology may fully participate in the premedical studies program. The curriculum in this degree program and its concentrations can fulfill the science prerequisites for most professional schools. Students should refer to page 28 of this catalog for more information about the premedical studies program and contact the Health Professions Advisory Committee for further academic advising.

## Five-year Master's Degree in Molecular and Cell Biology

The Department of Biological Sciences offers a five-year master's degree program in molecular and cell biology (non-thesis). Upon satisfactory completion of all of the undergraduate curriculum requirements, students receive a bachelor of science in biology. Students complete graduatelevel biology courses during their senior year. A minimum grade of 3.0 is required in all graduate courses. A maximum of 9 credits may be used to fulfill both undergraduate and graduate requirements. Students earn the MS in molecular
and cell biology upon satisfactory completion of all of the graduate curriculum requirements.

The MS degree in molecular and cell biology provides an excellent foundation for students intending to pursue studies in professional health care fields and doctoral programs. It also offers a competitive edge for students wishing to pursue a career in biotechnology and biopharmaceutical industries.

Students who choose to pursue the five-year master's degree in molecular and cell biology are required to complete the following courses by the end of their junior year:

1. PHY 110/110L and PHY 111/111L
2. BIO 282/282L and BIO 346/346L
3. CHE 315/315L

| Recommended Curriculum <br> Course |  |  |
| :--- | :--- | ---: |
| Title | Credits |  |
| Fall Semester, First Year |  |  |
| BIO 150/150L | General Biology I with lab (for majors) | 4 |
| CHE 110/110L | General Chemistry I with lab | 4 |
| EN 101 | (UC) Freshman Composition | 3 |
| MA 141 | (UC) Quantitative Literacy | 3 |
| FYS 101 | First-year Seminar | 3 |

Total 17
Spring Semester, First Year
BIO 151/151L $\begin{aligned} & \text { Molecular \& Cell Biology \& Genetics } \\ & \text { (for majors) }\end{aligned}$
CHE 111/111L General Chemistry II with lab 4
EN 102 (UC) Freshman Composition 3
UC University Elective 3
Total 14
Fall Semester, Second Year
BIO 298 Research Methods in Biology 3
BIO 152/152L Ecological \& Biological Diversity 4
CHE 210/210L Organic Chemistry I with lab 4
UC University Seminar 3
UC University Curriculum
Total 17

| Spring Semester, Second Year |  |  |
| :--- | :--- | ---: |
| BIO | Biology elective | $3-4$ |
| CHE 211/211L | Organic Chemistry II with lab | 4 |
| BIO | Biology elective | $3-4$ |
| UC | University Curriculum | 3 |

Total 13-15
Fall Semester, Third Year
PHY 110/110L General Physics I with lab 4
BIO 282/282L Genetics with lab
4
CHE 315/315L Biochemistry with lab
Open elective

## Spring Semester, Third Year

PHY 111/111L General Physics with lab 4
BIO Biology elective 3
BIO 346/346L Cell Physiology with lab 4
UC University Curriculum 3
Total 14
Fall Semester, Fourth Year
UC University Curriculum 3
BIO 515 Advanced Biochemistry 4
BIO $\begin{array}{ll}\text { Molecular \& Cell Biology } \\ \text { Graduate elective }\end{array}$
Open elective 3
Open elective 3
Total 16
Spring Semester, Fourth Year
UC University Curriculum 3
UC University Curriculum 3
BIO Molecular \& Cell Biology graduate elective 3
UC UC Capstone 3
Open elective 3
Total 15
Fall Semester, Fifth Year
BIO 606 Protein Methods Laboratory 4
BIO 571 Molecular Genetics 4
BIO Molecular \& Cell Biology graduate elective 3
Total 11
Spring Semester, Fifth Year
$\begin{array}{lll}\text { BIO 605 } & \text { DNA Methods Laboratory } & 4 \\ \text { BIO 568 } & \text { Molecular \& Cell Biology } & 4 \\ \text { BIO } & \text { Molecular \& Cell Biology graduate elective } & 3 \\ \text { BIO } 675 & \text { Comprehensive Exam } & 2\end{array}$
Total 13

## Minor in Biology

A minor in biology requires the completion of at least 20 BIO credits, 12 of which must be beyond the 100-level courses. A minimum grade of Cmust be achieved in all courses for the minor with an overall minimum cumulative GPA of 2.0. Students who wish to minor in biology are required to consult with the department chair to design a minor that best meets their needs.

## Bachelor of Science in

## Behavioral Neuroscience

The behavioral neuroscience major is an interdisciplinary course of study that emphasizes the interaction between the biological and social foundations of behavior. Interested students should refer to the Department of Psychology.

## Department of Chemistry and Physical Sciences

Bachelor of Science in Chemistry Bachelor of Science in Biochemistry Minor in Chemistry

The mission of the Department of Chemistry and Physical Sciences is to provide undergraduate course work in chemistry and the physical sciences in a student-centered, supportive learning environment characterized by small classes with access to faculty and well-equipped laboratory facilities where students can actively engage in the investigative process of science.

For students majoring in chemistry or biochemistry, the department provides an intensive program of study in the major areas of chemistry with an emphasis on developing skills in analytical thinking and problem-solving, evaluation and interpretation of data, effective communication of scientific information, and research methodologies, while also exploring the applications of chemistry that permeate our lives. Sufficient flexibility through open electives allows students to emphasize personal career goals.

Students are prepared for entry-level positions in chemical, pharmaceutical or academic research laboratory settings or in non-traditional settings, which rely on the background and skills that have been acquired. Their education also prepares them for entry into graduate programs of study in chemistry, biochemistry, environmental science, biomedical sciences, pharmacy, secondary education, medicine or law.

The department also provides a chemistry minor program structured to give students a balanced exposure to the major areas of chemistry and opportunities to develop associated skills. Providing this opportunity is an important asset for students studying in other programs, particularly those pursuing careers in the biomedical and biological sciences.

The department also offers courses in chemistry and physics tailored to the support of programs in the basic and health sciences, nursing and engineering. These programs all have a strong reliance on the ability of students to understand and apply the fundamental concepts of chemistry and physics and to demonstrate clear analytical
thinking and problem-solving skills developed in these courses.

In addition, it is the mission of the department to offer stimulating course work in the physical sciences for non-science majors as part of the University Curriculum so that all students can develop an appreciation of the process of science, engage in scientific investigative experiences, understand the role of science in their everyday lives and be prepared to make informed value judgments in our highly technological society.

## Bachelor of Science in Chemistry or Biochemistry

Initial placement in English and mathematics courses is determined by placement examinations and an evaluation of high school units presented. Students who do not place directly into MA 141 should take MA 140 . MA 142 is strongly recommended.

Undergraduates enrolled in the chemistry or biochemistry majors must maintain a minimum grade of C in all required chemistry, physics and mathematics courses. Any required course not listed in the course descriptions may be considered for scheduling when the need arises. All 4-credit science courses have a laboratory component. Chemistry electives must be selected with the advice and approval of the department adviser. Open electives should be selected based upon student interests and career goals from offerings in all schools.

An independent research project chosen by the student and directed by a full-time faculty member in the department or an approved internship is required of all students in these programs. This research project or internship plays a key role for the student in developing a deeper understanding of the chemistry involved, and builds skills necessary to work independently and communicate the results of the work to a group of scientists.

| Chemistry Core Requirements (53 credits) |  |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| CHE 110/110L | General Chemistry I with lab | 4 |
| CHE 111/111L | General Chemistry II with lab | 4 |
| CHE 210/210L | Organic Chemistry I with lab | 4 |
| CHE 211/211L | Organic Chemistry II with lab | 4 |
| CHE 215/215L | Analytical Chemistry with lab | 4 |

CHE 301/301L Physical Chemistry I with lab
CHE 302/302L Physical Chemistry II with lab
CHE 305/305L Instrumental Analysis with lab
CHE 315/315L Biochemistry I with lab
CHE 410 Advanced Inorganic Chemistry
CHE 475 Chemistry Seminar I
CHE 476 Chemistry Seminar II
CHE 490 Chemistry Research I
CHE 491 Chemistry Research II
Two upper level CHE elective courses, typically
CHE 300 Special Topics (offerings vary)
Cognate courses ( 11 credits) (required courses, which support the chemistry major and may be used to satisfy requirements outside of the major)
MA $141 \quad$ Calculus I (required)
PHY 110/110L* General Physics I with lab PHY 111/111L* General Physics II with lab
*PHY 121, University Physics I, and PHY 122, University Physics II, may be substituted
MA 142 Calculus II is highly recommended but is not required.
All students must complete the University Curriculum requirements.
Minimum number of credits required for graduation is 120 .

## Biochemistry Core Requirements (59 credits) <br> Course Title Credits

CHE 110/110L General Chemistry I with lab 4
CHE 111/111L General Chemistry II with lab 4
CHE 210/210L Organic Chemistry I with lab 4
CHE 211/211L Organic Chemistry II with lab
CHE 215/215L Analytical Chemistry with lab
CHE 301/301L Physical Chemistry I with lab
CHE 302/302L Physical Chemistry II with lab
CHE 305/305L Instrumental Analysis with lab
CHE 315/315L Biochemistry I with lab
CHE 316 Biochemistry II
CHE 475 Chemistry Seminar I
CHE 476 Chemistry Seminar II
CHE 490 Chemistry Research I
CHE 491 Chemistry Research II
Two upper-level CHE elective courses, typically CHE 300, offerings vary
Two upper-level BIO or BMS electives 6
Advanced biology electives for the biochemistry major are chosen in consultation with the departmental adviser.
Cognate courses (19 credits) (required courses, which support the biochemistry major and may be used to satisfy requirements outside the major)
MA $141 \quad$ Calculus I (required)
PHY 110/110L* General Physics I with lab 4
PHY 111/111L* General Physics II with lab

BIO 150/150L General Biology for Majors with lab
BIO 151/151L Molecular \& Cell Biology \& Genetics with lab
*PHY 121 University Physics I and PHY 122 University Physics II, may be substituted.
MA 142 Calculus II is highly recommended but is not required. All students must complete the University Curriculum requirements.
Minimum number of credits required for graduation is 120 .

## Minor in Chemistry

The highly technical nature of our daily living has increased the need for a working knowledge of chemistry in biological sciences, medical sciences, law, business, government, academia and many more areas. Students majoring in programs other than chemistry can be recognized as having additional proficiency in chemistry by successfully completing this balanced program. Candidates must apply to the chemistry department to enter this program and be enrolled concurrently in a major undergraduate program. The program consists of a minimum of 24 credits of chemistry distributed between 20 credits of required courses and 4 credits of elective courses consistent with the following specifications: The minimum grade required for each course is a C-.

| Course | Title | Credits |
| :--- | :--- | ---: |
| Required |  | 4 |
| CHE 110/110L | General Chemistry I with lab | 4 |
| CHE 111/111LL | General Chemistry II with lab | 4 |
| CHE 210/210L | Organic Chemistry I with lab | 4 |
| CHE 211/211L | Organic Chemistry II with lab | 4 |
| CHE 215/215L | Analytical Chemistry with lab | 4 |
| Elective (select one of the courses listed) |  |  |
| CHE 301/301L | Physical Chemistry I with lab | 4 |
| CHE 305/305L | Instrumental Analysis with lab | 4 |
| CHE 315/315L | Biochemistry I with lab | 4 |

## Required

CHE 110/110L General Chemistry I with lab 4
CHE 111/111L General Chemistry II with lab 4
CHE 210/210L Organic Chemistry I with lab 4
CHE 211/211L Organic Chemistry II with lab 4
CHE 215/215L Analytical Chemistry with lab 4
Elective (select one of the courses listed)
CHE 301/301L Physical Chemistry I with lab 4
CHE 305/305L Instrumental Analysis with lab 4
CHE 315/315L Biochemistry I with lab 4

## Department of Economics

Bachelor of Science in Economics Minor in Economics

## Bachelor of Science in Economics

Economics majors learn how to analyze social and business problems and to examine the proper role of the market and the government in solving these problems. Students have the opportunity to take specialized courses such as Environmental and Natural Resource Economics, Game Theory, International Economics and Money and Banking. Students who have earned a degree in economics have gone on to careers in banking, consulting, financial research, the government, the hedge fund industry, insurance firms such as Travelers and industrial firms such as General Electric and United Technologies. Besides preparing a student for graduate study in economics, the major provides excellent preparation for graduate study in business, law and public policy.

## Program Learning Outcomes

The BS in economics program has the following three program learning outcomes:

1. Knowledge of economics: Students demonstrate and can apply the core theories of economics.
2. Quantitative reasoning: Students develop the ability to represent mathematical information symbolically, visually, numerically and verbally, and to interpret mathematical models such as graphs, tables and schematics to draw inferences. They also develop an ability to use arithmetical, algebraic, geometric and statistical methods to solve social and business problems.
3. Critical thinking: Students develop the ability to recognize problems and to acquire, assess and synthesize information to analyze social and business problems.

| Economics Core Requirements (21 credits) |  |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| EC 111 | Principles of Microeconomics | 3 |
| EC 112 | Principles of Macroeconomics | 3 |
| EC 211 | Intermediate Microeconomics | 3 |
| EC 212 | Intermediate Macroeconomics | 3 |
| EC 271 | Statistics for Economics and Business | 3 |
| EC 365 | Econometrics | 3 |
| EC 450 | Senior Seminar | 3 |

## Economics Electives (12 credits)

Choose four economics courses numbered 200 or higher. All students must complete the University Curriculum requirements.
Minimum number of credits required for graduation is 120 .

## Minor in Economics

Students wishing to augment their field of study with the perspective and skills of economics are encouraged to consider an economics minor. In addition to the University Curriculum economics courses (EC 111: Principles of Microeconomics and EC 112: Principles of Macroeconomics), students must complete four additional economics courses for the minor. The courses used for the minor are subject to approval by the department chair.

## Department of English

## Bachelor of Arts in English <br> Minor in English

The mission of the Department of English is to engage students in an ever-deepening exploration of how the relationship between reading and writing shapes our understandings of ourselves, of our histories and cultures. The Department of English views the study of literature and writing as a means to study the power of language, form and content. By learning to read closely, interpret texts and write persuasively, students can harness that power. Students learn that writing is a creative tool through which to understand how beauty and ideas, racial and cultural differences, and political and economic realities are negotiated in literary forms. By analyzing and interpreting acts of writing through discussion and research, students sharpen their critical thinking and deepen their sense of cultural literacy.

The English major provides a solid foundation in the study of the genres of literature, literary theory, literary history, rhetoric and composition, and creative writing, leading to the senior seminar capstone course in which students produce their own extended, original project. Students may choose to pursue two concentrations within the major: creative writing and English study for secondary education. Both of these concentrations have more specific requirements in order to appropriately prepare students for their interests and career goals.

Students consult with advisers regularly to ensure that their personal, intellectual, creative and professional goals are being met. Students in the English major program are well prepared for entering graduate study in English, elementary and secondary education, law, business and library science and for careers in government, public service, not-forprofit foundations, public relations and advertising, print and digital publishing and other business fields that need skilled writers and researchers and creative problem-solvers.

The English minor has two emphases: literature and writing. The literature minor offers the same critical and creative engagements with texts as does the major. Students can choose from a variety of courses to help deepen their critical and writing acumen. The writing minor offers courses specifically tailored to composition, rhetoric and creative writing.

The Department of English supports four programs: the first-year writing program, the English major, the English minor and the five-year BA/MAT program in elementary or secondary education. All freshmen entering Quinnipiac University must take EN 101 Introduction to Academic Reading and Writing and EN 102 Academic Writing and Research. Students who wish to major, double major or minor in English can apply to the chair of the English department at any time. Students who are interested in the creative writing or secondary education concentrations are encouraged to declare their concentration with their academic adviser as early as possible. Students who are planning to enter the five-year BA/MAT programs in elementary or secondary education will need to apply to the School of Education in their sophomore year. All students in all English programs must maintain an overall 2.5 GPA, be in good academic standing and must satisfy all major and minor requirements.

Co-curricular activities are important to the educational goals of many English majors and minors. As a community of readers and writers, the English department supports the English Literary Club, open to all Quinnipiac students, and Montage, the undergraduate literary journal. The department hosts creative writing events, showcasing professional creative writers and artists, and student writers and artists. Students who excel in their studies will be invited to join Sigma Tau Delta, the International Honor Society for English majors.

## Bachelor of Arts in English

The English major is designed for the student who enjoys working with all forms of literary expression. It emphasizes strong reading, critical and creative thinking, problem-solving, research and writing, and oral communication, producing successful graduates who are well prepared for a wide range of careers and graduate study.

## English Major Requirements ( $\mathbf{3 6}$ credits) Flexible Requirements

Any EN courses at the 200 or 300 level ( 21 credits)
Students must take at least 6 credits at the EN 300 level in each category.
A. Language, Rhetoric, Genre and Form
B. Periods, Places, Cultures and Identities

## Advanced Requirements

Choose one from each category ( 15 credits)
Literary History Underrepresented Writers:
EN 235, EN 265, EN 338, EN 340
Literary History I:
EN 341, EN 345, EN 348, EN 350, EN 361
Literary History II:
EN 308, EN 322, EN 323, EN 352, EN 355, EN 365,
EN 366, EN 367, EN 380
Junior Seminar in Literary Theory: EN 304
Senior Seminar/Capstone: EN 460

## Concentration in Creative Writing

English majors can earn a concentration in creative writing by completing 15 or more credits in creative writing and contemporary literature courses. Students who earn the concentration in creative writing not only hone their compositional, reading and analytical skills in one or more genres, but they also build a foundation for understanding and utilizing the power of creativity in their professional lives after college. This concentration is especially recommended to those students who hope to pursue a master of fine arts degree. Successful completion of the concentration in creative writing is indicated on students' transcripts.

All students wishing to fulfill the requirements for a concentration in creative writing must take the following courses:

- two 200-level creative writing courses ( 6 credits)
- two 300 -level advanced creative writing workshops ( 6 credits)
- one course in contemporary/post-WWII literature, including but not limited to EN 220, EN 275, EN 308, EN 322, EN 323, EN 366, EN 367 and EN 373 (3 credits)

The 300-level workshop can be repeated once for credit (i.e., a student interested in fiction can take the Advanced Fiction Workshop up to two times).

## Concentration in Secondary Education

English majors who are planning to teach high school need a more structured curriculum tailored to state requirements and discipline-specific knowledge of literature. To earn the concentration in secondary education, students complete 18 credits in a strong, broadly based literature and expertise in writing foundation. The concentration enables them to move to graduate level work successfully, and greatly benefits them in their professional lives as high school teachers. Students use the flexible and advanced requirements to explore a range of courses in national literatures, genres, authors and writing, including:

- One course in British literature (3 credits)
- Two courses in American literature (6 credits)
- One course in Shakespeare (3 credits)
- One course in advanced composition (3 credits)
- History of the English Language (3 credits)


## Internships

The English major allows students to pursue 1-credit, repeatable internships (EN 293) in supervised fieldwork related to writing or reading to investigate career opportunities and to develop professional contacts. Interested students should see their adviser and the CAS Career Development Office.

## Honors Thesis in English

Students who have an overall 3.3 GPA, and a 3.5 in the English major may seek the recommendation of any English department faculty member to pursue a Senior Thesis Project (EN 470) in addition to the capstone course (EN 460). Students who are planning to attend graduate school in English or other related fields, might discuss taking advantage of this opportunity with their advisers.

## Minor in English

The Department of English offers a minor in English for students who wish to study literature and improve their writing proficiency. Students whose professional advancement depends on good reading aptitude, sound writing and rhetorical techniques, and critical and creative thinking are encouraged to apply to the Chair of the English department. The minor offers two different emphases depending on student interests:.
Literature Track Required CoursesEN 150 Advanced Revision \& Editing1

- two 200-level literature courses ..... 6
- four 300-level literature courses ..... 12
Strongly advised: two period courses and
EN 343 or 344 (Shakespeare)
Writing Track Required Courses Credits
EN 150 Advanced Revision \& Editing ..... 1
- one 200-level writing course ..... 3
- two 200 or 300 -level literature or writing courses ..... 6
- two 300-level writing courses ..... 6
EN 351 Studies in Rhetoric \& Writing ..... 3


## Department of History

## Bachelor of Arts in History Minor in History

The mission of the Department of History is twofold. First, it provides an intensive program of study for students majoring in history. The study of history is a long-established foundation for education since it builds critical skills of gathering and interpreting evidence, crafting arguments, engaging in research and developing polished presentation skills both written and oral. As a result, students earning a degree in history are prepared to pursue a wide range of career options. Some continue their education in graduate school in the humanities, social sciences, education or law; others pursue careers in public service, business and the arts.

Second, the Department of History provides opportunities for all students at Quinnipiac to familiarize themselves with the past through the study of history across time and around the world. Studying history helps students to appreciate their place in the world through a deeper understanding of the connection between the past and the present, through a better awareness of the variety of human experience, and through a more complete understanding of the rich diversity of cultures.

The faculty regularly reviews and updates the history curriculum to reflect the changing nature of the historical discipline; conducts exit interviews with graduating seniors to assess their experience in the major; and collects and updates survey information from graduates concerning their experiences after graduation.

## Bachelor of Arts in History

Students normally apply for admission to the major during their sophomore year. Applications must be made to, and approved by, the chairperson. Acceptance is usually approved for all applicants in good standing academically.

Continuation in the major is dependent upon a satisfactory level of performance in all courses, with special reference to work in history. In addition to the college requirements, students majoring in history must meet the following departmental requirements:
History Core Requirements (36 credits) Course

Credits
European History
American History
Global History
Four electives 200 level or above 12
HS 303: Historiography \& Historical Methods
HS 408: Seminar in History
3
No more than three courses may be at the $\mathbf{1 0 0}$ level
The minimum requirement ( 36 credits) must be met with a grade of C or better in all courses.
Note about internships: The department is able to provide student internships with area historical societies and also attempts to place qualified students in credit-related internships with area governmental organizations.

## Minor in History

A minor in history is recorded upon completion of at least 18 credits with a grade of C or better in all courses. The student must select at least 3 credits from each of the following areas of history: American, European and non-Western. At least 9 credits of the 18 must be at the 200-level or above and should be chosen with the consultation of the department chair.

## Department of Legal Studies

Bachelor of Arts in Legal Studies
Minor in Dispute Resolution
Minor in Studies in the Law
Quinnipiac University's ABA-approved bachelor of arts in legal studies combines the classic values of a liberal arts education with the critical thinking skills of the legal profession. The program is planned and taught by lawyers to provide students
with a solid grounding in the fundamentals of the legal system.

The education focuses on particular core areas of the law and on developing specific legal research, writing and critical thinking skills, all within a framework of the ethical and statutory constraints confronting the legal profession. This combination of theoretical class work with real-world experience, along with exposure to traditional liberal arts courses, prepares legal studies graduates for a broad range of professional opportunities.

Our students are often interested in continuing with their education. Many graduates go directly to law school; others work for a year or two before applying. Other graduates have become paralegals, social workers, teachers and business owners. A bachelor's degree in legal studies can lead to many opportunities.

## Bachelor of Arts in Legal Studies

The legal studies department curriculum has been approved by the American Bar Association as a paralegal education program. A paralegal performs specifically delegated substantive legal work under the supervision of an attorney. While paralegals may not give legal advice to clients or appear in court on their behalf, these highly skilled professionals perform a wide range of tasks and play an integral role in the delivery of legal services.

Students take seven required foundation courses, with a continuing emphasis on legal writing and professional ethics. The required Legal Internship Seminar I and II, taken in the student's senior year, places students in law office settings to apply their prior courses and learning in a practical legal environment. Electives allow students to tailor their education to their own interests and needs to meet their own personal career goals. Electives include theoretical and practical courses in a multitude of legal subjects. All courses engage students in their own active learning with an emphasis on developing skills in critical thinking and legal reasoning.

Students must take LE 101 by the end of their sophomore year to successfully complete the degree requirements within four years. The department encourages study abroad; however, because students may not take LE 301 while abroad, they should not go abroad during the fall semester of their junior year. Students should speak with their academic adviser and plan accordingly. LE 480-

481, Legal Internship Seminar I and II, are limited to legal studies majors and must be done within the fall and spring of the student's senior year.

## Program Learning Outcomes

Students who graduate with a degree in legal studies are able to:

1. understand and critically assess how law is made, interpreted and applied in the United States.
2. analyze a legal problem, research and synthesize the law, apply it to a set of facts, and write a legal memo using a generally accepted format for the legal profession with proper legal citation.
3. draft, review, organize and manage legal documents and correspondence using proper format and appropriate content.
4. formulate and present a coherent, wellsupported legal argument in both written and oral form to diverse audiences.
5. apply their legal skills and knowledge in a professional legal setting, consistent with ethical standards governing the legal profession.
Legal Studies Core Requirements ( 23 credits) Course Title Credits
LE 101 Introduction to the American Legal System 3
LE 211 Legal Reasoning, Research \& Writing I 3
LE 212 Legal Reasoning, Research \& Writing II 3
LE 301-302 Civil Procedures I \& II 6
LE 480-481 Legal Internship Seminar I \& II 8
Elective courses ( 15 credits)
Five electives chosen from the following. At least 9 credits must be at the 300 level.
LE 115 Criminal Law 3
LE $150 \quad$ Mock Trial (may be taken up to three times) 1
LE 200 Special Topics 3
LE 224 Sports Law 3
LE 225 Alternative Dispute Resolution 3
LE 250 Gender \& the Law 3
LE 260 Trial Techniques 3
LE 300 Special Topics 3
LE 309 Advanced Legal Writing 3
LE 310 Elder Law 3
LE 311 Administrative Agencies 3
LE 312 Family Law 3
LE 315 Wills, Probate \& Estate Administration 3
LE 317 International Law 3
LE 319 International Law for the Individual 3
LE 320 Land Transfers \& Closing Procedures 3
LE 322 Health Care Law 3
LE 328 Employment Law 3
LE 330 Business Entities 3

LE 340 The Constitution \& the Court 3
LE 342 Comparative Constitutional Law 3
LE 345 Intellectual Property 3
LE 350 Federal Indian Law \& Policy 3
LE 360 Mediation 3
LE 370 Negotiation 3
Additional Requirements
Legal studies majors also must take SO 101, a 200-level English course, and an American history course. These may be taken in conjunction with the College of Arts and Sciences requirements.

Students also must complete a minor in any other department within the University.

## Minor in Dispute Resolution

The minor in dispute resolution is for students who are interested in learning more about resolving disputes and conflict in both their personal and professional lives. Students study how disputes arise and various means of resolving them, including negotiation, mediation, arbitration and litigation. The minor teaches students how to use these means to resolve problems on a personal and community basis. Role play activities enable students to partake in actual dispute resolution.
Total credits 18 (at least 6 credits must be at the 300 level) Required courses (9 credits)
LE 101 Introduction to the American Legal System 3
LE 225 Alternate Dispute Resolution 3
LE 360 Mediation
or LE 370 Negotiation
Elective courses (9 credits)
LE 260 Trial Techniques 3
LE 301 Civil Procedures I 3
LE 302 Civil Procedures II 3
LE 312 Family Law 3
LE/PO 317 International Law 3
LE 328 Employment Law 3
LE 360 Mediation 3
LE 370 Negotiation 3
IB 324 Negotiating Internationally 3
PS 261 Social Psychology 3

## Minor in Studies in the Law

The Studies in the Law minor is offered for students who are interested in learning more about law and the American legal system. Law is the binding force in society. It reflects the values of society and is constantly changing as society changes. Law deals with issues such as justice, equity and the balance between the rights of
individuals and the public interest. Students will learn of their legal rights and responsibilities in today's society. This minor introduces students to the historical and current issues facing society through its legal system. The minor is not designed to prepare students to work as paralegals.
Total credits 18 (at least 6 credits must be at the 300 level) Required courses ( 6 credits)
LE 101 Introduction to the American Legal System 3 LE 211 Legal Reasoning, Research \& Writing I 3 Elective courses (12 credits):
At least 6 credits must be at the 300-level. Electives may be taken from all legal studies courses, except LE 480/1. Minors may not take LE 480 or LE 481, Legal Internship Seminar I and II.

Students must meet the prerequisites for elective courses.
Other courses that may be used as electives
(no more than one from this category)
(no more than one from this category)
EN 372 Law in Literature
LW 121 Business Law \& Society
LW 122 The Law of Property, Sales \& Negotiable Instruments
MSS 340 Communications Law
PL 202 Logical Reasoning
PS 383 Psychology \& the Law
SO 383
Sociology of Law

## Department of Mathematics and Computer Science

Bachelor of Arts in Mathematics
Minor in Mathematics
Bachelor of Science in Computer Science Minor in Computer Science

The disciplines of mathematics and computer science are respectively among the oldest and newest members of the academy. They share a rich intellectual history encompassing both theoretical and applied work. The mission of the Department of Mathematics and Computer Science is to provide students with a solid understanding of, and appreciation for, both theoretical and applied work.

Our commitment to the intellectual growth of our students applies not only to students majoring in mathematics or computer science, but to all students taking courses in the department. In an increasingly technical and technological world, a solid foundation in these disciplines is becoming more vital to students in all fields.

## Mathematics

Mathematics is the symbolic language of nature. More than numbers and symbols, it encompasses the logic and methodology of reasoning and provides the tools for making decisions, interpreting observations, explaining natural phenomena and solving problems. It is both a subject with widespread applications to the sciences and social sciences and a subject of intrinsic intellectual interest.

All Quinnipiac students should:

- learn the mathematical skills necessary to be successful in their chosen field and become an informed and responsible citizen
- appreciate the relevance of mathematics in society Students completing a major in mathematics also should:
- be prepared for employment in mathematicsrelated careers in fields such as business, science, government and education
- be prepared to pursue graduate studies in mathematics
- be able to work collaboratively on mathematical problems and effectively communicate these results
- be exposed to technological innovations used in mathematics
- be able to read and use the current mathematical literature to further their own education


## Computer Science

Pervasive and ever-changing computing technology provides the infrastructure for our globally connected world. Computer scientists are among the professionals who conceive, design, build and deploy critical devices and applications to support and advance this infrastructure. The computer science program in the Department of Mathematics and Computer Science prepares computer scientists who are able to contribute immediately and effectively to this project. Computer science graduates possess a solid grounding in core knowledge that they can apply to solve new and emerging problems with innovative solutions. Since new computing knowledge is regularly generated, computer science graduates are able to independently identify, learn and apply new concepts. Pervasive applications emerge in virtually any domain; computer science graduates adapt to any domain and effectively communicate and work with domain-specific users.

## Bachelor of Arts in Mathematics

The mathematics major provides a broad background in undergraduate mathematics that prepares students for graduate study, and for positions in teaching, business and government. Note: a Cor better is required for all departmental prerequisites, unless otherwise stated.

## Calculus Sequence ( 12 credits)

Take either Option A or Option B

## Option A

Course Title Credits

MA $141 \quad$ Calculus of a Single Variable I (UC) 3
MA $142 \quad$ Calculus of a Single Variable II (UC) 3
MA 241 Vector Functions \& the Geometry of Space 3
MA 242 Multivariable Calculus 3
Option B
MA $151 \quad$ Calculus I (UC)
MA $152 \quad$ Calculus II (UC)
MA $251 \quad$ Calculus III 4
Additional Mathematics Core Courses ( 15 credits)
MA 229 Linear Algebra 3

MA 301 Foundations of Advanced Mathematics 3
MA 321 Abstract Algebra 3
MA 341 Advanced Calculus 3
MA 490 Mathematics Senior Seminar 3
Plus, three electives chosen from the following:
MA 285 Applied Statistics
MA 300 Special Topics
MA 305 Discrete Mathematics 3
MA 315 Theory of Computation 3
MA 318 Cryptography 3
MA 361 Numerical Analysis 3
MA 365 Ordinary Differential Equations 3
MA 370 Number Theory 3
MA 371 Mathematical Statistics 3
MA 372 Mathematical Statistics 2
MA 378 Mathematical Modeling 3
MA $400 \quad$ Special Topics in Mathematics 3
MA 421 Advanced Algebra 3
MA 441 Complex Variables 3
MA 451 Point-Set Topology 3
While students must consult with their major adviser in planning a course of study, the department provides the following recommendations.

- Students interested in teaching should consider MA 285.
- Students interested in statistics should consider MA 371, MA 372 and MA 378.
- Students interested in actuarial studies should consider MA 285, MA 361, MA 371, MA 372, AC 101, EC 111, and CSC 110; and possibly EC 112, FIN 201, FIN 310, CIS 212.


## Minor in Mathematics

To complete a minor in mathematics, a student is required to complete six courses, including MA 141 or MA 151, MA 142 or MA 152, MA 229 , and three electives chosen in consultation with the department chairperson. At least one of the three electives must be at the 300-level. Courses numbered below MA 141 may be approved at the discretion of the department chairperson.

## Bachelor of Science in <br> Computer Science

The computer science major in the College of Arts and Sciences offers a foundation of study in computer science within the framework of a traditional liberal arts education. The major requires students to complete a core of 10 courses ( 29 credits) and four upper-division electives in computer science and mathematics. Note: a C- or better is required for all departmental prerequisites.
Computer Science Core Requirements ( 29 credits) Course Title Credits
CSC 110 Programming \& Problem Solving 4
CSC 111 Data Structures \& Abstraction 4
CSC 205 Introduction to Discrete Mathematics 3
or MA 305 Discrete Mathematics
CSC 210 Computer Architecture \& Organization 4
CSC 215 Algorithm Design \& Analysis 3
CSC 225 Introduction to Software Development 3
CSC 310 Operating Systems \& Systems Programming 3
CSC 491 Senior Project $1 \quad 1$
CSC 492 Senior Project 2 1
MA 141 Calculus of a Single Variable I (UC) 3
or MA 151 Calculus I (UC)
or MA 229 Linear Algebra
Plus four electives from the following list:
CSC 315 Theory of Computation 3
CSC 318 Cryptography 3
CSC 320 Compilers 3
CSC 325 Database Systems 3
CSC 340 Networking \& Distributed Processing 3
CSC 345 Computer Graphics 3
CSC 350 Intelligent Systems 3
CSC 355 Programming Language Concepts 3
CSC 361 Numerical Analysis 3
CSC 375 Advanced Topics in Computer Science 3
Note: CSC 375 may be repeated for credit if topics are different.

## Minor in Computer Science

To complete a minor in computer science, a student is required to take a total of six courses ( 20 or 21 credits), including CSC 110, CSC 111, either CSC 205 or MA 305, and three additional courses in computer science at the 200 level or above, to be approved by the chair of the Department of Mathematics and Computer Science. These additional courses must include either CSC 210 or CSC 215 (or both), and at least one computer science course at the 300 level. The following computer science courses are applicable toward the minor:
Course Title Credits
CSC 110 Programming \& Problem Solving 4
CSC 111 Data Structures \& Abstraction 4
CSC 205 Introduction to Discrete Mathematics
or MA 305
CSC 210
Discrete Mathematics

CSC 215
Computer Architecture \& Organization
CSC 225 Introduction to Software Development 3
CSC 310 Operating Systems \& Systems Programming 3
CSC 315 Theory of Computation 3
CSC 318 Cryptography 3
CSC 320 Compilers 3
CSC 325 Database Systems 3
CSC 340 Networking \& Distributed Processing 3
CSC 345 Computer Graphics 3
CSC 350 Intelligent Systems 3
CSC 355 Programming Languages Concepts 3
CSC 361 Numerical Analysis 3
CSC 375 Advanced Topics in Computer Science 3


## Department of Modern Languages

Bachelor of Arts in Spanish Language and Literature Minor in French
Minor in Italian
Minor in Spanish
The Department of Modern Languages is dedicated to the study of selected languages and aspects of their related cultures. Coverage varies depending on the language. The department offers a major in Spanish Language and Literature and minors in French, Italian and Spanish. It also offers instruction in Chinese and German through the intermediate level, and instruction in Japanese, Hebrew and Arabic through the elementary level.

The study of modern languages is a valuable entry point into parts of the world that use such languages. Students develop effective communication skills as well as cultural critical thinking and knowledge commensurate with the level of study achieved. In this way, the Department of Modern Languages contributes to their educational foundation for a changing world of diverse cultures and people.

## Bachelor of Arts in Spanish Language and Literature

In addition to major cultural benefits, the study of how important populations outside and within our borders communicate from day to day enhances the individual's value in the workplace.

The program has three components: Spanish language (written and oral); culture of Spain and Latin America; and major literary works in Spanish.

Students undertaking the Spanish major are prepared for careers dependent in part on facility with the language and familiarity with the culture.
These include employment in international business, journalism and mass communications, health care, government, education, criminal justice and law, among others. The Spanish major requires completion of 36 credits, with a grade of C or higher. At least 18 credits of the 36 credits required for the major must be completed on campus.

Double majors are encouraged.
Spanish Core Requirements ( 36 credits)

1. Written and oral fluency in Spanish (9 credits)

Demonstrated by completing the following courses or their equivalent:

## Course

SP 301
Title
SP 302
Advanced Spanish I
Advanced Spanish II
Advanced Spanish Conversation
*This course might be waived for students with demonstrated proficiency in oral Spanish-those students would take 3 additional credits in component 2 or 3
2. Cultural literacy ( 12 credits), including a familiarity with Hispanic cultures and fine arts, historical and sociopolitical matters, and/or linguistics.
Demonstrated by completing 12 credits in courses on Spanish culture or Spanish American culture taught in Spanish.

## Possible courses include:

SP 343
Culture of Spain
SP 370 History of the Romance Languages
SP 373
Latin American Culture I
SP 374
Latin American Culture II
SP 376 Spanish Caribbean

## 3. Knowledge of major works of literature written in Spanish (12 credits)

Demonstrated by completing 12 credits in courses on
Spanish or Spanish-American literature taught in Spanish.

## Possible courses include:

SP 317 Approaches to Literary Genres
SP 321 Masterpieces of Spanish Literature 3
SP 328 Spanish-American Literature from
SP 329 Conquest to 1880
Spanish-American Literature from
SP 335 19th-century Literature of Spain 3
SP 348 Spanish Drama \& Poetry of the Golden Age
SP 371 Contemporary Literature in Spanish 3
4. SP 450 Senior Seminar


## Honor Society

The department rewards students who do outstanding work in Spanish language courses with membership in Sigma Delta Pi, the national Spanish language honor society.

## Language Placement

Students who continue the study of a foreign language begun prior to college must take a placement test to be placed at the course level for which they qualify.

## Study Abroad

Study abroad, especially for students enrolled in the appropriate major/minor program, is encouraged. Quinnipiac facilitates organized opportunities for study abroad, and accepts relevant credit from colleges and universities abroad. (See the Department of Cultural and Global Engagement for additional information.)

## Minor in French, Italian or Spanish

French: Opens up a worldwide culture by means of intensive language study. The minor includes six courses, at least one at the 300-level ( 18 credits). In all courses for the minor, a grade of C or higher must be achieved. At least 9 credits must be taken on campus.

Italian: Offers a solid foundation in Italian language and culture, giving students access to an extraordinarily rich cultural tradition as well as a gateway to exciting professional opportunities. The minor includes six courses ( 18 credits), all of which must be taught in Italian. At least two of the six courses must be at the 300 level. A grade of C or higher must be achieved in all courses for the minor. At least 9 credits must be taken on campus.

Spanish: Offers the student a solid foundation in Spanish and a well-rounded entry to the Spanishspeaking cultures with practical benefits in travel and work. The minor includes six courses (18 credits), all of which must be taught in Spanish. At least two of the six courses must be at the 300 level. A grade of C or higher must be achieved in all courses for the minor. At least 9 credits must be taken on campus.

## Department of Philosophy and Political Science

Bachelor of Arts in Philosophy Bachelor of Arts in Political Science Minor in Philosophy
Minor in Political Science
The mission of the Department of Philosophy and Political Science is to develop educated students who are responsible for recognizing and respecting diverse worldviews, capable of evaluating systems of thought, oppression and power in communities, and motivated to engage in personal and social action.

The department supports programs in philosophy and political science: each provides a balanced offering of courses that offer both a broad overview of each discipline and the opportunity to focus more specifically in special topic areas. The department also is committed to experiential learning, and offers opportunities to study both philosophy and political science topics in ways that allow for a personal engagement with the topic area through study abroad, seminars in Washington, D.C., Service Learning courses and internship opportunities, and close collaboration with the Albert Schweitzer Institute at Quinnipiac.

The major in political science fulfills the department's mission by providing courses that balance social scientific analysis with a focus on the politics and values of community. Through their course work and activities, students develop foundational knowledge regarding the causes and consequences of socioeconomic inequalities in the United States and around the world; the rise of the U.S. as a global power and how that power is used; the major environmental, political and socioeconomic threats facing the global community; and the historical development of American democracy and its application to contemporary political challenges.

Political science students also develop the ability to engage in normative and empirical forms of inquiry: they can explain how different subfields in the discipline approach the study of politics scientifically, and they can critically analyze the justifications for individual political actions and governmental policies using normative and ethical reasoning. Students complete the major
with a senior seminar in which they engage major questions in political science and develop a sustained, independently conceived contribution to these questions in the form of a senior thesis. Upon graduation, political science majors have the tools necessary for active, informed and sustained engagement with the political process.

Within the political science major, a student may choose to pursue a focus on public policy and leadership or global affairs. The track in public policy and leadership provides students with the opportunity to undertake an academic and experiential program that will develop the intellectual tools for leadership and public service in government and nongovernmental organizations. Courses and experiential programs within this concentration emphasize the study of civic engagement, leadership skills, institutional design, the policymaking process and the ethical responsibilities of leadership within an increasingly diverse community. This track is distinctive in how it combines the study of public policy with analysis of the increasingly important ethical dilemmas of public leadership in issues of gender, race and ethnicity. The department strongly advises students as they design their academic and professional development outside the political science major. Extracurricular leadership activities, courses in diversity, and a background in statistics and economics are encouraged as ways to support learning in the public policy and leadership track.

The global affairs track provides students with the experience and intellectual tools for service and leadership in governmental and nongovernmental organizations that operate in the international/ global realm. The program of study emphasizes an interdisciplinary approach to the study of politics and organization at the international level; in addition to work in political science, a student following this track is encouraged to pursue upper-level courses in anthropology, sociology, history, economics, language and management. Students may choose to further specialize with a geographic region of focus based around the study of comparative politics or an institutional focus based around the study of international law and organizations.

Philosophy is an ancient project, but one that continues to evolve as humans attempt to respond ethically to challenges in the coming century: peace, environmental sustainability, globalization, technology, the needs for health and security, and the
yearning for love and justice. The philosophy major is structured to equip students with the conceptual tools and techniques of inquiry necessary to arrive at thoughtful responses to the world's challenges through their knowledge of different eras, themes and figures in the history of philosophy, both inside and outside the Western tradition.

Students learn to reflect critically, ethically and holistically on the significance of these tools and techniques to their own lives and to the world they are about to inherit. Students develop analytical and research skills in philosophical inquiry as they explore the history of philosophy and the current status of the main problems in epistemology, metaphysics and ethics.

The student who majors in philosophy develops competence in reasoning techniques, and will appraise the validity (and invalidity) of arguments, expose hidden assumptions, recognize fallacies and make a precise and coherent case in support of their own views. Philosophy graduates will be skilled in combining and synthesizing information from a wide range of sources, and in reflecting on their own thinking and experience. Students complete the major with a senior seminar in which they isolate and define a specific philosophical question that they explore in a senior thesis.

The department offers minors in philosophy and political science that are tailored to complement a student's major field of study, and supports a variety of multidisciplinary minor programs including women's studies, the history and philosophy of science, international studies, Latin American studies, European Union studies, and Middle East studies.

## Bachelor of Arts in Philosophy

The BA in philosophy requires the completion of 36 credits distributed as follows, with a minimum grade of C in all courses. No more than 6 credits of independent study (PL 299, PL 396, PL 399) may count toward completion of the major.
Philosophy Core Requirements ( 18 credits)
Course Title Credits

PL 101 Introduction to Philosophy 3
PL 202 Logical Reasoning 3
PL 220 Ethics \& Human Values 3
PL 332 Ancient Philosophy 3
PL 333 Modern Philosophy 3
PL 401 Senior Seminar 3

## Electives (18 credits)

## Six philosophy or cognate courses

Philosophy courses:
PL 217 Social \& Political Philosophy 3
PL 222 Bioethics 3
PL 234 Philosophies of Health, Healing \& Medicine 3
PL 235 Philosophy of Science 3
PL 236 Philosophy of Language 3
PL 237 Philosophy of Mind 3
$\begin{array}{lll}\text { PL } 238 & \begin{array}{l}\text { Philosophy of Technology \& Social } \\ \\ \\ \text { Transformation }\end{array}\end{array}$
PL $240 \quad$ Philosophy of Sport 3
PL $250 \quad$ Philosophy of Art 3
PL 265 Living Religions of the World 3
PL 266 Diverse Global Philosophies 3
PL 267 Philosophy of Religion 3
PL 299 Independent Study in Philosophy 3
PL 312 Philosophy of War \& Peace 3
PL 320 Thought \& Work of Albert Schweitzer 3
PL 330 Philosophy \& Gender 3
PL 331 Philosophy of Humor 3
PL 334 Medieval Philosophy 3
PL 335 Contemporary Philosophy 3
PL 337 Human Rights: Theory \& Practice 3
PL 338 Paradoxes 3
PL $340 \quad$ Philosophy of Sex \& Love 3
PL $368 \quad$ Philosophy of Death \& Dying 3
PL 395 Critical Game Studies 3
PL 396 Philosophy Internship 1-3
PL 399 Directed Research in Philosophy 3
Cognate courses: In addition to philosophy courses,
a student may count up to two of the following courses
toward completion of the philosophy major:
CSC 350 Intelligent Systems 3

HS 312 Ancient Greece 3
PO 215 Political Theory 3
PO 216 American Political Thought 3
PO 315 Democratic Theory \& Practice 3
SO 201 Sociological Theory 3

## Bachelor of Arts in Political Science

The BA in political science requires the completion of 36 credits distributed as follows, with a minimum grade of C in all courses. No more than 6 credits of internship (PO 295, PO 395) may count toward completion of the major:
Political Science Core Requirements (21 credits) Course Title Credits
PO 101 Issues in Politics 3
PO 131 Introduction to American Government \& Politics

PO 211 Introduction to International Relations
PO 215 Political Theory
PO 225 American Political Movements
Political Inquiry
PO 408 Senior Seminar
Electives (15 credits)

## Five political science or cognate courses

Political science courses:
PO 205 Public Policy \& Administration 3
PO 206 Ethics \& Public Leadership
PO 216 American Political Thought
PO 218 Politics of Health
PO $219 \quad$ Women \& Political Thought
PO 221 Introduction to Latin America
PO 227 The Politics of Intimacy
PO 231 Elections and Political Parties
PO 245
PO 247
PO 270
PO 297
PO 298
PO 299
PO 311
PO 315
PO 317
PO 319
PO 321
PO 325
PO 331
PO 334
P0 337
PO 342
PO 348
PO 350
PO 353
PO 360
PO 362
PO 365
PO 387
PO 399
PO 499
Cognate courses: In addition to political science courses, a student may count up to two of the following courses toward completion of the political science major:
IB 201 International Business
3
PS 261 Social Psychology
SO 264 Social Welfare Institutions
SO 285 Protest \& Change
SO $340 \quad$ Peace \& Conflict Resolution


## Experiential Requirement

PO 395 Advanced Internship (3-6 credits), PO 365 Inside Washington, D.C., or equivalent approved by the department. Students should plan with their academic advisers early to complete this requirement before the start of their senior year.
With department approval, this requirement may be completed with one of the following:

- A political science course taken in the study abroad program;
- A political science course taken in the Washington, D.C., program;
- A service learning course in any discipline (must have "SL" designation).


## Portfolio Requirement

In their senior year, students assemble a portfolio of representative academic work done in political science. This portfolio includes the senior thesis, an internship paper (or equivalent), and other key assignments.

## Tracks in Political Science

In addition to the core requirements common to all political science majors, those choosing to focus their studies in either the public policy and leadership track or the global affairs track choose from among the following electives:
Public Policy and Leadership Track (15 credits)
PO 205 Public Policy \& Administration 3
PO 206 Ethics \& Public Leadership 3
PO 227 The Politics of Intimacy 3
PO 231 Elections \& Political Parties 3
PO 247 Actors \& Processes in U.S. Foreign Policy 3
PO 270 State \& Local Government 3
PO 298 Public Service Fellowship 1
PO 315 Democratic Theory \& Practice 3
PO $325 \quad$ Political Psychology \& Public Opinion 3
PO 348 Political Communication 3
PO 353 American Constitutional Law 3
PO 360 Topics in American Politics 3
PO 362 Presidential Election Campaigns 3
PO 365 Inside Washington 3
PO 387 Women \& Public Policy 3
Global Affairs Track ( 15 credits)
PO 221 Introduction to Latin America 3
PO 245 International Political Economy 3
PO 247 Actors \& Processes in U.S. Foreign Policy 3
PO 297 Simulating International Organizations 1
PO 311 Topics in International Relations 3
PO 317 International Law 3

International Interventions
Comparative Government
Topics in African Politics
Human Rights: Theory \& Practice
Comparative \& Constitutional Law
Minor in Philosophy
This minor in philosophy offers an adventure in thinking and talking about our own ideas as well as those of great philosophers, past and present, with reference to the moral life, power and wealth, and man's relation to nature and the future of the planet. To include: PL 101 and five courses in philosophy (18 credits).

## Minor in Political Science

A minor in political science is awarded upon completion of 18 credits with a grade of C or better. At least 6 credits must be earned at the 300 level or above. No more than 3 credits of internship in political science (PO 295 or PO 395) may count toward completion of the minor.

## Washington, D.C. Program

The Washington, D.C., semester programs are multidisciplinary, experiential learning programs that bring students from around the nation and the world to semester-length internships, research projects and seminars in the nation's capital. Quinnipiac students must have a 3.0 GPA or better to be eligible, and they should not be under any judicial sanctions. Students may have the GPA requirement waived by application to the associate vice president for academic affairs. (See p. 31 for details.)

## Department of Psychology

Bachelor of Arts in Psychology
Bachelor of Science in Behavioral Neuroscience
Premedical Studies
Minor in Psychology
The mission of the Department of Psychology is to introduce students to the broad field of scientific psychology while offering them an education in the true liberal arts tradition. Many students begin by assuming that psychology consists primarily of clinical psychology, but they soon learn it includes many other specialties, such as industrial/organizational, developmental, cognitive, physiological and more. Students study psychology from several vantage points: as a natural science, as a social science and as an applied science. In this way, students come to appreciate the complexity of the field.

The psychology faculty members are committed to helping students become more sophisticated readers of scientific texts, more effective writers and more articulate speakers. These skills are linked to the development of critical thinking, a primary goal of the faculty. Courses require students to read primary research publications, to write in expository style and to speak their minds. Students engage in these activities as a way to learn about different kinds of research and about competing theories. The faculty prides itself on the way it prepares students to think analytically and express themselves clearly.

In both majors, the BA in psychology and the BS in behavioral neuroscience, the department offers preparation for admission to graduate and professional schools and employment after graduation. All students learn a variety of useful skills in addition to those described above. They learn to design and conduct research, analyze data using statistical software and use academic search engines. Students learn the importance of first impressions and how to behave professionally. They also learn how to be self disciplined; all seniors complete a substantial piece of scholarly work in the form of a thesis. The psychology program is designed to produce independent thinkers and lifelong learners.

## Bachelor of Arts in Psychology

Students seeking a BA in psychology must take a set of courses that emphasize scientific reasoning. After taking PS 101, all majors take PS 206, 307, 308, 309 and 409. PS 206 and PS 307 are taken concurrently followed by PS 308 in a subsequent semester. PS 309 and PS 409 must be taken in the senior year. In each of the following sequence courses, students must earn a grade of C - or higher before moving on to the next course: PS 206, PS 307, PS 308. In addition, students must maintain a psychology GPA that is above 2.0. PS 409, Senior Seminar, must be taken as a seminar during the regular academic year.

For breadth, all majors are required to take two psychology courses from the category of natural science (PS 233, PS 251, PS 252, PS 354), two from social science (PS 232, PS 236, PS 261, PS 262, PS 272) and one from applied science (PS 242, PS 250, PS 265, PS 311, PS 325, PS 371, PS 383). In addition, two psychology electives are required, one at the 200-level or higher and one at the 300-level.

Psychology majors also have the opportunity to engage in supervised fieldwork and intensive study within one of two concentrations.

## Human Services Concentration

Students may elect to enroll in the human services program within the psychology major. The program prepares students for careers in human service and provides the basis for graduate work in fields such as social work, counseling and school psychology. A 3.0 overall GPA is required to participate in the HS concentration fieldwork courses.

HS students must take PS 272, PS 371, PS 391, PS 393 and PS 394.

The HS program emphasizes:

1. Mental health fields as possible careers.
2. Conceptions of mental illness and the history of therapeutic methods.
3. Counseling and other treatment techniques.

## Industrial/Organizational Psychology Concentration

Students may elect to enroll in the industrial/ organizational psychology program within the psychology major. The program exposes students to career possibilities in I/O psychology areas and provides the basis for further study in fields such as

I/O psychology and management. I/O psychology students must take PS 265, PS 397 and two of the following: PS 366, PS 367 or PS 368.

The I/O psychology program emphasizes:

1. The traditional research and practice of industrial/organizational psychology.
2. Using psychological principles to study and improve working conditions.
3. Mindfulness of the changing nature of work and the ability of the field to make innovations to match such changes.

## Bachelor of Science in Behavioral Neuroscience

Behavioral neuroscience is an interdisciplinary field that studies brain and behavior in a multifaceted and integrative way. The behavioral neuroscience major is a course of study that emphasizes the interaction between the psychological and biological foundations of behavior. Behavioral neuroscience majors choose one of two tracks (natural science or psychological science) based on individual goals and interests.

The natural science track is a science-intensive program that provides training to students who have primary interests in the biological sciences as applied to psychology and behavior.

The psychological science track includes a core set of courses in biology, chemistry and physics, but is more psychology-intensive than the natural science track. This track would be appropriate those who are most interested in psychology as a discipline, but want to focus their studies on those aspects of psychology that are most directly related to physiology and brain function, and how they relate to behavior.

Students in both tracks would be prepared for entry to graduate programs or employment in behavioral neuroscience and related fields.

## BS in Behavioral Neuroscience: Natural Science Track

Students on the natural science track must complete requirements for the University Curriculum, a science core, a biology and chemistry core, and a psychology core.

The University Curriculum includes:
FYS 101, UC Elective and UC Capstone; EN 101 and EN 102; MA 140 and MA 141; two courses in the sciences (BIO 150 and BIO 151); two
courses in the social sciences (usually psychology courses); two courses in the humanities; one course in fine arts; and two UC electives (usually CHE 110 and CHE 111).

The science core includes: BIO 150/150L, BIO 151/151L, CHE 110/110L, CHE 111/111L, CHE 210/210L, CHE 211/211L, PHY 110/110L and PHY 111/111L.

The biology and chemistry core includes BIO 211/211L or 227/227L, BIO 212/212L or $228 / 228 \mathrm{~L}, \mathrm{BIO} 329$, BIO 346/346L, CHE 315/315L.

The psychology sequence courses include: PS 101, PS 206, PS 307/307L, PS 308/308L or PS 353, PS 309, PS 409.

The psychology content courses include: PS 233, PS 252, PS 354, and PS 357.

Behavioral neuroscience majors normally complete FYS 101, EN 101/EN 102, MA 140, BIO 150/BIO 151, CHE 110/CHE 111 and PS 101 in their first year. All majors are encouraged to work closely with their academic adviser to plan their progress through the major.

## Premedical Studies Program

Students majoring in the natural science track of behavioral neuroscience may fully participate in the premedical studies program. The curriculum in this degree program can fulfill the science prerequisites for most professional schools. Students should refer to page 28 of this catalog for more information about the premedical studies program and contact the Prehealth Advising Office for further academic advising.

## BS in Behavioral Neuroscience: Psychological Science Track

Students on the psychological science track must complete requirements for the University Curriculum, a science core, a biology and chemistry core, and a psychology core.

The University Curriculum includes: FYS 101, UC Elective and UC Capstone; EN 101 and EN 102; MA 140 and MA 141; two courses in the social sciences (usually psychology courses); two courses in the humanities; one course in fine arts; and two additional UC electives (usually CHE 110 and CHE 111).

The science core includes: BIO 150/150L, BIO 151/151L, CHE 110/110L, CHE 111/111L and PHY 101.


The biology and chemistry core includes BIO 211/211L or BIO 227/227L, BIO 212/212L or BIO 228/228L, BIO 240 and BIO 329.

The psychology sequence courses include: PS 101, PS 206, PS 307/307L, PS 308/308L or PS 353, PS 309 and PS 409.

The psychology content courses include: PS 233, PS 252, PS 354, PS 357 and three PS electives.

Behavioral neuroscience majors normally complete FYS 101, EN 101/EN 102, MA 140, BIO 150/BIO 151, CHE 110/CHE 111 and PS 101 in their first year. All majors are encouraged to work closely with their academic adviser to plan their progress through the major.

## Minor in Psychology

Students wishing to minor take 18 credits in psychology, no more than six of which may be at the 100-level. Course selection should be based on the student's interest and goals. However, the following are reserved for majors only: PS 206, 307, 308, 309, 409 and internship courses.

## Department of Sociology, Criminal Justice and Anthropology

Bachelor of Arts in Criminal Justice
Bachelor of Arts in Gerontology
Bachelor of Arts in Sociology
Minor in Anthropology
Minor in Criminal Justice
Minor in Gerontology
Minor in Sociology
The Department of Sociology, Criminal Justice and Anthropology embraces a range of disciplines and their related subfields: anthropology, criminal justice, gerontology and sociology. These disciplines are united by a core set of classes designed to cultivate an appreciation for social and cultural diversity as well as to give students applied data analysis skills relevant to a career in any field. Students are taught to observe the ways that social and cultural forces shape both groups and individuals, and are provided with the skills of scientific inquiry that will enable them to be critical thinkers who can analyze the causes and consequences of social interaction in a wide range of settings. Our graduates are represented in careers such as social work, teaching, health care, politics, law enforcement, law, corrections, nonprofits, public administration and social policy. Students who choose one of these majors acquire a valuable set of skills useful in their future professions or in graduate education:

Diversity Awareness. Students go outside their comfort zone to not only witness but identify with and appreciate the perspective of diverse groups.

Scientific Literacy. Students learn how to separate what they know from what they don't know, and the process by which we create and evaluate knowledge.

Social Responsibility. Students analyze and critique existing social policies and consider empirically grounded alternatives.

Communication. Students learn to articulate their ideas visually, orally and in writing.

Critical Thinking. Students apply disciplinary theories and concepts to interpret real-world events and identify alternative approaches.

Course work in the department provides students with skills that make them invaluable as workers, as community leaders and as citizens of a diverse, interconnected nation and world. Our majors graduate with the ability to appreciate diversity, to facilitate discussions across diverse viewpoints, to gather and assess evidence, to evaluate programs and then "think outside the box" to act as leaders of innovation and change in the workplace.

The core of the criminal justice, gerontology and sociology majors is our internship program. As one of the first departments at Quinnipiac to have centered our majors around an applied internship, we have 34 years of experience in helping students translate their classroom knowledge into real-world, in-demand job skills. In addition to rigorous sociological training, the department stresses the applicability and usefulness of this training through an upper-division experience in any number of internships at professional settings.

## Majors in the Department

## Sociology

Sociology is the discipline of understanding society and social groups. Quinnipiac University offers a traditional sociology degree, and students may also choose a concentration in social services or in medicine and health to focus their course of study. Through all of these, students learn how groups interact and the social reasons for individual and group behaviors. As such, our sociology majors are applicable to a wide range of fields for which understanding groups and social dynamics, particularly diversity, is essential: social work, teaching, health care, politics, law, nonprofits, public administration and social policy. Our major equips students with the applied skills, capabilities and work experience to enable them to begin careers immediately upon graduation or to pursue graduate education in these areas. Through this major, students learn how groups interact and the social reasons for individual and group behaviors. Our program requirements incorporate the skills needed for the 21st century workforce: written communication, oral communication, diversity awareness, critical thinking and quantitative reasoning.

Through all of our classes, sociology students learn to witness and then scientifically examine invisible structural forces and how these affect organizations and individuals. Sociology majors
learn to analyze broader social trends, such as trends in illness and wellness, changes in marriage and family formations, rates of educational attainment or patterns of hiring in organizations, with the goal of connecting and applying these observations in everyday interactions. As a discipline, sociological skills can be used to study nearly any aspect of social life-schooling, health and well-being, religious devotion, immigration patterns and hip-hop, to name a few.

Faculty members in the sociology program offer a breadth of courses in sociological areas from which students can choose, such as education, culture, family, gender, health, immigration, media, medicine, religion, social change, deviance and social services. Because we study community, we are also good at creating it. In the sociology major, students find a place to explore and develop their own unique interests and talents with thoughtful mentorship and guidance from faculty in the department. Within the sociology major, there are two concentrations in which students may elect to enroll: social services or medicine and health.

In the sociology major, all students take the same core classes, including courses that show students how to apply their sociological skills to real-world situations, particularly the internship course. The internship requirement is one of the program's capstone experiences, through which students apply their sociological skills to a real world setting. Through the close mentorship of our departmental internship coordinator, students gain valuable insight into and experience with how their acquired knowledge and capabilities translate into marketable job skills. The program retains a long list of possible placement sites-from work in schools, hospitals and foster care settings to providing assistance with newly arrived immigrants to working with disadvantaged youth - to ensure that students can match their internship experience to their interests.

## Social Services Concentration

A sociology degree with a concentration in social services integrates a traditional liberal arts education with the specialized training and field background for students who intend to pursue a career in social services or pursue graduate education in social work, health-related fields or public administration. Society is increasingly faced with challenges in delivery of social services to a growing set of underserved
populations. For students who want to work for a social service agency, for nonprofits who help disadvantaged individuals or families, for mental health and counseling services, in social work or for local and state government, this concentration provides a perfect background. Students focus their course work in the areas of social institutions, social inequalities and social issues. They also complete an advanced internship in the field, providing them with the experience and expertise to work with a wide range of client needs. For those wishing to pursue graduate education in social work, the concentration provides background course work helpful for success in graduate programs as well as work experience that will help distinguish students in the application process.

## Medicine and Health Concentration

In our increasingly diverse nation, there is a growing need for medical professionals who understand how cultural and social factors affect individuals' health statuses, behaviors and interactions with the medical community. This concentration is well suited for students who wish to pursue careers and/or graduate work in any health-related field: medicine, mental health, drug and alcohol abuse prevention/treatment or nonprofits addressing the mental and physical health of their clients. Students focus their course work in such areas as sociology or anthropology of medicine, death and dying, disability, illness and mental health. Through this course work, students learn about the varying medical and health needs of diverse populations, including the causes and consequences of health disparities, that will enable them to improve the health of groups with different cultural and social needs. Students in this concentration may complete their internships in hospitals, hospices or other health-related settings.

## Criminal Justice

The criminal justice program prepares students for work in the diverse and challenging criminal justice field. Recent developments, including growth of the prison population and ever-growing numbers of prisoners returning to communities, create challenges our criminal justice majors are prepared to meet. Our program combines theory with practice as our majors learn in the classroom and the professional world. While students take courses dealing with topics such as policing, crime by juveniles, corrections and forensic science, a required 120-
hour internship lets them apply their classroom experiences in a professional setting. Our internship program is unique as we meet individually with each student to assess his or her professional interests before recommending sites for which we feel they are best suited. In addition to the 120 hours at the professional site, students participate in a weekly seminar to connect the skills they take from the internship to their course work. Students have the option to complete two different internships that teach them about criminal justice work across diverse settings. Our graduates are employed in law enforcement (local, state and federal), law, social work and probation, and some pursue advanced criminal justice degrees. As with all disciplines in the Department of Sociology, Criminal Justice and Anthropology, criminal justice majors benefit from small class sizes and advising loads so they have ready access to faculty to help them shape their educational experience to best fit their professional and personal aspirations.

## Gerontology

Older Americans comprise the fastest growing age group in the country and careers in aging are growing right along with the elderly population. Our state-licensed program in gerontology prepares students to work for and with older adults in a wide variety of settings, such as senior centers, health care agencies, life-care communities, care management, elder advocacy and recreation. In addition to course work in gerontology, the interdisciplinary curriculum includes courses in the fields of sociology, psychology, health, social work, counseling, law, ethics, therapeutic recreation and biology, all of which are relevant to the study of aging. Two semester-long internships in the community provide practical skills and career readiness opportunities. Through this integration of course work in the classroom and fieldwork in the community, students receive a broad understanding of and the skills they need to work with older adults in today's society.

## Bachelor of Arts in Criminal Justice

This distinctive criminal justice degree program offers students a well-integrated education, placing criminal and deviant behavior within a wider sociological context. Students are exposed to courses ranging from crime response philosophy to public policy in criminal justice. Carefully structured intern-
ships assure students of practical applications of theoretical material. Upon successful degree completion, students are prepared to continue their education or assume careers in law enforcement, corrections, law, social work, public administration, teaching, international peacekeeping and many fields related to crime control and administration of justice.

## Criminal Justice Core Requirements (25 credits) <br> Course Title Credits

CJ 101 Crime \& Society 3
SO 101 Introduction to Sociology 3
CJ 205 From College to Careers 1
SO 241 Race \& Ethnicity 3
CJ 241 Police \& Policing 3
CJ 261 Prisons \& Jails 3
CJ 290 Criminal Justice Research Methods 3
CJ 392 Internship Seminar 3
CJ 385 Senior Seminar in Criminal Justice 3
Take one course from the following crime typologies options:
CJ 232 Women in the Criminal Justice System 3
CJ 240 Organized Crime 3
CJ 250 Youth Crime 3
CJ 253 Sexual Violence 3
CJ 271 Public Order Crime 3
Take one course from the following criminal justice in practice options:
LE 225 Dispute Resolution 3
CJ 243 Investigative Techniques 3
CJ 261 Probation, Parole \& Community Corrections3
PS 283 Introduction to Forensic Psychology 3
CJ 299 Special Topic* 3
*Can count as either a crime typologies or criminal justice in practice option.
Take two of the following advanced elective options:
CJ 320 Victimology 3
CJ 330 Perspectives on Violence 3
CJ 333 Drugs, Alcohol \& Society 3
CJ 343 Forensic Issues in Law Enforcement 3
CJ 355 Crime \& Media 3
SO 360 Sociology of Mental Illness 3
CJ 370 Constitution, Ethics \& Policing 3
CJ 394 Advanced Internship Seminar 3
CJ 399 Special Topics 3

## Bachelor of Arts in Gerontology

Quinnipiac is one of the few universities to offer an undergraduate major that anticipates one of the growing realities in our society: the rise in the number of older Americans. Because the effects
of an aging population are so far-reaching, the program is based on interdisciplinary studies, including courses from sociology, psychology, biology, philosophy and law.

Gerontology majors also complete two semes-ter-long internships in public or private agencies involved directly with the elderly, such as senior centers, retirement complexes, hospitals, rehabilitation facilities, community aging services, case management agencies and nursing homes. Students are prepared to continue their education or assume careers in aging-related areas such as social work, law, public health, medicine, health administration and public policy.

## Gerontology Core Requirements (43 credits) Course Title <br> Credits

1. Required courses for the major in gerontology

SO 101 Introduction to Sociology*
PS 101 Introduction to Psychology* 3
GT 205 From College to Career
GT 263 Sociology of the Aged
PS 234 Adult Development Psychology
BMS 200 Biology of Aging*
GT 381 Research Methods

- 3

GT 382 Studying Social Issues with Statistics 3
GT 385 Senior Capstone
2. Two internships in the community

GT 392 Internship in the Community 3
GT 394 Advanced Internship in the Community 3
3. Two courses from the following

SO 241 Racial \& Ethnic Groups*
SO 244 Social Stratification*
SO 255 Sociology of Families* 3
SO 264 Social Welfare Institutions 3
SO 266 Population \& Society* 3
SO 280 Illness \& Disability* 3
SO 305 Death, Grief \& Bereavement 3
PL 220 Ethics \& Human Values* 3
PL 234 Philosophies of Health, Healing \& Medicine* 3
PL 368 Life \& Life After Death 3
PS 325 Health Psychology 3
Any PT or OT course 3
4. Two courses from the following

GT 270 Program Planning \& Administration
GT 300 Special Topics 3
GT 305 Death, Grief \& Bereavement 3
GT 311 Introduction to Social Work 3
GT 315 Case Management 3
GT 318 Therapeutic Recreation 3
GT 325 Counseling Older Clients 3
*These courses also satisfy University Curriculum requirements.

## Bachelor of Arts in Sociology

American society is in the midst of rapid social change, which affects all of our social institutions. Families, schools, the economy and health care systems are all undergoing significant changes. Students in this major study and analyze this change and explore potential solutions to a number of societal problems. Issues such as globalization and race, gender and class inequality are the focus of course work and fieldwork experience. Each student is required to complete a semester-long internship in the community in such settings as schools, government and social service agencies, treatment centers and nonprofit agencies.
Students are prepared to continue their education or assume careers in areas including teaching, social work, public administration, health care, law and criminal justice.

## Sociology Core Requirements (19 credits)

1. Introduction to Sociology (SO 101)
2. From College to Career (SO 205)
3. Social Stratification (SO 244)
4. Internship in the Community (SO 392)
5. Research Methods (SO 381)
6. Studying Social Issues with Statistics (SO 382)*
7. Senior Capstone (SO 385)

In addition, students take 6 electives ( 18 credits), one of which could include AN 101: Local Cultures, Global Issues: Introduction to Cultural Anthropology, or AN 102: Bones, Genes and Everything in Between, or AN 103: Dirt, Artifacts and Ideas; and one of which could be a criminal justice (CJ) course, so long as it is not cross-listed with sociology. *If students take MA 206 to fulfill the University quantitative literacy requirement, MA 206 can be used to fulfill the sociology statistics requirement. The sociology statistics course (SO 382) cannot be used for the University quantitative literacy requirement.

If students wish to focus their electives, they may take three classes ( 9 credits) of their 6 electives in either a social services concentration or a medicine and health concentration.

## Social Services Concentration

For this applied concentration, students must take SO 394
(Advanced Internship in the Community) AND choose three
classes ( 9 credits) from this list:
SO 225 Social Problems
SO 232 Women in the Criminal Justice System
SO 250 Youth Crime
SO 260 Social Control \& Deviance

Social Welfare Institutions
Program Planning \& Administration

SO 311 Introduction to Social Work
SO 312 Large-Scale Organizations
SO 315 Case Management
SO 318 Therapeutic Recreation
SO 325 Counseling Older Clients

## Medicine and Health Concentration

For this concentration, students choose three classes ( 9 credits) from this list (one course may be from anthropology):
AN 102 Bones, Genes \& Everything in Between
AN 250 Forensic Anthropology
AN 333 Ancient Food for Thought
AN 337 Anthropology of Health \& Medicine
AN 350 Tales from the Crypt: Research Methods in Bioarchaeology
and
AN 350L Research Methods in Bioarchaeology
AN 352 The Science of Human Diversity
SO 263 Sociology of the Aged
SO 266 Population \& Society
SO 280 IIIness \& Disability
SO 300 Special Topics (if the topic relates to medicine \& health)
SO 305 Death, Grief \& Bereavement
SO 315 Case Management
SO 318 Therapeutic Recreation
SO 325 Counseling Older Clients
SO 333 Drugs, Alcohol \& Society
SO 360 Sociology of Mental Illness

## Minor in Anthropology

Anthropology is the study of humans in the broadest sense: through time and across geographical space, as social beings and as biological creatures. Anthropologists are interested in the big questions about what makes us human, and how living and past cultures are similar and different. Most importantly, anthropologists are committed to exploring what we can learn from other people cross-culturally, from our ancestors in the past, and from our primate relatives.

Studying anthropology allows students to explore the complexity of human diversity and to develop confidence in your ability to work collaboratively with people from vastly different
backgrounds and life experiences. Anthropology is a perfect area of study for anyone interested in learning about other cultures and ways of life, and offers excellent preparation for a range of career choices. Anthropology students find work in such fields as medicine, nongovernmental and nonprofit organizations, government, public health, development and international aid, and education. Studying anthropology offers students important training in persuasive writing, scientific research and data analysis, and critical thinking.

To complete the minor, students must take 18 credits of anthropology course work.

## Minor in Criminal Justice

For the criminal justice minor, students must complete 15 credits in criminal justice studies at any level, and one 300-level criminal justice class for a total of 18 credits. Students should meet with the program director to select courses that are most related to their major field. A student majoring in gerontology or sociology can minor in criminal justice. Courses taken for the minor may not count toward the major. Courses for the major may not count toward the minor.

## Minor in Gerontology

For the gerontology minor, students should work with the program director to select 18 credits of course work in gerontology. A student majoring in criminal justice or sociology can minor in gerontology. Courses taken for the minor may not count toward the major. Courses for the major may not count toward the minor.

## Minor in Sociology

For the sociology minor, students are welcome to work with the department chair to select 18 credits of course work that align with the student's interests in the field. A student majoring in criminal justice or gerontology can minor in sociology. Courses taken for the minor may not count toward the major. Courses for the major may not count toward the minor.

# Department of Visual and Performing Arts 

Bachelor of Arts in Game Design and Development Bachelor of Arts in Theater
Minor in Fine Arts
Minor in Game Design and Development
Minor in Music
Minor in Theater
Minor in Theater Design and Production (suspended until further notice)

The Department of Visual and Performing Arts is an interdisciplinary department that offers students the opportunity to study the history, theory and practice of art, design, theater, game design and music. The visual arts programs foster the development of creative processes for the creation of innovative works of art and design while situating the work in the broader contexts of history and culture. The performing arts programs include courses in the history of the disciplines and techniques of performance, which are enriched by an active theater production program and performing ensembles.

Programs in the Department of Visual and Performing Arts offer students a foundation in creative thinking that is recognized as critical to problem-solving and conceptualization, qualities increasingly valued by leaders and organizations in all areas of society.

## Bachelor of Arts in Game Design and Development

The bachelor of arts in game design and development is a preprofessional program that prepares students to enter the highly competitive industry of game design or to pursue studies at the graduate level. This is an applied, interdisciplinary major that focuses on the meaningful application of game technologies beyond commercial entertainment by addressing serious topics regarding the environment, health care and education including STEM and STEAM (science, technology, engineering, arts and math) initiatives. Students receive a solid foundation in fundamental arts principles and concepts, and develop specialized technical skills and competence in design.

There are a total of 39 credits in the major. The major has nine required core courses. With the
recommendation of the student's adviser and/or the program director, students take two required and two elective courses from either the game design track (designing, producing and making games) or the game art track (creating and designing the artwork and assets such as characters, props, costumes, architecture, levels and sound). A unique feature of the program is the game lab where students come together in interdisciplinary teams to build game prototypes. The game lab is offered as a multisemester sequence beginning in the sophomore year. In the senior year, the program culminates in a capstone experience when students take the Senior Project and Seminar.

A grade of C - or better is required in all game design and development prerequisites.

It is recommended that students majoring in game design and development pursue a minor or double major in a complementary discipline such as interactive digital design or computer science. Majors can elect to pursue internships and take electives that complement their interests in the field. Students choosing the game art track are encouraged to take art history courses.

Game Design \& Development Core Requirements (27 credits)
Course Title
Course Title Credits
GDD 101 Introduction to Game Design 3
GDD 110 Introduction to Visual Design for Games 3
GDD 200 Introduction to Game Development 3
GDD 210 Game Lab I: Team Projects (Fall) 3
GDD 211 Game Lab II: Team Projects (Spring) 3
GDD 395 Critical Game Studies 3
or GDD 396 Games, Learning \& Society 3
GDD 410 Game Lab V: Team Projects (Fall) 3
GDD $411 \quad$ Game Lab VI: Team Projects (Spring) 3
GDD 495 Senior Project \& Seminar I (Spring) 3

## Game Design \& Development Tracks

With the recommendation of the student's adviser and/or the program director, students take two required and two elective courses from either the game design or game art track.
Game Design Track Requirements (6 credits)

| GDD 201 | Game Design I | 3 |
| :--- | :--- | :--- |
| GDD 301 | Game Design II | 3 |
| Game Art Track Requirements (6 credits) |  |  |
| GDD 202 | Game Art I | 3 |
| GDD 302 | Game Art II | 3 |

Game Design \& Game Art Track Electives ( 6 credits)
GDD 250 Interactive Storytelling \& Narrative 3
GDD/EN 303 The Art of Audio Narrative 3

| GDD 310 | Game Lab III: Team Projects (Fall) |
| :---: | :---: |
| GDD 311 | Game Lab IV: Team Projects (Spring) |
| GDD 370 | Acting \& Directing for Game Design |
| GDD 402 | Game Art III |
| GDD 405 | Game Audio Design |
| GDD 399-499 | Independent Study 1-3 |
| GDD 290/390/490 |  |
|  | Internship |
| A course from the following list can be taken to satisfy the |  |
| DR 220 | Voice \& Movement for Actors |
| DR 230 | Directing for the Theater |
| GDD 280/ENT 290 |  |
|  | Digital Businesses |
| IDD 301 | Motion Graphics I |
| *Students wishing to take courses from the above list must complete any prerequisites required by individual departments/programs. |  |
| Elective substitutions are permitted with prior approval of the program director. |  |

## Bachelor of Arts in Theater

The Quinnipiac University theater major is a preprofessional program that prepares students for careers or graduate studies in areas such as theater production, theater administration, theater education and drama therapy. The program is distinctive in its applied focus. Each student majoring in theater is strongly encouraged to pursue a secondary program in a specified area, such as education (the courses required by the MAT program), sociology, psychology, political science or history (studies to support the emphasis in community and theater), business or communication (to augment a focus in theater administration) or media production (to augment a focus in theater production).

Additionally, students are required to complete an internship during their junior or senior year of study. Possible internship sites include the Long Wharf Theatre, Hartford Stage and other professional theaters in the New York area (for theater production, administration and educational theater), the West Haven VA Hospital, the Clifford Beers Institute, the Long Wharf (theater and community) and area elementary and secondary schools (educational theater). The BA in theater allows students to explore their interests in performance areas (acting, directing, playwriting) while gaining the education and work experience to secure employment or to pursue graduate training upon graduation.

Theater Core Requirements (28 credits)
Course Title

Credits
DR 191 Theater Practicum 4
DR 140 Stagecraft 3
DR 160 Introduction to Acting 3
DR 270 History \& Dramatic Literature of the World Theater, I
DR 275 History \& Dramatic Literature of the World Theater, II
DR 230 Directing for the Theater 3
DR 286 Comparative Drama/Play Analysis 3
DR 310 Seminar/Lab in Community-focused Theater
or DR 410 Senior Project 3
DR 370 Internship 3
In addition to completing courses for the departmental core, students complete courses for one of the following four tracks.
Theater Generalist Track (9 credits)
Students take 9 credits of 200- or 300 -level courses chosen from at least two of the following areas: acting, directing, theater history and dramatic literature, design, playwriting, theater production/administration, such as:
DR 220 Voice \& Movement 3
DR 240, 241
or DR 242 Scenic, Lighting or Costume Design 3
DR 260 Acting for Film/TV 3
DR 375 History \& Literature of Contemporary Theater

3
DR $350 \quad$ Playwriting 3

## Theater Education Track (9 credits)

Additional requirement courses satisfy State of Connecticut Theatre Arts Certification guidelines for specialized credential in theater (6/7/05).
DR 220 Voice \& Movement for Actors 3
DR 350 Playwriting 3
DR 305 Theater for Young Audiences 3
Plus 18 credits in education, as specified by MAT program.
(Electives in applied music are strongly encouraged for theater education students.)
Theater Production/Administration Track
This track has been suspended until further notice. Theater production/administration courses are still open (as space allows) to students wishing to explore/study the discipline.
Theater and Community Track (9 credits)
DR 310 Seminar/Lab in Community
Focused Theater
DR $350 \quad$ Playwriting 3
Plus one additional 200- or 300-level theater course (two courses if Seminar/Lab in Community Focused Theater is taken as core major requirement.)

## Minor in Fine Arts

The Department of Visual and Performing Arts offers a minor for students interested in exploring the fine arts. The different tracks in fine arts are designed to advance each student's unique abilities in creative thinking and artistic processes, in addition to developing a basic foundation in visual literacy. Students electing this minor must complete the courses under one of the following three tracks (18 credits).

## Fine Arts: Studio Art Track

AR 102 (UC) Art History: Ancient Through Medieval 3
or AR 103 (UC) Art History: Renaissance Through Contemporary
AR 140 Basic Visual Design
AR 251 Studio Art: Drawing
One other 200-level studio art course or AR 158
(Photography I)
Two 300-level AR courses, at least one of which must be a studio course

## Fine Arts: Art History Track

AR 102 (UC) Art History: Ancient Through Medieval 3
or AR 103 (UC) Art History: Renaissance Through Contemporary
Plus choose two additional courses from the following list:
AR 102 (UC) Art History: Ancient Through Medieval 3
AR 103 (UC) Art History: Renaissance Through Contemporary
AR 104 (UC) Survey of Non-Western Art
AR 105 (UC) American Art
AR 175
(UC) Any course
Fine Arts: Interdisciplinary Track
AR 102 (UC) Art History: Ancient Through Medieval 3
or AR 103 (UC) Art History: Renaissance Through Contemporary
Plus five courses in art, music and/or drama. (In consultation with the chair, certain film courses such as FVI 102 may be applicable.) At least two courses must be at the 200 level or higher. Due to the interdisciplinary nature of this minor, courses from at least two disciplines must be taken with a maximum of four courses from any single discipline.

## Minor in Game Design and Development

This game design and development minor focuses on the meaningful application of game technologies beyond commercial entertainment by addressing serious topics in health care and education, including STEM and STEAM (science, technology, engineering, arts and math) initiatives. Students receive a solid foundation
in fundamental arts principles and concepts, and develop specialized technical skills and competence in game design. A minor may be combined with any major inside or outside the College of Arts and Sciences, complementing majors or minors in other disciplines on campus ( 18 credits).
Minor Core Requirements ( 15 credits)
GDD 101 Introduction to Game Design 3
GDD 110 Introduction to Visual Design for Games 3
GDD 200 Introduction to Game Development 3
GDD 210 Game Lab I: Team Projects (Fall) 3
GDD 211 Game Lab II: Team Projects (Spring) 3

## Minor Electives (3 credits)

At least one course from the following list must be selected in consultation with the program director. Minors are encouraged to take additional courses as free electives outside their major at the 300-400 level.
GDD 310 Game Lab III: Team Projects (Fall) 3
GDD 311 Game Lab IV: Team Projects (Spring) 3
GDD 395 Critical Game Studies 3
GDD 396 Games, Learning \& Society 3
GDD 495 Senior Project \& Seminar I 3
Substitutions to this list are permitted with prior approval of the program director.

## Minor in Music

The music minor offers students a broad spectrum of the subject both as an art form and as a global "language." Students are required to master the rudiments of musical theory and to emerge with a comprehensive view of music history as well as the fundamentals of informed listening. Students also study an instrument of their choosing and participate in one of the University's performing ensembles. Given the prominence music continues to hold culturally, its interdisciplinary relationships make it well-suited to the interests of students majoring in a variety of fields and also offers students an outlet for artistic expression. (18 credits).

## Required Courses

MU 130 Understanding Music 3
MU 230 Music Theory I 3
MU 330 Music Theory II 3
MU 140 Applied Studio Lessons 3
(three semesters, 1 credit each)
Students also take three semesters of a performing ensemble (1 credit each):
MU 190 Quinnipiac Singers
MU 194 Jazz Band
MU 200 Orchestral Ensemble
Music Elective

## Minor in Theater

The theater minor provides students with a background in the primary areas of theater study and production while allowing them the flexibility to explore their particular interests.

Students select courses from an array of offerings in acting, directing, playwriting, design, stagecraft, theater history, theater for community and theater for young audiences. Students also may earn theater practicum credit by working on the Theater for Community mainstage productions (18 credits).
Theater Minor Required Courses (12 credits)
DR 140 Stagecraft 3
DR 160 Introduction to Acting 3
DR 230 or 350 Directing or Playwriting 3
DR 270 or 275 Theater History, part I or II 3
Electives ( 6 credits)
Any two 200-400-level DR courses

## Minor in Theater Design and Production

The theater design and production minor has been suspended until further notice. Theater design and production courses are still open (as space allows) to students wishing to explore/study the discipline without receiving a minor.

## Performing Arts Workshop

The department invites participation in musical performance workshops, which carry an optional 1 academic credit and which can be repeated up to a maximum of 6 credits, the equivalent of two electives in liberal arts. These workshops include: MU 190 Quinnipiac Singers
MU 191 Hamden Symphony Orchestra
MU 194 Jazz Ensemble
MU 140 Applied Studio Lessons

## Interdisciplinary Minors

Minor in Asian Studies
Minor in Global Public Health
Minor in History and Philosophy of Science
Minor in International Studies
Minor in Irish Studies
Minor in Middle Eastern Studies
Minor in Sports Studies
Minor in Women's and Gender Studies
Human culture, creativity and knowledge are often produced and experienced in the spaces across and between the traditional disciplines. Interdisciplinary minors-those that focus on areas of interest rather than established disciplines-afford students an opportunity to examine topics from multiple disciplinary perspectives. Through these cross-departmental minors, students embark on an ambitious, meaningful learning experience that complements their work in their majors and in the University Curriculum. Students hone critical intellectual skills by evaluating facets of human culture and the natural world from various viewpoints and integrating these insights to form new knowledge and understanding.

## Minor in Asian Studies

This interdisciplinary program introduces students to the people and cultures of East and Southeast Asia. To complete the minor in Asian Studies students are required to take six courses (18 credits) distributed as follows:
Language ( 6 credits)
Course Title Credits
JP 101-102 Japanese 6
CN 101-102 Chinese 6
History (6 credits)
HS 208 Modern World History 3
HS 235 Modern China 3
HS 236 Modern Japan 3
HS 271 Southeast Asia: the Mainland 3
HS 272 Southeast Asia: the Islands 3
HS 305 Vietnam 3
HS 332 History of India 3
Open Electives ( 6 credits)
AN 337 Non-Western Medicine 3
CN 201-202 Chinese 3
JP 201-202 Japanese 3
PO 111 International Relations 3
PO 331 Topics in Comparative Government 3

## Minor in Global Public Health

The minor in global public health provides an interdisciplinary focus of study that enables students to understand and promote individual and population health throughout the world. This is accomplished via a range of courses that provide relevant and rigorous intellectual learning, community and international service learning, and a capstone course in the senior year. This minor is suitable for students with a wide range of interests in the humanities, as well as the arts and the sciences, as each of these disciplines contributes to the diversity and complexity of global public health issues. Students are encouraged to explore the variety of course offerings to enrich their academic experience in the minor. Each student is assigned a faculty mentor, who provides guidance in completing the required components of the minor.

Interested students are required to apply for acceptance to the minor. The minor requires a substantial level of commitment from students, so applicants should carefully consider whether they can meet the expectations of course study, community and international learning and a capstone experience.

## Program of Study

Application: Students are eligible to apply for the minor beginning first semester (fall) sophomore year. Accepted students will be officially enrolled in the minor the following spring. For application details, interested students should contact the Institute for Global Public Health at the Frank H. Netter MD School of Medicine.

Courses: Students must complete 18 total credits (usually six courses) from the following course list (please note, this list is subject to change). GPH 201 (Introduction to Global Public Health) and GPH 301 (Capstone in Global Public Health) are required courses.

Service Learning: There are two distinct servicelearning requirements. Students must complete a Quinnipiac-approved four-week international academic experience. To complete this requirement, students could travel to an underserved area of the United States or, with approval, integrate this requirement into a semester study abroad. Students also are required to engage in community service learning with a community health organization for at least two semesters. With prior approval, one
semester of this requirement can be integrated into a Quinnipiac service learning course.
Course Title Credits

AN 101 Introduction to Cultural Anthropology 3
$\begin{array}{lll}\text { AN } 102 & \text { (UC) Introduction to Biological } \\ & \text { Anthropology }\end{array}$
AN 222 Indigenous Peoples of North America 3
AN 223 Latin American Societies \& Cultures 3
AN 310/WS 310 Cross-cultural Perspectives on Gender,
Sex \& Sexuality
AN 337 Anthropology of Health \& Medicine 3
$\begin{array}{ll}\text { BIO 105/105L } & \begin{array}{l}\text { (UC) Introduction to the Biological } \\ \text { Sciences with lab }\end{array}\end{array}$
$\begin{array}{ll}\text { BIO 106/106L } & \text { (UC) Science \& Society: Concepts/ } \\ & \text { Current Issues with lab }\end{array}$
$\begin{array}{lll}\text { BIO } 161 & \text { (UC) Intro to Biological Aspects of } \\ & \text { Science \& Society }\end{array}$
BIO 328/L Human Clinical Parasitology 3
BMS 110/L (UC) The World of Microbes with lab 4
BMS 117/L (UC) Human Organism with lab 4
BMS 162 (UC) Human Health 3
BMS 276 Drug Development 3
BMS 375HSC 375 Immunology 4
BMS 378 Vaccines 4
BMS 473 Infections of Leisure 3
BMS 474 Power of Plagues 3
EC 206 Urban Economics 3
EC 304 Environmental Economics 3
$\begin{array}{lll}\text { ED } 250 & \text { (UC) Diversity, Dispositions \& } \\ & \text { Multiculturalism }\end{array}$
EN 215 (UC) The Travel Essay 3
GP 101 Introduction to Geography 3
GPH 201 Introduction to Global Public Health 3
GPH 301 Capstone in Global Public Health 3
$\begin{array}{lll}\text { HSC } 203 & \text { Interprofessional Community-based } & \\ & \text { SL Seminar: Children \& Youth } & 1\end{array}$
$\begin{array}{lll}\text { HSC } 204 & \text { Interprofessional Community-based } & \\ & \text { SL Seminar: Younger Adult } & 1\end{array}$
$\begin{array}{lll}\text { HSC } 205 & \text { Interprofessional Community-based } & \\ & \text { SL Seminar: Older Adult } & 1\end{array}$
HSC 262 Nutrition in Health \& Illness 3
HSC 315 Bioethical Issues in the 21st Century 3
HSC 378 Vaccines \& Vaccine-Preventable Diseases 3
HS 330/SV 330 History of Western Medicine 3
$\begin{array}{ll}\text { HS } 394 & \text { Doctors, Disease \& Death in the } \\ & \text { Western World }\end{array}$
$\begin{array}{ll}\text { IB } 201 & \text { (UC) Globalization \& International } \\ & \text { Business }\end{array}$
MA 206 Statistics for the Behavioral Sciences 3
MSS 346 Global Communication 3
NUR 304 Health Promotion \& Wellness 3

NUR 322
Care of Women, Children \& Families
NUR 428 Community \& Public Health Nursing
NUR 480
Health Disparities
PL 220
(UC) Ethics \& Human Values
PL 222 Ethics in Biomedical Research \& Health Care Delivery
PL 234 Philosophies of Health, Healing \& Medicine
PL 320 Thought \& Work of Albert Schweitzer
PL 330/WS 330 Philosophy \& Gender
PL 337 Human Rights in Theory \& Practice
PO 211 (UC) Introduction to International Relations
PO 221 Introduction to Latin America
PO 245 (UC) International Political Economy
PO 287
Women \& Public Policy
PO 318 Development of International Organizations
PO 334 Topics in African Politics
PO 337 Human Rights: Theory \& Practice
PS 325 Health Psychology
PS 368 Occupational Health Psychology
PS 373 Positive Psychology
PRR 346 Health Care Public Relations
SCI 105/L (UC) Food Chemistry \& Nutrition with lab
SCI 161 (UC) Nutrition: An Investigative Experience
SCl 162 (UC) Consumer Chemistry
SV 301 Science, Technology \& Health Care:
Present \& Future Challenges
SO 225 (UC) Social Problems
SO 241 (UC) Racial \& Ethnic Groups
SO 244 (UC) Social Stratification
SO 253 The Immigrant Experience
SO 263 (UC) Sociology of the Aged
SO 266 Population \& Society
SO 280 (UC) Illness \& Disability
SO 304/WS 304 Sociology of Gender
SO 305/GT 305 Death, Grief \& Bereavement
SO 360 Sociology of Mental IIlness
SO 365/GT 365 Aging: Problems \& Policies
CJ 242/SO 242 Race Crime \& Justice
CJ 283/SO 283 Crime \& Society
CJ 330/S0 330 Perspectives on Violence
CJ 333/S0 333 Drugs, Alcohol \& Society
CJ 353 Sexual Violence
SP 373 Latin American Cultures (I)
SP $374 \quad$ Latin American Cultures (II)
SP 376 The Spanish Caribbean

Minor in History and Philosophy of Science
This interdisciplinary program seeks to introduce students to the historical, philosophical and sociological issues raised by the dominant place that science has assumed in our world. Science is defined broadly to encompass both scientific theory and practical applications of scientific knowledge. To pursue a minor in history and philosophy of science therefore means to consider technology, the practice of medicine, the health sciences, and aspects of the human sciences in addition to the traditional physical, chemical and biological sciences. Students develop the skills to understand, assess and critique the place of, and changes in science and technology, and to evaluate the ways in which these changes impact society.

Students also explore and understand the pace of change in science and technology and develop critical thinking and writing skills applicable to a broad range of professional pursuits such as technical writing or science journalism. The program is designed to expose students to a wide range of courses offered by different schools throughout the University, while establishing a solid foundation in the humanistic tradition of the arts and sciences. The course of study is designed to build upon the knowledge and skills developed in the student's major by providing a greater interdisciplinary scope and a consideration of philosophical, historical and ethical issues on topics relating to science and technology.

To complete a minor in history and philosophy of science, students are required to complete six courses ( 18 credits). Students take both HS 200: The Rise of Modern Science, and PL 235: Philosophy of Science. In addition, students take 12 credits from the following list of approved courses, no more than 6 credits of which may be at the 100 level:
Course Title Credits
AN 337 Anthropology of Health \& Medicine 3
BIO 205 Bioethics 3
BIO 222 Evolution in Biology \& Literature 3
BIO 383 Evolution 3
BMS 117 The Human Organism 4
BMS 162 Human Health \& Disease 4
BMS 278 Research and Technology 3
BMS 474 Power of Plagues 3
CSC 101 Introduction to Internet Studies 3
CSC 350 Intelligent Systems 3
EC 363 American Economic History 3

HS 200 American Environmental History 3
HS 330 The History of Western Medicine 3
HSC 315 Bioethical Issues in the 21st Century 3
MSS 320 History \& Social Impacts of Communication Technologies
PL 222 Ethics in Biomedical Research \& Health Care Delivery
PL 234 Philosophies of Health, Healing \& Medicine 3
PL $320 \quad$ Thought and Work of Albert Schweitzer 3
PS 309 History of Psychology 3
SO 280
SO $360 \quad 3$
In consultation with the director of the program, students design a course of study with a coherent focus related to their interests and major field.
These courses of study will have a central theme or area of study that falls within the general scope of the program.

## Minor in International Studies

A minor program in international studies is designed to stress connections between "classroom" learning and the international experience as well as to increase program options available to students with an interest in international studies who are pursuing major programs of study in fields such as English, history, legal studies, communications, political science, psychology, social services, sociology and Spanish, as well as programs in business and the health sciences. Students pursuing a minor in international studies are required to complete 18 credits in four years. Students are encouraged to meet with the international studies adviser to declare the minor by the end of their sophomore year or early in their junior year.

## Course Structure

Students are required to satisfy the following requirements within the 18 -credit minor; at least 6 credits must be completed at the 300 level:

1. Two world language courses at the 200 -level or above. In languages without advanced course offerings, students may complete two courses in a second language where the first language was pursued through the 102 course.
2. One course that explores a non-American culture. Courses offered in history, art, comparative literature or anthropology can all satisfy this requirement. Examples include:

| Course | Title | Credits |
| :--- | :--- | ---: |
| AN 101 | Introduction to Cultural Anthropology | 3 |
| AN 223 | Latin American Societies \& Cultures | 3 |
| AN 229 | Peoples of Africa | 3 |

$\begin{array}{ll}\text { AN } 304 & \text { Cross-Cultural Perspectives on Gender, } \\ & \text { Sex \& Sexuality }\end{array}$
AN 337 Anthropology of Health \& Medicine 3
HS 227 Russian Cultural \& Intellectual History 3
HS 229 The Irish 3
HS 235 History of Modern China 3
HS 236 History of Modern Japan 3
HS 273 African History \& Culture 3
SP 363 20th-Century Latin American Fiction 3
SP 375 Pre-Columbian America 3
3. One course in international business/economics at the introductory or advanced level depending on the student's major concentration:
EC 250 International Economics 3
IB 201 International Business 3
IB 280 International Field Experience 3
IB 311 International Marketing 3
IB 324 International Business Negotiation 3
IB 325 International Trade, Investment \& Competition 3
4. One course in geography, philosophy or political science.

Examples include:
GP 101 Introduction to Geography 3
GP 200 Special Topics in Geography 3
PL 265 Living Religions of the World 3
PL 320 Thought \& Work of Albert Schweitzer 3
PL 337 Human Rights: Theory \& Practice 3
PO 211 Introduction to International Relations 3
PO 311 Topics in International Relations 3
PO 317 International Law 3
PO 318 Development of International Organizations 3
PO 331 Topics in Comparative Government 3
PO 332 European Politics 3
PO 333 Middle Eastern History \& Politics 3
PO 334 Topics in African Politics 3
5. One capstone course in international studies: PO 321
(Comparative Government) is a required course for all
students who choose to minor in international studies.
Students are encouraged, but not required, to take off-campus studies, either in the form of a study abroad or an internship in, for example, Washington, D.C.

## Minor in Irish Studies

This interdisciplinary, and multidisciplinary program introduces students to the history, people and cultures of Ireland, both pre and postPartition. Students choose from a range of courses that provide relevant and rigorous intellectual learning, internships, study trips to Ireland and a capstone course that utilizes the unique range
of Irish sources available within Quinnipiac University.

This minor is suitable for students with interests in the humanities, the arts and the sciences, as well as those interested in colonial and postcolonial studies, conflict resolution, human rights and social justice. Each of these topics, individually and collectively, contributes to our understanding of the diversity, complexity and potential of viewing Irish Studies within a global context. Students are encouraged to spend a semester in an Irish University, but this is not compulsory.

Interested students are required to apply for acceptance to the minor.

## Program of Study

Application: Students are eligible to apply for the minor in the first semester of sophomore year. Interested students should contact Ireland's Great Hunger Institute or the Department of History.

## Course Structure

Students must complete 18 total credits (usually six courses) in Irish Studies and related disciplines. IRST 101 (Introduction to Irish Studies); HS 229 (Irish History); and IRST 301 (Irish Studies Capstone-currently in development) are required courses. Students complete a further 9 credits in electives in approved courses in subject areas such as English, philosophy, political science, history, music and film, video and interactive media. Students have an opportunity to complete courses for the minor at a partner university or institution in Ireland. Credits also are available through relevant internships in Ireland or at Quinnipiac University.

## Minor in Middle Eastern Studies

The minor in Middle Eastern studies facilitates the interdisciplinary study of the Middle East, offering insights into the language, history, culture, politics and religions of this ethnically diverse geographical region. The program recognizes the interconnectedness of the peoples of the Middle East, and emphasizes the interactions between the Middle East and the wider global community, in both the past and present. Courses included in the minor encompass the Arab World, Turkey, Israel, Iran and North Africa. While current political and military conflicts are covered, no single topic,
academic discipline or political ideology dominates the programming; students are able to engage with a number of approaches and disciplines, ranging from ancient Middle Eastern religions to contemporary political economies of Middle Eastern countries.

## Course Structure

A minor in Middle Eastern studies consists of six courses ( 18 credits) to be selected from the list below after consultation with the program director.

## Course

Title
Credits
ARB 101 Elementary Arabic I 3
ARB 102 Elementary Arabic II 3
HBR 101 Elementary Modern Hebrew I 3
HBR 102 Elementary Modern Hebrew II 3
HS 307 The Holocaust 3
HS 328 Jewish History 3
HS 333 The Middle East, 1300-1919 3
PL 265 Living Religions of the World 3
PO 333 Middle Eastern History \& Politics 3
Special topics courses relevant to the minor are offered on a rotating basis to supplement the courses listed above. Examples include Introduction to Judaism or The Anthropology of Morocco: Gender and Indigeneity.

## Minor in Sports Studies

Whether as a participant in sports or as a spectator, people throughout the world have contributed to the creation of a multi-billion dollar industry. Sport is a profound social phenomenon, the study of which can provide the student with deep insights into the dynamics of our society.

The goal of the interdisciplinary sports studies minor is to foster an understanding of the role of sport in society and culture, to explore the complex relationships between sport and various industries and institutions (business, medicine, media, politics, law, etc.), and to prepare students for careers in sports-related industries by raising awareness of the major issues facing professionals in these fields. This minor also seeks to make connections between what students learn in the University Curriculum and their major course work by illustrating how sport bridges various disciplines.

Students can complete the minor by taking six courses for a total of 18 credits. All students must take SPS 101: Introduction to Sports Studies. In addition, students must select at least
one SPS course from two of the four areas (arts and sciences, business, communications, health science), with the remaining credits coming from any of the courses offered as part of the minor. Students from the School of Communications can take no more than 6 credits in communications. Classes are cross-listed with the SPS designation. Course Title Credits SPS 101 Introduction to Sports Studies 3 SPS/JRN 106 Electronic News Gathering for Sports 3 SPS 200/300/400 Special Topics in Sports Studies 3 SPS/AT 201 Medical Aspects of Sport \& Activity 3 SPS/LE 224 Sports Law 3 SPS/MA 226 Baseball \& Statistics 3
SPS/SO 307 Sociology of Sport
SPS/PRR 311 Sports Public Relations 3
SPS/MG 312 Sports Management 3
SPS/EC 325 Sports Economics 3
SPS/JRN 361 Sports Reporting 3
SPS/JRN 362 The Story of Football 3
SPS/MSS 420 Sports, Media \& Society 3
SPS 488 Internship 3
SPS 490/JRN 590 Newsroom Clinical 3
SPS 498 Student Media Independent Study 3
SPS 499 Independent Study 3

## Minor in Women's and Gender Studies

Women's and gender studies is an interdisciplinary program that explores how gendered expectations structure social, cultural, political, economic and aesthetic human endeavors. Women's and gender studies examines femininities, masculinities and transgendered identities within a matrix of power relations constituted by race, ethnicity, class, sexuality and nationality. We draw on many disciplines, including history, literature, political science, psychology, sociology, anthropology, philosophy and the law. Women's and gender studies puts women-in all their diversity-at the center of inquiry, and is feminist, queer and antiracist in perspective. Rather than a marginal field of study, WGS invites students to critically engage how gender and sexuality operate in all societies, institutions and ideologies.

For a minor in women's and gender studies, students take six courses. WS 101, Introduction to Women's and Gender Studies and WS 301, Seminar in Women's and Gender Studies, are required. WS 301 should be taken during the junior or senior year.

The other courses should include at least three different disciplines and be selected from the following:
Course
WS 100
WS 101
WS 210
WS 219
WS 232
WS 235
WS 244
WS 250
WS 255
WS 262
WS 285
WS 287 Women \& Public Policy 3
WS 301 Seminar in Women's \& Gender Studies 3
WS 304 Sociology of Gender 3
WS 308 U.S. Women's History 3
WS 309 Women in America, 1920-Present 3
$\begin{array}{lll}\text { WS } 310 & \text { Cross-cultural Perspectives on Gender, } \\ & \text { Sex \& Sexuality }\end{array}$
WS 311 Diversity in the Media 3
WS 315 Women Artists 3
WS 330 Philosophy \& Gender 3
WS 335 Images of Women in Psychology \& Literature 3
WS 338 American Literature by Women of Color 3
WS 345 Media Users \& Audiences 3
WS 370 Intimate Partner Violence Seminar 3
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## School of Business and Engineering

## Lender School of Business Center 203-582-8720 (central office)

| Administrative Officers |  | Phone |
| :--- | :--- | :--- |
| Dean | Matthew O'Connor | $203-582-8914$ |
| Interim Associate Dean | Mary Meixell | $203-582-5206$ |
| Associate Dean of Engineering | Justin Kile | $203-582-3372$ |
| Assistant Dean of Academic Services | Jennifer M. Driscoll | $203-582-8249$ |
| Associate Dean for Career Development | Jill Ferrall | $203-582-3655$ |
| Director of MBA Program | Lisa Braiewa | $203-582-3710$ |
| Director of MS in Business Analytics Program | Richard McCarthy | $203-582-8468$ |
| Director of MS in Organizational Leadership Program | Michael Taylor | $203-582-3949$ |
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|  |  |  |
| Departments/Programs | Chairperson |  |
| Accounting | Nelson Alino | $203-582-3827$ |
| Computer Information Systems | Bruce Saulnier | $203-582-8579$ |
| Engineering | Lynn Byers | $203-582-5028$ |
| Entrepreneurship and Strategy | Patrice Luoma | $203-582-8320$ |
| Finance | Robert Porter | $203-582-3647$ |
| International Business | Robert Engle | $203-582-3610$ |
| Management | Mario Norbis | $203-582-8309$ |
| Marketing | Abhik Roy | $203-582-8465$ |
| Organizational Leadership and Health Management | Angela Mattie | $203-582-3630$ |

## Mission Statement

The School of Business and Engineering provides the foundation for lifelong learning to meet the business and leadership challenges of today and tomorrow.

## Values

We pursue a supportive learning environment-both inside and outside of the classroomthat provides our students with opportunities to develop the expertise required to distinguish themselves academically and professionally.

We are devoted to the principles of integrity and pledge to be ethical, honest, fair, respectful and responsible in our interactions with others.

We embrace diversity in people and in ideas.
We systematically assess our teaching efforts and our curricula to ensure learning.
We are dedicated to the continual development of our faculty in terms of teaching and research.
We actively support scholarship that advances business practice and pedagogy.
We are committed to mutually beneficial collaboration with the business community that advances the education of our students and the research of our faculty.

## Learning Goals

## Personal and Professional Development

The formulation of an individualized career plan and the development of the personal leadership characteristics and professional skills required to realize that plan.

## Expertise in a Business Discipline

An in-depth understanding of a business discipline including technical knowledge, the ability to apply that knowledge, and skill in the evaluation of business strategy within that discipline.

## Business Integration

An understanding of the interdependence of the various functional areas of business.

## Strategic Decision Making

The ability to make a well-reasoned recommendation concerning a business situation.

## Written Communication

The ability to communicate effectively using standard business forms of writing.

## Oral Communication

The ability to present information verbally in an organized, clear and persuasive manner.

## Teamwork

The interpersonal skills required to work effectively as a member of a team.

## Technology

The strategic use of technology, including technical skill and an understanding of the role that technology plays in business.

## Ethical Reasoning

The identification of ethical issues related to business practices, the recognition of the complexity and ambiguity of those issues, the application of an ethical decision-making framework, and the formulation of an ethically justifiable solution.

## Diversity and Globalization

An awareness and appreciation of diversity in the workplace and of issues surrounding the globalization of both domestic and international business activities as well as the ability to develop strategies to address those issues.

## Business Core Curriculum

The common requirements for graduation with the bachelor of science degree for all business majors include completion of the University Curriculum (that covers fundamental areas such as English, quantitative literacy, science, social sciences, the humanities and the arts), the business core curriculum and the major requirements. The business core challenges each student to develop a knowledge and skill base for further study within the business disciplines, and the major requirements provide students with specialized knowledge within a field of business.

In addition to the traditional business core course work in accounting, business law, economics, finance, international business, management and marketing, the school also offers a series of seminars in personal and professional development designed to begin the professional development process required to be successful in today's competitive business world.

As noted below, these seminars cover topics including personal effectiveness, career planning and development, business communications, ethics and diversity.

## Business Core Curriculum

Course Title Credits

AC 211
AC 212
CIS 101 Introduction to Information Systems 3
EC 111 Principles of Microeconomics 3
EC 112 Principles of Macroeconomics 3
EC 271 Applied Statistical Methods 3
FIN 201 Fundamentals of Financial Management 3
IB 201 International Business 3
LW 121 Business Law \& Society 3
MG 210 Essentials of Management \& Organizational Behavior
MG 211 Operations Management 3
MK 201 Marketing Principles 3
SB 101 The Business Environment 3
SB 111 Personal Effectiveness 1
SB 112 Career Planning \& Development 1
SB 211 Business Communications 1
SB 212 Ethics \& Diversity 1
SB $450 \quad$ Strategic Integrated Management 3
University Curriculum
FYS 101 First-year Seminar ..... 3
UC UC Capstone ..... 3
English Composition
EN 101 Elements of Composition I ..... 3
EN 102 Elements of Composition II ..... 3
Quantitative Literacy
MA 118 Introductory Calculus ..... 3
Science ..... 7
Social Science ..... 6
Humanities ..... 6
Fine Arts ..... 3
University Curriculum Electives* ..... 9Total 46
*Note: EC 111, EC 112 \& IB 201 completed as part of the business core fulfill the University Curriculum social science requirement and 3 of the 9 required credits of University Curriculum electives.

## Career Development

In the School of Business and Engineering, members of the Office of Career Development work with students to plan the academic and professional components of each student's education. They explore career interests, guide students through a career development process and provide assistance with internships, resume preparation and employment interviews.

## Internship Program

Undergraduate business students are encouraged to gain valuable career experience by participating in our internship program. Both paid and unpaid internships are available in a range of industries.

With the approval of their department chair and dean, students who have completed a mini-
mum of 57 credits with a GPA of 2.6 or higher and have completed the business core courses within their major are eligible to earn up to 3 academic credits for an internship experience. Students who do not meet these standards may complete an internship, but are not eligible to earn academic credit for that experience. Unless a student is completing a double major, only 3 credits can be earned for internship experiences. Students who are completing a double major can earn up to 3 credits in each major (for a total of 6 credits) for internship experiences. Students may not receive internship credit toward the completion of a minor.

## Minor in Business

The minor in business is available to students outside the School of Business and Engineering who are enrolled in bachelor of arts or the bachelor of science programs. The intention of this minor is to provide students with a broad perspective of the disciplines that affect organizations. Students wishing to receive a minor in business must receive written approval from the assistant dean of academic services.

Students must complete the following four classes, in addition to any two business courses, for which the student has completed the prerequisites.
Course Title Credits

AC 211 Introduction to Financial Accounting 3
FIN 201 Fundamentals of Financial Management 3
MG 210 Essentials of Management \& Organizational Behavior
MK 201 Marketing Principles 3
Plus any two business electives ( 6 credits)
Note: EC 111 is a prerequisite for FIN 201 and MK 201.


## Degrees in Business and Engineering

## Bachelor's Degrees

Accounting
Biomedical Marketing
Computer Information Systems
Computer Information Systems and Accounting
Engineering
Civil Engineering
Industrial Engineering
Mechanical Engineering
Software Engineering
Entrepreneurship and Small Business Management
Finance
International Business
Management
Marketing

## Certificate Programs

Export Marketing
International Purchasing

## Master's Degrees

Master of Business Administration
with electives available in:
Computer Information Systems
Finance
Entrepreneurship
Health Administration
International Business
Management
Marketing
Strategy
MBA/CFA ${ }^{\circledR}$ (Chartered Financial Analyst Track)
MBA/HCM (Health Care Management Track)
MBA/SCM (Supply Chain Management Track)
Master of Science in Business Analytics
Master of Science in Organizational Leadership
Accelerated Four-year (3+1) BS/MBA
Fast Track Combined BA/MBA Program
Fast Track Combined BS/MBA Program
JD/MBA

## Certificate Programs

Health Care Compliance
Long-term Care Administration

## Graduate Programs

For more about graduate business programs, please see p. 192.

## Accelerated Four-year (3+1) BS/MBA

The accelerated four-year $3+1 \mathrm{BS} / \mathrm{MBA}$ is designed for outstanding School of Business students-those who rank in the top 20 percent of their high school class and have a combined critical reading and math SAT score of 1200 or a composite ACT of 27. Students enter the program as freshmen and learn at an accelerated pace to earn a bachelor's degree in three years and an MBA in the fourth. This select program features total savings over the traditional five-year BS/
MBA option and additional features including:

- dedicated housing for students in the program with private study hall
- dedicated resident assistant and academic adviser
- flat tuition and fees for the entire four years with any academic scholarships carrying from the third to the fourth, graduate year.
For more information about this program, please visit www.quinnipiac.edu/four-year-bs-mba.


## Fast Track Combined Bachelor's/Master's Degree Programs

The Fast Track BA/MBA program is designed for outstanding undergraduate students outside of the School of Business and Engineering.

The Fast Track BS/MBA and BS/MS programs are designed for outstanding undergraduate School of Business and Engineering students. These programs enable students to start taking courses toward their graduate degrees during senior year. Interested students must apply for admission to one of the programs during the last semester of junior year. For program descriptions refer to p. 197 of this catalog.

## Department of Accounting

Bachelor of Science in Accounting
Bachelor of Science in Computer Information
Systems and Accounting
Minor in Accounting

## Mission Statement

The mission of the Department of Accounting is to prepare students for successful careers in accounting and related fields. The department's mission is guided by the missions of the University and the School of Business and Engineering. To fulfill our mission, we strive to:

Create and support a learning environment that produces students who are inquisitive, thoughtful and engaged participants in the process of continuous learning and development, and who have:

- an understanding of business and accounting concepts and requisite technical skills
- critical thinking skills required to identify problems, gather and interpret information with an appropriate level of professional skepticism, evaluate alternatives and formulate solutions
- an understanding of ethical issues in accounting, personal responsibility and integrity
- skills for working in collaborative environments
- respect for diverse opinions and cultural backgrounds
- effective verbal and written communication skills.

Recruit and retain faculty who, in collaboration with students, accounting professionals and the business community:

- deliver current and engaging curricula informed by practice and research
- foster an engaging learning environment that promotes an expectation of the highest ethical standards and practices
- produce research that advances knowledge and informs their teaching, including contributions to practice, pedagogical, case and disciplinebased scholarship
- contribute to department service, school and University communities and the broader academic community

Quinnipiac's accounting curriculum provides a blend of relevant expertise and rigor that will
set a foundation for your career. The bachelor of science in accounting program features a broad business education, designed to foster the technical competence and analytical skills required to maximize each student's potential as a business professional. Sometimes referred to as the language of business, accounting is used to communicate financial and other information to people, organizations and governments, and is integral to effective management.

An understanding of accounting is necessary to thrive in various accounting, finance and management settings. The accessibility of Quinnipiac's faculty and staff, the resources provided to students, and the school's contacts in the business world all contribute to the success of accounting majors.

## Learning Goals

Students who complete the accounting program successfully will:

- demonstrate technical competencies in accounting
- develop an understanding of ethical issues in accounting, personal responsibility and integrity
- demonstrate skills in working in collaborative environments
- demonstrate effective written and verbal communication skills
- respect diverse opinions and cultural backgrounds

Quinnipiac accounting graduates often receive job offers in the summer before their senior year. They connect with potential employers early in their studies by participating in career fairs and accounting networking events on campus, which bring representatives from local, regional and international accounting firms, as well as representatives from industry and government. Accounting majors also use these opportunities to interact with alumni and other representatives from their future profession.

Through these contacts and through the support of career services staff, many students obtain internships. These on-the-job experiences provide opportunities to integrate classroom learning into a real-world environment to clarify career goals.

Upon graduation, many accounting majors join public accounting firms. These firms generally
offer services including auditing, consulting, income tax planning and preparation, and the compilation and review of financial statements. Some graduates go into management and private industry accounting, where they prepare financial statements, develop budgets, perform cost analyses or conduct internal audits. An accounting background is highly valued in business; many CEOs and presidents come from accounting and finance departments.

## Bachelor of Science in Accounting

A total of 125 credits is required for graduation with the degree of BS in accounting. Accounting majors must earn a minimum grade of a B - in the following courses to receive credit: AC 211 (formerly AC 101) Financial Accounting; AC 212 (formerly AC 102) Managerial Accounting; AC 305 Intermediate Accounting I; AC 306 Intermediate Accounting II; and AC 307 Intermediate Accounting III. An accounting major earning a grade below B - in any of these courses must repeat the course. In addition, accounting majors must earn a minimum grade of C - in all other accounting and law courses.

A minimum cumulative GPA of 3.0 is required for entry into the accounting major. In addition, a minimum cumulative GPA of 3.0 is required for graduation with a degree in accounting.

## Business Core Curriculum

As described on page 99
University Curriculum
As described on page 100
Accounting Core ( 30 credits)
Course Title Credits

AC 305 Intermediate Accounting I 3
AC 306 Intermediate Accounting II 3
AC 307 Intermediate Accounting III 3
AC 323 Cost Accounting 3
AC 335 Accounting Systems 3
AC 405 Accounting for Business Combinations 3
AC 411 Auditing Theory \& Practice 3
AC 412 Advanced Auditing Theory \& Practice 3
AC 431 Federal Income Taxation of Individuals 3
AC 432 Advanced Federal Income Tax Procedure 3
Open Electives (12 credits)

## Bachelor of Science in Computer Information Systems and Accounting

Students who wish to specialize in computer information systems with applications in accounting may earn a dual degree in computer information systems and accounting. For a description of this program, see page 105.

## Minor in Accounting

Students wishing to augment their field of study with the perspective and tools of accounting are encouraged to consider a minor in accounting.

The minor in accounting requires six courses. Students wishing to minor in accounting must complete AC 211 Financial Accounting, AC 212 Managerial Accounting, and AC 305, Intermediate Accounting I. The remaining three courses may be selected from the following:
AC 306 Intermediate Accounting II 3
AC 307 Intermediate Accounting III 3
AC 323 Cost Accounting 3
AC 335 Accounting Systems 3
AC/CIS 350 Advanced Excel Programming 3
AC 405 Advanced Accounting 3
AC 411 Auditing Theory \& Practice 3
AC 412 Advanced Auditing 3
AC 431 Federal Income Taxation of Individuals 3
AC 432 Advanced Federal Income Tax Procedure 3

## Department of <br> Computer Information Systems

Master of Science in Business Analytics (see p. 198)
Bachelor of Science in Computer Information Systems
Bachelor of Science in Computer Information
Systems and Accounting
Minor in Computer Information Systems
Graduates of the computer information systems program are business problem solvers who assist firms to be more competitive via the use of technology. Those who choose the computer information systems major enjoy technology and also enjoy working with people.

Quinnipiac University is widely recognized as a national leader in computer information systems education. The CIS program is one of only a very few information systems programs accredited by the Computing Accrediting Commission (CAC) of ABET, Inc. located in AACSB-accredited schools of business. The faculty members are national leaders in information systems education.

The department prides itself on excellence in teaching, and fosters a supportive learning environment that provides students with the opportunity to develop the expertise required to distinguish themselves both academically and professionally. Career tracks of program graduates include high-demand positions in data management, network management, information systems security administration, systems analysis, web development and mobile applications support.

The demand for CIS graduates over the next decade is outstanding with job growth projected to increase rapidly. Currently there are more career openings for CIS majors than there are graduates available to fill the positions; consequently, starting salaries are among the highest of all undergraduate business majors. All CIS students who qualify complete internships. There are ample internship opportunities available and more than 95 percent are paid internships. Many result in offers of fulltime employment upon graduation.

The department also collaborates with the accounting department to offer an undergraduate program of study in information systems and accounting. A minor in information systems is available as well.

## Bachelor of Science in <br> Computer Information Systems

## Learning Objectives

Computer-based information systems have become a critical component to both the development of products and services as well as the management of organizations. Information systems are vital to problem identification, analysis and decision making at all levels of management. The major in computer information systems focuses on the development of systems that improve the performance of people in organizations. The information systems discipline centers on the development of systems that improve the performance of people in organizations. Information systems professionals must analyze the evolving role of information and organizational processes. Their work includes the design, implementation and maintenance of the information systems that form the backbone of today's global economy.

Students who major in computer information systems are provided with specific skills, including: - Understanding the role of information systems in organizations, including the use of information technology for strategic decision making and competitive advantage, effective and efficient electronic business and electronic commerce strategies, enterprise resource planning to support their business strategy, and supply chain management.

- Analysis and design of information systems that meet enterprise needs, including both a comprehensive understanding and experience using the system development life cycle and alternative design methodologies.
- Alternative information technology architectures, including both hardware and software alternatives, that satisfy current and future business needs.
- A thorough understanding of data management, including the development of databases, the effective use of data warehouses, and data security considerations.
- The role of networking, data communications and wireless computing in supporting organizational effectiveness, including hands-on experience in developing and configuring network environments.
To achieve these learning goals, the program
is built upon a carefully structured sequence of required core courses, a distribution of elective courses within the program, and a required internship. As with all programs within the School of Business and Engineering, students must meet the requirements of the University Curriculum, the School of Business and Engineering core curriculum, and the specific requirements of the major for a total of 125 credits:
Business Core Curriculum
As described on page 99
University Curriculum
As described on page 100
Computer Information Systems Core (21 credits)
Course Title Credits

CIS 125 Systems Analysis \& Design
CIS 245 Object-Oriented Programming 3
CIS 301 Enterprise Systems
CIS 351 Database Programming \& Design
CIS 440 IT Project Management
CIS $484 \quad$ Information Systems Internship
CIS $490 \quad$ Computer Information Systems Capstone
CIS electives ( 9 credits)
Open electives (12 credits)

## Bachelor of Science in Computer Information Systems and Accounting

There is a great industry demand for students who wish to specialize in computer information systems with applications in accounting. A minimum cumulative GPA of 3.0 is required for entry into this program, and a minimum cumulative GPA of 3.0 is required for graduation with this degree. Students may earn a dual degree in computer information systems and accounting by completing the requirements of the University Curriculum, the Business Core Curriculum, and specific requirements outlined below for a total of 134 credits:
Business Core Curriculum
As described on page 99
University Curriculum
As described on page 100
Accounting Course Work (24 credits)
Course Title Credits
AC 305 Intermediate Accounting I 3
AC 306 Intermediate Accounting II 3
AC 323 Cost Accounting 3
AC 335 Accounting Systems 3
AC 411 Auditing Theory \& Practice 3
AC 412 Advanced Auditing Theory \& Practice 3

AC 431 Federal Income Taxation of Individuals 3
AC 432 Advanced Federal Income Tax Procedure 3
Computer Information Systems Course Work (24 credits)
CIS 125 Systems Analysis \& Design 3
CIS 245 Object-Oriented Programming 3
CIS 301 Enterprise Systems 3
CIS 351 Database Programming \& Design 3
CIS 440 IT Project Management 3
CIS 484 Information Systems Internship 3
CIS 490 Computer Information Systems Capstone 3
CIS elective (3 credits)
Open electives (3 credits)

## Minor in Computer Information Systems

The minor in computer information systems complements the major in a wide variety of disciplines. It provides the students with the skills to serve as effective users of information technology within their respective major areas and allows them to become more savvy personal consumers of information technology. The minor is structured to provide each student with the opportunity to select courses that support his or her own interests. The minor in computer information systems requires the completion of 18 credits as follows:

| Course | Title | Credits |
| :--- | :--- | ---: |
| CIS 101 | Introduction to Information Systems | 3 |
| CIS 125 | Systems Analysis \& Design | 3 |
| CIS electives (12 credits) |  |  |

## Minor in Computer Information Systems for Communications Students

The minor in computer information systems for students in the School of Communications allows communications students to become better equipped to work with information technology resources commonly used in the communications industry. In particular, the minor focuses on the successfully utilize both information retrieval and information deployment resources in an electronic world. The minor in computer information systems for communications students requires the completion of 18 credits as follows:

| Course | Title | Credits |
| :--- | :--- | ---: |
| CIS 101 | Introduction to Information Systems | 3 |
| CIS 125 | Systems Analysis \& Design | 3 |
| CIS 301 | Enterprise Systems | 3 |
| CIS electives $(\mathbf{9}$ credits) |  |  |

## Department of Engineering

Bachelor of Science in Civil Engineering Bachelor of Science in Industrial Engineering Bachelor of Science in Mechanical Engineering Bachelor of Science in Software Engineering

Graduates of the engineering program are prepared for professional practice in engineering and industry as well as for advanced study at the graduate level. Specifically graduates of the engineering program will have:

- an ability to apply knowledge of mathematics, science and engineering
- an ability to design and conduct experiments, as well as to analyze and interpret data
- an ability to design a system, component or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability
- an ability to function on multidisciplinary teams
- an ability to identify, formulate and solve engineering problems
- an understanding of professional and ethical responsibility
- an ability to communicate effectively
- the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental and societal context
- a recognition of the need for, and an ability to engage in lifelong learning
- a knowledge of contemporary issues
- an ability to use the techniques, skills and modern engineering tools necessary for engineering practice.
An engineering degree prepares students for a flexible career and many education options. In addition to practicing engineering, graduates can earn an MBA or law degree or move into other great careers. Engineering opens up many paths for the future.

All engineering programs will be assessed in the ongoing ABET cycle of accreditation, selfstudy, and continuous improvement and will seek initial accreditation at the earliest opportunity, Fall 2016.

## Bachelor of Science in Civil Engineering

The BS in civil engineering has a broadbased curriculum that provides exposure to technical issues and design in a number of civil engineering subdisciplines including: structural, environmental, geotechnical, hydraulic and construction management. Civil engineering projects are often multidisciplinary in nature and can involve large public works. Specifically, civil engineers design, build and maintain a variety of projects including: roads, buildings, tunnels, retaining walls, dams, bridges, airports, water supplies and sewerage systems.

Through exposure to the University Curriculum, foundational course work in science and mathematics, major field courses and extracurricular activities, students graduating with a BS in civil engineering achieve intellectual proficiencies in critical thinking and reasoning, scientific literacy, quantitative reasoning, information fluency, creative thinking and visual literacy. They also achieve interpersonal proficiencies in written and oral communication, responsible citizenship, diversity awareness and sensitivity, and social intelligence.

Graduates of the civil engineering program shall become successful professionals recognized for their:

1. resourcefulness and ability to apply new knowledge, tools and technology to changing problems and circumstances in the natural and built environment;
2. ability to communicate complex ideas and problems to a wide audience;
3. ethical behavior and capacity for finding engineering solutions that consider both the technical and social consequences of their work;
4. leadership, mentorship and contributions to their profession and community;
5. pursuit of intellectual, personal and professional development.

A minimum grade of C - is required to satisfy the prerequisites of all civil engineering courses.

The BS in civil engineering requires 129 credits as outlined here:

| University Curriculum (46 credits) |  | Civil Engineering Electives (2) |
| :---: | :---: | :---: |
| Course | Title Credits | Technical Elective |
| FYS 101 | First-year Seminar 3 | Technical elective includes any CER elective or a 200 -level |
| UC | UC Capstone 3 | or higher MER, IER, SER, MA, BIO or CHE course with |
| English Composition |  | department chair approval. |
| EN 101 | Elements of Composition I | Depending on math sequence taken, additional UC electives |
| EN 102 | Elements of Composition II 3 | may be required. |
| Fine Arts | 3 |  |
| Quantitative Literacy |  | Bachelor of Science in |
| MA 365 | Ordinary Differential Equations 3 | Industrial Engineering |
| BIO 101/101L | General Biology I with lab | Industrial engineers are employed throughout |
| CHE 110 | General Chemistry I 3 | business and industry to research, analyze and |
| Social Science |  | determine the most effective and efficient ways |
| EC 111 | Principles of Microeconomics | to utilize resources. Industrial engineers are |
|  | Social Science Elective 3 | concerned with increasing productivity through |
| Humanities |  | the effective management of people, processes and |
| UC Electives |  | technology. Through exposure to the University |
| CHE 110L | General Chemistry Lab I | Curriculum, foundational course work in science, |
| MA 151 | Calculus I 4 | mathematics, major field courses and extra- |
| MA 152 | Calculus II 4 | curricular activities, students graduating with a |
| Foundational Courses for Civil Engineering (19 credits) |  | BS in industrial engineering achieve intellectual |
| MA 229 | Linear Algebra 3 | proficiencies in critical thinking and reasoning, |
| MA 251 | Calculus III 4 | scientific literacy, quantitative reasoning, |
| PHY 121 | University Physics | information fluency and creative thinking and |
| PHY 122 | University Physics II | visual literacy. They also achieve interpersonal |
| CSC 110 | Programming \& Problem Solving 4 | proficiencies in written and oral communication, |
| Common Engineering Curriculum (7 credits) |  | responsible citizenship, diversity awareness and |
| ENR 110 | The World of an Engineer 3 | sensitivity and social intelligence. |
| ENR 210 | Engineering Economics \& Project Management | Within four to seven years after graduation, industrial engineering alumni are expected to: |
| ENR 395 | Professional Development Seminar 1 | 1. demonstrate core industrial engineering |
| Civil Engineering Courses ( 57 credits) |  | knowledge and skills in their career; |
| MER 210/210L | Fundamentals of Engineering Mechanics \& Design with lab | 2. successfully pursue professional training, engineering certification, advanced professional |
| MER 220/220L | Mechanics of Materials with lab | degrees or graduate studies; |
| MER 310 | Thermo Fluid Systems I 3 | 3. demonstrate professional and intellectual |
| CER 210 | Intro to CE Infrastructure 3 | growth as managers and leaders in their |
| CER 220 | Civil Engineering Site Design 3 | profession, society and communities. |
| CER 310 | Structural Analysis 3 | The BS in industrial engineering requires 120 |
| CER 320/320L | Design of Concrete Structures with lab 4 | credits as outlined here: |
| CER 330 | Fundamentals of Environmental Engineering 3 | University Curriculum (46 credits) |
| CER 340/340L | Soil Mechanics \& Foundations | Course Title Credits |
|  | Engineering with lab 4 | FYS 101 First-year Seminar |
| CER 350/350L | Hydrology \& Hydraulic Design with lab 4 | UC UC Capstone |
| CER 360 | Construction Management 3 | English Composition |
| CER 445 | Advanced Soil Mechanics \& 3 | EN 101 Elements of Composition I |
|  | Foundation Engineering | EN 102 Elements of Composition II |
| CER 455 | Advanced Environmental Engineering 3 | Fine Arts |
| CER 490 | Engineering Professional Experience 1 | Quantitative Literacy |
| CER 498 | Design of CE Systems 3 | MA 285 Applied Statistics |


| Scientific Literacy |  |
| :---: | :---: |
| CHE 110 | General Chemistry I |
| CHE 110L | General Chemistry I Lab |
| BIO 101 | General Biology I |
| Social Science |  |
| Humanities |  |
| UC Electives |  |
| BIO 101L | General Biology I Lab |
| MA 151 | Calculus I |
| MA 152 | Calculus II |
| Foundational Courses for Industrial Engineering (15 credits) |  |
| MA 251 | Calculus III |
| PHY 121 | University Physics |
| CSC 110 | Programming \& Problem Solving |
| Mathematics and Science Elective* |  |
| Common Engineering Curriculum (7 credits) |  |
| ENR 110 | The World of an Engineer |
| ENR 210 | Engineering Economics \& Project Management |
| ENR 395 | Professional Development Seminar |
| Industrial Engineering Courses (28 credits) |  |
| IER 310 | Operations Research I |
| IER 320 | Production Systems |
| IER 330 | Lean Systems Engineering |
| IER 335 | Systems Engineering \& Management |
| IER 340 | Human Factors \& the Workplace |
| IER 360 | Operations Planning \& Control |
| IER 430 | Statistical Process Control |
| IER 465 | Cognitive Human Factors \& the Workplace |
| IER 490 | Engineering Professional Experience |
| IER 497 | Senior Design Project I |
| IER 498 | Senior Design Project II |
| Industrial Engineering Electives (15 credits) |  |
| IER Techni | Electives** |
| CER, IER, | R, SER Technical Electives*** |
| Open Elec |  |
| *Choose one course from BIO 102, BIO 208, CHE 111, MA 205, MA 229, MA 301, MA 365, PHY 122 |  |
| **All IER courses that are not required for an IE degree |  |
| ***One additional IER technical elective or any 300 -level or higher ENR, CER, MER, SER courses that are not require for an IE degree |  |
| Depending on math sequence taken, additional UC electives may be required. |  |

## Scientific Literacy

CHE 110 General Chemistry I
BIO 101 General Biology I

Foundational Courses for Industrial Engineering (15 credits)
MA $251 \quad$ Calculus III

Industrial Engineering Courses (28 credits)
IER $310 \quad$ Operations Research I
IER $320 \quad$ Production Systems
IER 330 Lean Systems Engineering
IER 335 Systems Engineering \& Management

IRR 430 Splita Proces Colrol

IER 465 Cognitive Human Factors \& the Workplace
IER 490 Engineering Professional Experience
IER 497 Senior Design Project I
Industrial Engineering Electives ( 15 credits)
CER, IER, MER, SER Technical Electives***
Open Electives
*Choose one course from BIO 102, BIO 208, CHE 111, MA 205, MA 229, MA 301, MA 365, PHY 122
**All IER courses that are not required for an IE degree
***One additional IER technical elective or any 300 -level or higher ENR, CER, MER, SER courses that are not required for an IE degree
may be required.

## Bachelor of Science in <br> Mechanical Engineering

Mechanical engineers are employed in the research design, development and manufacturing of broad range of tools, engines, machines and other mechanical devices and components. Through exposure to the University Curriculum, foundational course work in science, mathematics, major field courses, and extracurricular activities, students graduating with a BS in mechanical engineering achieve intellectual proficiencies in critical thinking and reasoning, scientific literacy, quantitative reasoning, information fluency, creative thinking and visual literacy. They are prepared to enter the profession or to pursue graduate studies with a solid foundation in the breadth of mechanical engineering, as well as a particular concentration through the selection of a group of coherent electives. They also achieve interpersonal proficiencies in written and oral communication, responsible citizenship, diversity awareness and sensitivity and social intelligence.

Within four to seven years after graduation, mechanical engineering alumni are expected to:

1. attain a position(s) of responsibility in which they:
a. work effectively in teams
b. manage resources
c. solve complex problems
d. communicate information
e. influence decisions
f. act ethically
g. balance constraints
2. realize self-development through formal and informal learning opportunities;
3. achieve sustained employment and/or further education in a technical/professional field;
4. enhance their capacity to engage independently in meaningful creative endeavors.

The BS in mechanical engineering requires 130 credits as outlined here:
University Curriculum (46 credits)
Course Title Credits

FYS 101 First-year Seminar 3
UC UC Capstone 3
English Composition

| EN 101 | Elements of Composition I | 3 |
| :--- | :--- | :--- |
| EN 102 | Elements of Composition II | 3 |


| Fine Arts |  | 3 |
| :---: | :---: | :---: |
| Quantitative Literacy |  |  |
| MA 285 | Applied Statistics | 3 |
| Scientific Literacy |  |  |
| CHE 110/110L | General Chemistry I with lab | 4 |
| CHE 111 | General Chemistry II | 3 |
| or BIO 101 | General Biology I | 3 |
| Social Science |  |  |
| EC 111 | Principles of Microeconomics | 3 |
|  | Social Science Elective | 3 |
| Humanities |  | 6 |
| UC Elective |  |  |
| CHE 111L | General Chemistry Lab II | 1 |
| or BIO 101L | General Biology I Lab | 1 |
| MA 151 | Calculus I | 4 |
| MA 152 | Calculus II | 4 |
| Foundational Courses for Mechanical Engineering (22 credits) |  |  |
| MA 229 | Linear Algebra | 3 |
| MA 251 | Calculus III | 4 |
| MA 365 | Ordinary Differential Equations | 3 |
| PHY 121 | University Physics | 4 |
| PHY 122 | University Physics II | 4 |
| CSC 110 | Programming \& Problem Solving | 4 |
| Common Engineering Curriculum (7 credits) |  |  |
| ENR 110 | The World of an Engineer | 3 |
| ENR 210 | Engineering Economics \& |  |
|  | Project Management | 3 |
| ENR 395 | Professional Development Seminar | 1 |
| Mechanical Engineering Courses (55 credits) |  |  |
| MER 210 | Fundamentals of Engineering |  |
|  | Mechanics \& Design | 3 |
| MER 210L | Fundamentals of Engineering |  |
|  | Mechanics \& Design lab | 1 |
| MER 220 | Mechanics of Materials | 3 |
| MER 220L | Mechanics of Materials lab | 1 |
| MER 221 | Dynamics | 3 |
| MER 230 | Engineering Materials | 3 |
| MER 230L | Engineering Materials lab | 1 |
| MER 250 | Computer Aided Design | 3 |
| MER 310 | Thermal-Fluid Systems I | 3 |
| MER 320 | Thermal-Fluid Systems II | 3 |
| MER 330 | Introduction to Circuits | 3 |
| MER 330L | Circuits Lab | 1 |
| MER 340 | Manufacturing/Machine Component |  |
| MER 340L | Manufacturing/Machine Component Design lab | 1 |
| MER 350 | ME Design | 3 |
| MER 360 | Heat Transfer | 3 |
| MER 470 | Dynamic Modeling \& Control | 3 |
| MER 470L | Dynamic Modeling \& Control Lab | 1 |

MER 490

Engineering Professional Experience

1

MER 498 ME Capstone Design
Mechanical Engineering Electives (6 credits) Choose two courses from the following MER technical electives:
MER 387 Introduction to Applied Aerodynamics ..... 3
MER 388
Environmentally Conscious Design \& Manufacturing ..... 3
MER 472 Energy Conversion Systems ..... 3
MER 475 Mechatronics ..... 3
MER 481 Aircraft Performance \& Static Stability ..... 3
MER $486 \quad$ Vibration Engineering ..... 3
MER $489 \quad$ Advanced Study in Mechanical Engineering ..... 3
MER 491 Biomedical Engineering I ..... 3
Technical elective (3 credits)
Choose one course from the following technical electives:
One additional MER Technical Elective from above ..... 3
CER 310 Structural Analysis ..... 3
IER $320 \quad$ Production Systems ..... 3
IER $340 \quad$ Human Factors \& the Workplace ..... 3
IER 420 Industrial Control Systems ..... 3
IER 430 Statistical Process Control ..... 3Other 200-level or higher CER, IER or SER course withprogram coordinator approvalDepending on math sequence taken, additional UC electivesmay be required.
Bachelor of Science in Software Engineering

Software engineers design and develop software. Using mathematical analysis and computer science principles, they design, create, test and evaluate software applications and systems. Through exposure to the University Curriculum, foundational course work in science, mathematics, major field courses, and extracurricular activities, students graduating with a BS in software engineering achieve intellectual proficiencies in critical thinking and reasoning, scientific literacy, quantitative reasoning, information fluency and creative thinking and visual literacy. They also achieve interpersonal proficiencies in written and oral communication, responsible citizenship, diversity awareness and sensitivity and social intelligence.

Within four to seven years of graduation, software engineering alumni are expected to:

1. demonstrate core software engineering knowledge and skills;
2. demonstrate ethical behavior in their pursuits;
3. have achieved sustained employment and/or be pursuing additional educational opportunities;
4. pursue lifelong learning by maintaining currency in their field as they develop as professionals;
5. demonstrate professional and personal growth by seeking leadership and mentoring roles in their profession and community
Note: a minimum grade of C - is required for all software engineering courses and their prerequisites, unless otherwise stated.

The BS in software engineering requires 120 credits as outlined here:
University Curriculum ( 46 credits) Course Title

Credits
FYS 101 First-year Seminar
UC
UC Capstone
English Composition
EN 101 Elements of Composition I 3
EN 102 Elements of Composition II 3
Fine Arts
Quantitative Literacy
MA 285 Applied Statistics
Scientific Literacy 7
Social Science 6
Humanities 6
UC Electives
MA 151 Calculus I 4
or MA 141 Calculus of a Single Variable I 3
MA $205 \quad$ Introduction to Discrete Mathematics 3
UC UC elective 2-3
Foundational Courses for Software Engineering ( $\mathbf{2 8}$ credits)
CSC 110 Programming \& Problem Solving 4
CSC 111 Data Structures \& Abstraction 4
CSC 215 Algorithm Design \& Analysis 3
CSC Elective CSC 210 or any CSC 300-level course, waived with approved minor
Two MA electives from the following:
MA 152, MA 229, MA 301, MA 305, MA 315, MA 318,
MA 361 and MA 378 or any MA 200 level or higher approved course.
One year of lab science from the following:
CHE 110/CHE 110L and CHE 111/CHE 111L; or BIO 101/ BIO 101L and BIO 102/BIO 102L; or BIO 150/BIO 150L and BIO 151/BIO 151L; or PHY 121/122

## Common Engineering Curriculum (7 credits)

ENR 110 The World of an Engineer 3

ENR 210 Engineering Economics \& Project Mgmt. 3
ENR 395 Professional Development Seminar

## Software Engineering Courses (38 credits)

SER 120 Object-oriented Design \& Programming 4
SER 210 Software Engineering Design \& Development3

SER 225 Introduction to Software Development 3
SER 310 Human Computer Interaction 3
SER 320 Software Design \& Architecture 3
SER 330 Software Quality Assurance \& Testing 3
SER 340 Software Requirements Analysis 3
SER 350 Software Project Management 3
SER 490 Engineering Professional Experience 1
SER 491 Senior Capstone I 3
SER 492 Senior Capstone II 3
SER SER electives (2) 6
Open electives ( $0-1$ credits) 1
Depending on math sequence taken, additional UC electives may be required.


## Department of <br> Entrepreneurship and Strategy

Bachelor of Science in Entrepreneurship and
Small Business Management
Minor in Entrepreneurship and Small Business
Management

## Bachelor of Science in Entrepreneurship and Small Business Management

Increasingly recognized as an important driver for both the national and international economy, entrepreneurship is more than the creation of a new business venture. Rather, entrepreneurship encompasses seeking opportunity, identifying and acknowledging risk and most importantly persisting until the idea becomes reality. At Quinnipiac University, we strive to develop this perspective in our students; to enable them to apply their entrepreneurial perspective and skills to realize innovative ideas in a variety of settings including profit and not-for-profit organizations, new and existing ventures, and in business and non-business activities. The development of this perspective has special relevance for the small business environment that many of our students seek upon graduation.

The program includes a rigorous and rounded academic curriculum complemented by extracurricular and service learning involvement in the region's business activity. The program develops entrepreneurial thinking, establishes a foundation in sound business practices along with an appreciation and understanding of the arts and sciences, and hones the skills necessary for successful entrepreneurship and small business management.

This is accomplished through a distinct and innovative curriculum. The program is highly experiential, allowing students to work on team and individual projects to develop and improve businesses and business ideas. Students compete in regional and national business plan competitions and interact with various agencies and financial institutions supportive of entrepreneur and small business success.

The program involves local, regional and national companies and small business owners sharing their expertise and experiences as an important element in the program's educational process.

Students majoring in entrepreneurship are required to complete 125 credits.

## Business Core Curriculum

As described on page 99
University Curriculum
As described on page 100
Entrepreneurship \& Small Business Management Core Required Courses (30 credits)
Course Title Credits

ENT 210 Fundamentals of Entrepreneurship 3
ENT 250 Ventures in Social Enterprise 3
ENT 310 Entrepreneurial Creativity 3
ENT 320 Small Business Marketing 3
ENT 330 Entrepreneurial Finance 3
ENT 340 Opportunity Recognition \& Negotiation 3
ENT 410 Business Plan Creation 3
ENT 488 Entrepreneurship Internship 3
Plus either:
ENT 420-430 Entrepreneurial Implementation I \& II 6
or two entrepreneurship electives from:
ENT 290 Digital Businesses 3
ENT 299 Special Topics in Entrepreneurship 3
ENT 360 Small \& Family Business 3
ENT 490 Special Projects 3
IB $320 \quad$ Global Entrepreneurship 3
MG $340 \quad$ Supply Chain Management 3
SB 360 International Microloan Funding 3
Open Electives (12 credits)

## Minor in Entrepreneurship and Small Business Management

Both business and non-business school students are encouraged to minor in entrepreneurship and small business management. The minor enables students to supplement their main area of interest with the basic skills necessary to create a business plan and engage in the entrepreneurial activities and learning experiences offered by the University. Required Courses (18 credits)
ENT 210 Fundamentals of Entrepreneurship 3
Plus five courses from:
ENT 250 Ventures in Social Enterprise 3
ENT 290 Digital Businesses 3
ENT 299 Special Topics in Entrepreneurship 3
ENT 310 Entrepreneurial Creativity 3
ENT 320 Small Business Marketing 3
ENT 330 Entrepreneurial Finance 3
ENT 340 Opportunity Recognition \& Negotiation 3
ENT 360 Small \& Family Business 3
ENT 410 Business Plan Creation 3

## Career Possibilities

Although some of the entrepreneurship and small business management majors will indeed launch their own new business or firm upon graduation, most opt to begin their careers in already established organizations. Indeed, many Quinnipiac students come from a family business background and use this program as a vehicle to develop ideas and plans to be implemented when they join the business. Others find that the entrepreneurial perspective they gain through this program, along with the rich portfolio of learning experiences, provides them with skills of interest to prospective employers in a wide range of industries.

Successful completion of the major provides students with documented evidence of their ability to integrate and apply their business acumen in both directed and self-managed activities. This, coupled with a rich network of faculty, staff, businesses and entrepreneurs eager to assist them in attaining their career goals from the moment they enter the program, provides students with the tools they need to successfully navigate a rewarding career in today's business environment.

## Student Activity

The Department of Entrepreneurship and Strategy values experiential learning and direct contact with businesses, practitioners and entrepreneurs, and provides students majoring in entrepreneurship and small business management with many extracurricular opportunities to expand their skills and stretch their capabilities. These currently include:

1. ENACTUS is an international organization that gives students the opportunity to apply what they have learned about the free enterprise system. ENACTUS challenges students on more than 1,000 college campuses worldwide to take what they are learning in the classroom and use their knowledge to better their communities. Guided by their faculty advisers, ENACTUS teams design and conduct a variety of community outreach programs that teach free enterprise. For example, they teach concepts such as budgeting, accounting, and supply and demand. They help budding entrepreneurs get their plans off the ground and mentor at-risk students, inspiring them to reach for their dreams.
2. The Entrepreneurship Club, a Quinnipiac University chapter of the national Collegiate Entrepreneurs' Organization, is an exciting organization founded in March 2013 that is dedicated to bolstering inventive students, their ideas and their entrepreneurial spirit. Not only can students share their own business ideas and network with fellow peers, but they also can participate in regular meetings and lectures to hear from some of the most successful entrepreneurs Quinnipiac University has to offer. The Quinnipiac Entrepreneurship Club welcomes all students who have an interest in business, entrepreneurship, technology and the drive and desire to create a product or business and take it to the top.
3. QU Entrepreneurship Business Plan Competition. Each year, the department sponsors a business plan competition that awards cash prizes to winning student businesses. Faculty facilitate and encourage students to enter the competition and assist students in their planning efforts.
4. Connecticut Venture Group and the Connecticut State Department of Economic and Community Development sponsor an annual statewide university business plan competition. The competition provides more than $\$ 50,000$ in prize money to student business plans and is designed to educate students in the process of creating and evaluating business ventures; prepare students for opportunities in entrepreneurship during their future careers; and avail students of the use of the resources and skills of CVG members and venture capitalists to further their educational experience.

## Department of Finance

## Bachelor of Science in Finance <br> Minor in Finance

The Department of Finance is committed to providing high-quality teaching and learning activities so that graduates are well prepared to compete in the global community.

The BS in finance prepares graduates for career opportunities in both the financial services sector as well as in nonfinancial businesses. Students can focus on courses that include Investment Management, including equities and fixed income analysis, asset valuation, and portfolio management; Wealth Management and Financial Planning; and Corporate Finance. The program also prepares students for graduate work in finance, business administration, law and other related disciplines.

## Finance Department Mission

The mission of the Department of Finance is to provide a high-quality educational experience for students; produce high-quality scholarly research; and contribute to the intellectual and cultural life of the University and community.

## Undergraduate Program Objectives Introductory financial processes: Develop

 the ability to explain core financial terms and concepts and their application to real business and financial problems.Advanced financial knowledge: Develop an understanding of modern financial theory and its application to corporate financial decision making, valuation, financial markets and institutions, and portfolio management.

## Critical, analytical and scientific reasoning:

 Develop technical proficiency in gathering information, utilizing databases, and employing standard software to organize, model and analyze data. Social and ethical considerations: Develop an understanding of the importance of ethical considerations in financial practices and decisions.Student learning opportunities are enhanced by the resources available within the Terry W. Goodwin '67 Financial Technology Center. The center allows student to access real-time financial data, develop financial models, conduct trading simulations and analyze financial and economic
data. Students have the opportunity to participate in the Student-Managed Portfolio, an extension of the University's endowment fund. Leadership and educational opportunities come from participating in the Global Asset Management Education (G.A.M.E.) Forum as well as intercollegiate "Fed Challenge" and "Investment Research Challenge" and trading competitions.

Extracurricular activities include the Investment Club and the Economics and Finance Club. These student-led organizations sponsor investment challenges, campus speakers and trips to financial marketplaces and institutions. The clubs also provide students peer-centered opportunities to develop their networking, team building and leadership skills. Outstanding students are eligible to be inducted into the Financial Management Association (FMA) National Honor Society.

## Investment Management Focus

Students who seek to focus on a program that prepares them to pursue their interest in careers within the financial services sector, specifically working in the areas of investment banking, portfolio management and investment analysis. Upon completion of the finance core and suggested investment management courses, students will have the educational requirements to sit for the Chartered Financial Analyst (CFA) Level I examination.

## Wealth Management and Financial Planning Focus

The purpose of offering a financial planning track is so students can pursue their interest in careers in wealth management, financial planning and retail investment and insurance brokerage services. Graduates have the opportunity to work within law and accounting firms that provide comprehensive financial plans and services. As part of the curriculum, students receive instruction in risk management and insurance services, investment planning, retirement and estate planning, employee benefit planning and tax planning. Upon completion of the finance core and suggested wealth management and financial planning courses, students will have the educational requirements to sit for the Certified Financial Planner (CFP) certification examination. Also, students may elect to sit for the FINRA Series 7, 63, and 66 licensing exams. Alternately, students who take additional required mathematics courses may elect to sit for the Financial Risk Manager (FRM) exams.

## Corporate Finance Focus

Students may wish to focus in courses that prepare them for careers in the nonfinancial sector, mainly the management and operations of large and small corporations. Upon completion of the finance core and suggested corporate finance courses, students will have the educational requirements to sit for the Certified Management Accountant (CMA) certification exam, which demonstrates knowledge and proficiency in corporate financial planning and analysis, decision support and ethics. Alternately, students may prepare to sit for the Certified Treasury Professional (CTP) designation, which exhibits knowledge and skills needed of treasury professionals.

## Bachelor of Science in Finance

Graduation with a BS in finance requires that the student complete 125 credits.
Business Core Curriculum
As described on page 99
University Curriculum
As described on page 100
Finance Core (18 credits)
Course Title Credits
FIN 310 Investment Analysis 3
FIN $320 \quad$ Financial Modeling 3
FIN $350 \quad$ Financial Markets \& Institutions 3
FIN $360 \quad$ Financial Statement Analysis
FIN 380 Intermediate Corporate Finance
FIN 485 Derivative Securities
Finance Electives (12 credits)
Students must complete 12 credits of finance electives.
Students may apply up to 3 credits from the following courses toward their finance elective requirements:
AC 305 Intermediate Accounting I
AC 323 Cost Accounting
AC 431 Federal Income Taxation of Individuals
CIS 350 Advanced Excel Programming
IB 335 International Finance
SB 360 International Microloan Funding
Open Electives (12 credits)

## Minor in Finance

Students wishing to minor in finance must complete FIN 201, Fundamentals of Financial Management, and choose five of the six finance core courses listed above. Students may request permission to use one non-finance course to fulfill their minor requirements.

## Department of International Business

Bachelor of Science in International Business Minor in International Business

The world around us is fast changing and bringing new challenges for future managers every single day. As new technologies bring international buyers and sellers closer together, opportunities expand for entrepreneurs, small business managers and multinational corporations. In addition, it is critical that we-as voters, as future employees and as citizens of our increasingly globalized world-understand the pros and cons of this process.

What goes on outside of the United States affects us, and the better we understand it, the better we can operate within it. Recognizing the necessity of global awareness for success in today's business world, the Department of International Business at Quinnipiac prepares students for a wide range of careers in practically every field and type of organization: business, not-for-profit, and government. The following organizations have demonstrated a particular need for graduates in international business:

- manufacturing firms such as start-ups, multinational corporations, or any firm that currently exports, imports or outsources;
- service firms engaged in import-export trading, shipping, banking, insurance, finance, consulting, market research, advertising, accounting, or the law, as well as airlines, hotels and travel agencies;
- government agencies such as the foreign service, consular staff, the Export-Import Bank, and state and federal commerce departments;
- international organizations such as the World Bank, IMF and the United Nations; and
- non-governmental organizations such as Invisible Children, Grassroot Soccer, Amnesty International, the Red Cross and the Hole-in-the-Wall Gang.
The program's purpose is to offer a curriculum that helps nurture and develop students' abilities and interests. Students are exposed to a multiplicity of perspectives and challenged to develop a broad and inquisitive mindset. Concurrently, practical knowledge and skills also
are emphasized through the active development of technical and business-related skills. This dual focus is accomplished through:
- specific functional courses (global entrepreneurship, international negotiation, international finance, international marketing and marketing research, international management, international strategy, global supply chain management) that provide students with the theoretical foundations needed for sound practical decisions;
- a focus on developing key conceptual, analytical and practical competencies, including critical thinking, negotiation skills, global awareness and sensitivity toward cultural differences and ethical issues, commitment for lifelong learning, as well as technology-related abilities such as facility with the Internet and its many applications, and expertise in using spreadsheet programs and other business software;
- the development of an additional area of competence early in the program (ideally a minor in a business discipline such as finance, entrepreneurship, etc.) with a broad range of options including in business, arts, and sciences (languages, political science, etc.);
- frequent interaction with the local business community through adjunct faculty, guest speakers, participation in smaller projects for local businesses, field trips and international as well as domestic internships; and
- hands-on experience with two certificate programs: export marketing and international purchasing.
Study abroad programs offer the opportunity for immersion in a foreign country to better understand its language, history, politics, business and culture. Quinnipiac University has semesterabroad programs in various countries such as Austria, Australia, China, England, Ireland, Italy, France, Germany, Mexico, New Zealand, South Africa and Spain. The University also assists students in seeking out opportunities in a broad spectrum of other countries. A growing number of students take advantage of internships while studying abroad, greatly enhancing their insights into those countries as well as enhancing their resumes.

The International Business Society is a student organization that provides opportunities to visit internationally oriented companies in
the Northeast, and is active in establishing and strengthening ties with local companies through projects on export and foreign market entry for local business and entrepreneurs.

## Program Learning Outcomes

On completion of the BS in business administration with a major in international business, students are able to:

1. produce a professional integrated business plan for potential investors that reflects their understanding of informal and formal institutional aspects of the target market and their ability to critically apply functional business knowledge to a global context.
2. demonstrate a high degree of cultural intelligence that reflects their diversity awareness and sensitivity to others.
3. provide evidence of quantitative skills through their capability to appraise financial risks and returns, the use of online surveys (e.g., SurveyMonkey, Qualtrics), statistical packages (e.g., SPSS, Excel) and the interpretation of the results of their research.
4. demonstrate effective communication skills, especially in cross-cultural settings, both orally and in written form, by producing and presenting individual and group reports on international business projects and assignments.

## Bachelor of Science in

 International BusinessThe BS in international business requires the completion of 125 credits.

## Business Core

As described on page 99
University Curriculum
As described on page 100
International Business Core (21 credits)
Course Title Credits
IB 313 International Marketing Research 3
IB 320 Introduction to Global Entrepreneurship 3
IB 324 Negotiating Internationally 3
IB 335 International Finance 3
IB 352 International Management 3
IB 345 Global Supply Chain 3
IB 401 International Strategy \& Business Plan 3
International Business Electives ( 6 credits)
Choose two courses from the following:
IB 300 Special Topics in International Business 3

Advanced Topics in International Financial Management

IB 363 Cross-cultural Business Research Part II 3
IB 488 International Business Internship 3
IB 499 International Business Independent Study 3
SB 360 International Microloan Funding 3
Open Electives ( 15 credits)
Students can choose any course they want.
However, it is recommended that students choose open courses that could be applied to their minor. Note: Students placed in MA 107 have 12 credits available under electives.

## Minor

All international business students are strongly advised to complete a minor in any functional area of business (e.g., finance, CIS, marketing, management, etc.) In most cases, a minor can be completed without taking any extra courses by carefully planning the course selections.

## Study Abroad Requirement

Students are required to study abroad, ideally for a semester but in special circumstances a shorter program is possible (e.g., J-term, Summer etc.). Please see the department chair if you have further questions. Foreign students are exempt from this requirement.

## Minor in International Business Required courses (18 credits)

Course Title Credits

IB $201 \quad$ Globalization \& International Business 3
IB 320 Introduction to Global Entrepreneurship 3
IB 352 International Management 3 (fall) 3
Plus, choose three courses from the following:
IB 105 International Business Environment 3
IB 300 Special Topics in International Business 3
IB 311 International Marketing 3
IB 313 International Marketing Research 3
IB 324 Negotiating Internationally 3
IB 335 International Finance 3
IB 345 Global Supply Chain 3
IB $355 \quad$ Advanced Topics in International Financial Management
IB 362 Cross-cultural Business Research Part 13
IB 363 Cross-cultural Business Research Part 23
IB 488 International Business Internship 3
IB 499 International Business Independent Study 3

## Department of Management

Bachelor of Science in Management Minor in Management

## Bachelor of Science in Management

The department's mission is driven by a faculty commitment to serving students in ways that develop them as whole managers and leaders capable of excelling in and integrating both behavioral and technical skills. Students completing a degree in management gain foundational knowledge of management theory and research. In addition, they garner real-world, hands-on application of those skills to assist organizations in achieving their strategic plans and goals. In particular, students completing a degree in management are able to: - administer a variety of management systems to assess employee and organizational needs in different types of organizational environments.

- communicate models, theories and concepts in written, oral and digital formats to management at any level.
- develop recommendations for improvement to organizational processes, practices or policies.
- demonstrate persuasion, empathy, fairness and an ability to handle conflict when dealing with and responding to coworkers, supervisors, subordinates, customers or suppliers.
- acquire advanced knowledge of theoretical underpinnings and current best practices in organizational processes.

Students majoring in management are required to complete 125 credits.

## Business Core Curriculum

As described on page 99
University Curriculum
As described on page 100
Management Core ( 15 credits)
Course Title Credits
MG 301 Group \& Virtual Team Processes 3
MG 302 Human Resource Management 3
MG 321 Decision Making for Managers 3
MG $335 \quad$ Project Management 3
MG 402 Management Senior Seminar 3
Management Electives or Concentrations ( 15 credits)
Take five courses from MG level 200 or higher (not included in the management core) or complete a track in Human Resource Management (HRM) or Operations and Supply

Chain Management (OSCM) by taking the following required courses:

## Required Courses for HRM Track

MG 306 Staffing: Recruitment, Selection \& Placement
MG 311 Advancing Employment Relations 3
MG 345 Training \& Development
MG 355 Compensation \& Benefits
IB 352 International Management
Required Courses for OSCM Track
MG 340 Supply Chain Logistics \& Technology
MG 341 Service Operations Management
MG 342 Supply Chain Analytics
IB 345
Global Supply Chain

## Minor in Management

The minor in management requires a total of 18 credits including:
MG 210 Essentials of Management \& Organizational Behavior
Plus five additional management courses.

## Department of Marketing

Bachelor of Science in Marketing Bachelor of Science in Biomedical Marketing Minor in Marketing

The department seeks to empower students with the knowledge and tools necessary to compete successfully in today's challenging global business environment. Ethical considerations, international aspects and cultural diversity topics are included throughout the department's programs of study. The department aims to offer high-quality teaching and a small-group learning environment. Through a variety of classroom and internship experiences, and global exchange programs, majors are prepared to apply academic concepts to business situations and also to use them as personal resources in planning their future. In addition, students are prepared to enhance their knowledge of the field through active pursuit of lifelong learning. In support of these objectives, the department offers resources to carry out and enhance faculty activities such as classroom teaching, supervision of internships and independent studies, individual and club advising, professional development, research and the ongoing development of these majors.

## Bachelor of Science in Marketing

The bachelor of science in marketing is designed to provide students with a comprehensive understanding of marketing concepts and practices. The marketing major combines core business courses and the technical skills of marketing. The curriculum includes courses such as MK 301 Internet Marketing, MK 334 Product \& Pricing Strategy, MK 401 Marketing Strategy, MK 210 Consumer Behavior, MK 333 Marketing Channels and Distribution, MK 352 Retail Management, and MK 312 Advertising.

Marketing majors are encouraged to complete a minor in another department such as communications or art. A student chapter of the American Marketing Association is active on campus, and the Quinnipiac University Polling Institute offers opportunities for students to gain hands-on experience conducting survey research. Students are encouraged to take advantage of the many internship opportunities available to Quinnipiac marketing students.

Graduates find career opportunities in a variety of businesses such as pharmaceutical manufacturers, financial institutions, high-tech firms, retailers, and small businesses. In addition, marketing career opportunities exist outside business organizations, in government, trade associations, health organizations, and not-for-profit institutions. The marketing program also provides students with the necessary prerequisites for graduate education.

The BS in marketing requires the completion of 125 credits as outlined below:

## Business Core Curriculum

As described on page 99
University Curriculum
As described on page 100
Marketing Core (18 credits)
Course Title Credits
MK 210 Consumer Behavior 3
MK 332 Integrated Marketing Communications 3
MK 333 Marketing Channels \& Distribution 3
MK 334 Product \& Pricing Strategy 3
MK 370 Marketing Research 3
MK 401 Marketing Strategy 3
Marketing Electives (complete 6 credits from the following)
MK 301 Internet Marketing 3
MK 312 Advertising 3
MK 315 Media Planning 3
MK 319 Marketing Analytics 3
MK 324 Business-to-Business Marketing 3

| MK 340 | Database Marketing | 3 |
| :--- | :--- | ---: |
| MK 352 | Retail Management | 3 |
| MK 355 | Services Marketing | 3 |
| MK 383 | Professional Selling \& Sales Management | 3 |
| MK 450 | Marketing History | 3 |
| MK 488 | Marketing Internship | 3 |
| MK 497 | Advertising Competition | 3 |
| IB 345 | Global Supply Chain | 3 |

Open Electives (18 credits)

## Minor in Marketing

The marketing minor requires the completion of 18 credits, including MK 201 Marketing Principles, MK 210 Consumer Behavior, MK 370 Marketing Research and 9 additional credits of marketing courses approved by the chair of the department.

## Bachelor of Science in Biomedical Marketing

The marketing of biomedical products, including pharmaceuticals, is a fast growing industry, and a large number of companies specializing in biomedical sciences are located in the Northeast, many in Connecticut. The department offers a degree in biomedical marketing, aimed at satisfying the need for students with knowledge of the fundamentals of marketing as well as an understanding of the science behind the development of biomedical products.

The program requires 24 credits of marketing courses beyond the business core. These include traditional marketing core courses (Marketing Research), as well as courses that are important to biomedical marketing and pharmaceutical sales (Integrated Marketing Communications, Marketing Channels and Distribution, Product and Pricing Strategy, Professional Selling and Sales Management). An internship is an integral part of the program. Electives include Consumer Behavior, Business-to-Business Marketing and Services Marketing. A capstone course in Biomedical Marketing Strategy ties everything together within the context of the marketing of biomedical products and services.

The science requirement is made up of 20 credits including: BMS 117 Human Organism (with lab), BMS 162 Human Health, BMS 276 Drug Development, CHE 101 Fundamentals of Chemistry I (with lab), CHE 102 Fundamentals of Chemistry II (with lab) and HSC 220 Health Care Essentials.

After completion of the program, a Quinnipiac graduate has a degree unique among colleges and universities in the Northeast. Job opportunities exist in the marketing departments of pharmaceutical companies and biotechnology firms; as medical sales representatives; marketing diagnostic testing products to laboratories; medical equipment to hospitals and clinics; marketing of over-the-counter drugs for consumer product companies.

The bachelor of science in biomedical marketing requires the completion of 124 credits as outlined here:

## Business Core Curriculum

As described on page 99
University Curriculum
Course $\quad$ Title $\quad$ Credits

FYS 101 First-year Seminar 3
UC UC Elective 3
UC UC Capstone 3
English Composition
EN 101 Elements of Composition I 3
EN 102 Elements of Composition II 3
Quantitative Literacy
MA 118 Introductory Calculus 3
Humanities 6
Fine Arts 3
Scientific Literacy
BMS 117 Human Organism 3
BMS 117L Human Organism Lab 1
BMS 162 Human Health 3
Biomedical Science Core ( 14 credits)
BMS 276 Drug Development 3
CHE 101 Fundamentals of Chemistry I 3
CHE 101L Fundamentals of Chemistry I Lab 1
CHE 102 Fundamentals of Chemistry II 3
CHE 102L Fundamentals of Chemistry II Lab 1
HSC 220 Health Care Essentials 3
Biomedical Marketing Core (24 credits)
MK 332 Integrated Marketing Communications 3
MK 333 Marketing Channels \& Distribution 3
MK 334 Product \& Pricing Strategy 3
MK $370 \quad$ Marketing Research 3
MK 383 Professional Selling \& Sales Management 3
MK $401 \quad$ Seminar in Marketing Strategy 3
MK $405 \quad$ Seminar in Biomedical Marketing Strategy 3
MK 495 Biomedical Marketing Internship 3
Plus one Biomedical Marketing Elective (3 credits)
MK 210 Consumer Behavior 3
MK $324 \quad$ Business-to-Business Marketing 3
MK 340 Database Marketing 3
MK 355 Services Marketing 3
Open Elective 3
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## School of Communications

# Center for Communications and Engineering Ed McMahon Mass Communications Center, School of Business 203-582-8492 (central office) 

Administrative Officers

Dean
Associate Dean
Assistant Dean for Career Development
Assistant Dean for Student Services
Assistant Director for Student Services
Director of the McMahon Center
Associate Director, McMahon Center

## Departments/Programs

Film, Television and Media Arts
Interactive Media and Design
Journalism
Media Studies (BA in Communications)
Strategic Communication (BA in Advertising and
Integrated Communications \&
BA in Public Relations)
Graduate Programs Director

|  | Phone |
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| Joseph M. Catrino | $203-582-8725$ |
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Lisa Burns

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## Mission Statement

The School of Communications fosters student success and leadership in a rapidly changing world of communication by offering a liberal education built on a practical and theoretical foundation of scholarship and ethics, a command of evolving technologies, and a respect for diversity. Our faculty members are scholars, artists and professionals who excel in teaching, research and creative endeavors.

The school offers bachelor's degrees in advertising and integrated communications; film, television and media arts; interactive digital design; journalism; media studies; and public relations, as well as master's degrees in interactive media; journalism; public relations and sports journalism. The school has wellestablished relationships with more than 1,000 private and nonprofit communications organizations, offering advanced students internship opportunities in professional settings. Students are encouraged to explore and advance their educational and professional interests while gaining the critical practical experience and training to develop a portfolio of work before they graduate.

On campus, students work in one of the finest university educational facilities in the Northeast-the Ed McMahon Mass Communications Center. The center features a spacious, professional level, all-digital high-definition television studio, audio recording studio, media innovation classrooms and labs, 4 K editing facility, editing suites and labs, a collaborative editing room and a screening theater. The center is equipped with state-of-the-art technology, including more than 50 iMac stations running the latest applications for digital media production, and is staffed with highly skilled media professionals to instruct and assist students. As a result, our graduates enter the communications professions equipped with the training, education and experience to excel in their chosen career.

The school's faculty and administrative offices are located in the Center for Communications and Engineering, which also houses a multimedia classroom/lab-the "Hub"-student computer center, a design studio and independent study facilities as well as traditional classrooms.

## Undergraduate Studies

For information about graduate studies, please see p. 201.

## School Requirements

Beyond the University Curriculum requirements (see p. 22), students pursuing a bachelor of arts degree in the School of Communications must complete the following:

- 12 credits in the school-wide core
- all major requirements (outlined below)
- a minor (typically 18 credits), to be chosen in consultation with the department chair
- 2 credits in the Seminars for Success: COM 101, Communications First-year Seminar, and COM 201, Media Career Development
- 6 credits in the area of "global issues and cultures." The School of Communications maintains a list of acceptable courses to satisfy this requirement.
- two additional courses outside the School of Communications, one of which must be at the 200 level or higher.
- Note: The BFA degree in film, television and media arts requires DR 150, 160 or 220 and one additional course outside the School of Communications at the 200-level or higher. Students pursuing the BFA degree are not required to complete a minor.
Program Requirements: Students are expected to achieve a B- (2.67 GPA) or better in School of Communications courses during their first year at the University. Students who do not meet this standard will be notified and are required to meet with a representative from the dean's office to address their academic progress and develop a plan for improvement.

Students who do not show improvement may be subject to appropriate action, which may include (but is not limited to) additional support, credit restrictions, or dismissal from the School of Communications.

Transfer Students and the B-Rule: Students transferring from other colleges and universities are expected to achieve a B- average ( 2.67 GPA ) in School of Communications courses taken during their first semester at Quinnipiac. Those who do not meet this standard will be notified as above.

Transfer credits: The School of Communications
accepts up to 18 transfer credits toward major requirements. Additional courses may apply to UC or additional elective courses as appropriate.

## Advising

Academic advising in the School of Communications fosters a collaborative relationship between student and faculty adviser. It is dedicated to guiding undergraduates in achieving intellectual and personal growth and preparing them for professional success in a diverse and changing global community. Faculty and staff of the School of Communications advise all students. Each student will be paired with a faculty adviser in his or her major department who will serve as a guide and mentor after the first semester. Although the primary responsibility for course selection rests with the student, the adviser maintains a file or program plan for the student and aids in proper course selection. Students are not permitted to register without their advisers' approval and are required to meet with their assigned adviser each semester by their advising deadline.

Note: The primary responsibility for the completion of all prerequisites for courses is the student's. Students who take courses without the proper prerequisites, or who complete the prerequisites after taking the courses, may lose credits toward their degree requirements. Students may not repeat a course for credit except to remove an F grade or, under special circumstances, to remove a C - or D grade in a school requirement, a prerequisite, or a major (refer to page 26 for a description of the grading system).

## Career Development

In the School of Communications, the assistant dean for career development works with students to explore majors and career interests through individual appointments and group sessions, guide them through the career development process, and provide assistance with resume and cover letter writing, interview preparation, conducting a job search and graduate school applications. Students can participate in experiential learning through internships and community service, as well as parttime and summer employment. Workshops on career-related topics are presented each semester, as well as programs connecting students with alumni and employers.

## Degrees in Communications

## Bachelor's Degrees

Bachelor of Arts in Advertising and
Integrated Communications
Bachelor of Arts in Communications (see p. 127)
Bachelor of Arts in Film, Television and Media Arts
Bachelor of Arts in Interactive Digital Design
Bachelor of Arts in Journalism
Bachelor of Arts in Public Relations
Bachelor of Fine Arts in Film, Television and Media Arts

> Master's Degrees (see p. 201)
> Master of Science in Interactive Media
> Master of Science in Journalism
> Master of Science in Public Relations
> Master of Science in Sports Journalism Combined BA or BS/MS in Interactive Media Combined BA or BS/MS in Journalism
> Combined BA or BS/MS in Public Relations
> Combined BA or BS/MS in Sports Journalism

## Department of Film, Television and Media Arts

Bachelor of Arts in Film, Television and Media Arts
Bachelor of Fine Arts in Film, Television and Media Arts
Minor in Scriptwriting

## Bachelor's Degrees in <br> Film, Television and Media Arts

The Department of Film, Television and Media Arts offers specialized programs that educate students in contemporary media practice, and demand that they excel as technically accomplished, aesthetically grounded and expressively mature professionals. These programs are dedicated to skilled storytelling and the creation of documentary and narrative works in visual and audio media as well as other informative and entertaining programming for delivery on film, television, DVD, the Internet, mobile devices and all emerging media platforms.

To achieve these goals, students in the Department of Film, Television and Media Arts
are immersed in techniques of visual storytelling that demand expertise in single and multi-camera video production and writing and producing for film, radio, television and the Internet. Because we believe that good media practice requires a solid understanding of media history and theory, this curriculum is balanced with courses that explore the role and impact of mass media in society. Formal course work is not only taught on campus but in recent years has taken place in Tralee, Ireland; Nice, France; and in Cape Town and Kruger National Park, South Africa.

Students in film, television and media arts explore sequentially all dimensions of visual and audio storytelling beginning with the historical, cultural, business and professional contexts within which their own work will develop. They learn to conceive and organize ideas clearly and forcefully through writing and to shape those ideas for expression through image and sound. After mastering a full spectrum of basic techniques, students are immersed in the complex grammar of image and sound editing and the challenging artistry of lighting for both single and multi-camera environments. Mastering the acquisition, composition and manipulation of moving images and sound, they are expected to create and execute compelling stories-factual or fictional-for current and developing distribution platforms.

Graduates of the film, television and media arts programs are well positioned to pursue careers in the creation and distribution of a broad range of digital material for all current and emerging media platforms. They are prepared to work for corporate, entertainment and not-for-profit institutions engaged in delivering entertainment and information programming to audiences around the world and have a firm foundation to pursue graduate (MFA) work.

## Learning Outcomes

Upon completion of the FTM program, students will:

- develop the ability to conceptualize and produce visual stories demonstrating aesthetic competence, fluency with visual grammar, and an appreciation of the historical context from which new forms and stories are created. (creative thinking and visual literacy)
- acquire the facility to create effective content for visual media, as well as an ability to demonstrate both written and oral proficiency within a variety of professional formats and delivery platforms.
(written and oral communication)
- develop the skills needed to critically analyze the work of others as a means to problemsolve and better inform students' own original creative output. Achieve a proficiency in creating professional quality work within the parameters and practical limitations of a broad spectrum of production environments. Recognize works of art as visual arguments, and be able to use analytical skills to assess their effectiveness. (critical thinking and reasoning)
- learn to plan and produce effectively across a wide array of technical contexts, demonstrating facility and expertise with preproduction, production and postproduction phases of film, television and interactive media creation. (information fluency)
- demonstrate an ability to work effectively within groups and production teams, to understand and manage collaborations and to act ethically, constructively and responsibly in the process of achieving individual and common goals. (social intelligence)
- acquire an understanding of and respect for the similarities and differences among human communities, including a recognition and appreciation for the unique talents and contributions of all individuals. (diversity awareness and sensitivity)
- learn to recognize and analyze media-related issues and influence decisions and actions at the local, national and global community, and to become engaged as responsible citizens. (responsible citizenship)


## Programs of Study

The standard degree in film, television and media arts is the 46 -credit bachelor of arts with minor.

The school also offers a highly competitive 64-credit bachelor of fine arts degree. Candidacy for this degree can only be obtained through a successful separate application that includes a portfolio review. Candidates for the BFA are selected in September or February of a student's sophomore year or by separate application after admission to Quinnipiac.

Students enrolled in the BA program in film, television and media arts are required to take a minor (typically 18 credits) that will complement their career and/or personal interests. This minor can be from any program either inside or outside the School of Communications. However, a student majoring in film, television and media arts
may not minor in film, television and media arts.
Students enrolled in the BFA program in film, television and media arts are not required to take a minor.
FTM Core Requirements (BA degree with minor)

## (46 credits)

Required School of Communications core courses (12 credits) Course Title Credits
*MSS 101 Media Industries \& Trends 3
*JRN 160 Introduction to Media Writing 3
*MSS 220 Media History 3
MSS 340 Communications Law \& Policy 3
*must be completed by the end of sophomore year
Other required FTM courses ( 25 credits)
FTM 110 Fundamentals of Media Production 3
FTM 112 Fundamentals of Media Production II 3
FTM $230 \quad$ Animation \& Mobile Media 3
FTM 240 Analysis of the Moving Image 3
FTM 245 Writing \& Producing Media 3
FTM 372 Scriptwriting 3
FTM 450 Senior Seminar 3
FTM 494 Senior Project Colloquy 1
FTM 495 Senior Project (capstone) 3
Electives, select three (9 credits)
FTM $310 \quad$ Projects in Animation \& Mobile Media 3
FTM $320 \quad$ History of Film I 3
FTM 342 Directing Film \& Television 3
FTM $355 \quad$ Projects in Single-camera Production 3
FTM 375 Advanced Camera \& Lighting 3
FTM $380 \quad$ Projects in Audio Production 3
FTM $390 \quad$ Projects in Multi-camera Production 3
FTM 392 Post-Production Techniques 3
FTM 393 Advanced Animation Techniques 3
FTM 397 Summer Production Project 4
COM 215 Social Media: Leveraging the Digital Age 3
COM 490 Internship 3
Other courses with chair's approval.

## FTM Core Requirements (BFA degree) ( 64 credits)

Required School of Communications core courses ( 12 credits)
Course Title Credits
*MSS 101 Media Industries \& Trends 3
*JRN 160 Introduction to Media Writing 3
*MSS 220 Media History 3
MSS 340 Communications Law \& Policy 3
*must be completed by the end of sophomore year
Other required FTM courses ( 37 credits)
FTM 110 Fundamentals of Media Production 3
FTM 112 Fundamentals of Media Production II 3
FTM 230 Animation \& Mobile Media 3
FTM 240 Analysis of the Moving Image 3

FTM 245
Writing \& Producing Media
FTM 320
History of Film I
FTM 322
History of Film (\& Television) II
FTM 342
Directing Film \& Television
FTM 372
Scriptwriting
FTM 450
Senior Seminar
FTM 494
FTM 495
Senior Project Colloquy
Senior Project (capstone)
Internship
Electives, select five ( 15 credits)
FTM $310 \quad$ Projects in Animation \& Mobile Media
FTM 342 Directing Film \& Television
FTM 355 Projects in Single-camera Production
FTM 375
Advanced Camera \& Lighting
FTM 380
Projects in Audio Production
FTM $390 \quad$ Projects in Multi-camera Production
FTM 392
Post-Production Techniques
FTM 393 Advanced Animation Techniques
FTM 397 Summer Production Project
COM 215 Social Media: Leveraging the Digital Age
COM $491 \quad$ Advanced Internship
Other courses with chair's approval.

## Minor in Scriptwriting-Majors Inside or Outside the School of Communications

The scriptwriting minor, designed for
undergraduate students who have majors inside or outside the School of Communications, consists of a film theory survey course (FTM 240), two hands-on television and film production courses (FTM 110 and FTM 245), a film history course (FTM 320), and three courses in the art and craft of writing the screenplay (FTM 372, FTM 494 and FTM 495). On completion, this minor can result in the authorship of a full-length screenplay or television two-hour pilot of the student's invention.

## Minor requirements (19 credits)

FTM 110 Fundamentals of Media Production I
FTM 240 Analysis of the Moving Image
FTM $245 \quad$ Writing \& Producing Media
FTM 320 History of Film I
FTM 372 Scriptwriting
FTM 494 Senior Project Colloquy-
Scriptwriting Focus
FTM 495
Senior Project-Scriptwriting

## Department of Interactive Media and Design

Bachelor of Arts in Interactive Digital Design Minor in Interactive Digital Design

## Bachelor of Arts in Interactive Digital Design

The interactive digital design major provides students with in-depth, hands-on experience in the design and authoring of original interactive work for a range of media including web, print, motion graphics and mobile devices. Students have the opportunity to study graphic design and interactive design, emphasizing creative thinking, visual literacy and technological proficiency. The program provides a rigorous curriculum of conceptualization, problem solving, innovation, critical thinking and visualization. It acknowledges that design is a cultural catalyst that bridges commerce and social causes. Students graduating from this program are well prepared to meet the challenges within the field of interactive and graphic design. The areas of study are always evolving and include typography, print design, motion graphics, web design and mobile interaction design. The following competencies are critical to the effective contribution of entry-level designers in professional design practice and they construct a framework that contributes to the overall effective practice of the discipline.

Graduates from the interactive digital design program:

- solve creative problems-IDD students solve creative problems within the field of design, including research and synthesis of technical, aesthetic and conceptual knowledge. This is demonstrated by the ability to create and develop visual responses to communication problems, including understanding of hierarchy, typography, aesthetics, composition and construction of meaningful images.
- communicate ideas-IDD students communicate their ideas professionally and connect with their intended audience using visual, oral and written presentation skills relevant to their field. This is evident in the ability to construct verbal and written arguments for solutions that address the needs of the organization or community.
- actualize concepts-IDD students actualize technical, aesthetic and conceptual decisions based on an understanding of design principles and by using appropriate tools and technology. This includes knowing how to learn technology with the recognition that technological change is constant.
- evaluate solutions-IDD students evaluate work in their field, including their own work, using professional terminology and demonstrating fluency in the use of the formal vocabulary and concepts of design. This includes recognizing the influence of major cultural and aesthetic trends, both historical and contemporary, on design products and services.
- implement processes-IDD students implement design processes with a strategic understanding of how communication is planned, produced and distributed. This is exhibited by the ability to solve communication problems including identifying the problem, researching, analysis, solution generating, prototyping, user testing and outcome evaluation.
- produce professional design-IDD students produce a body of design work suitable for seeking professional opportunities in their chosen branch of design. This body of work demonstrates effective use of typography, images, diagrams, motion, sequencing and color with an informed consideration of content, elements, structure and style.
There are a total of 45 credits in the major. 27 of those credits are derived from IDD required courses. An additional 9 credits (three courses) are chosen from a list of IDD electives. The School of Communications core courses make up the balance. A C- or better is required in all interactive digital design prerequisites.

Interactive Digital Design Requirements (45 credits) Required School of Communications core courses (12 credits)
Course Title Credits
*MSS 101 Media Industries and Trends 3
*JRN 160 Introduction to Media Writing 3
*MSS 220 Media History 3
MSS 340 Communications Law \& Policy 3
*must be completed by the end of sophomore year
Required Interactive Digital Design courses ( 27 credits)
IDD 110 Design Research \& Methods 3
IDD 160 Digital Design I 3
IDD 161 Digital Design II 3
IDD 250 Interactive Narrative Forms 3
IDD 270 Typography I 3
IDD 301 Motion Graphics I 3
IDD 315 Mobile Interaction Design 3
IDD 410 Advanced Interactive Authoring 3
IDD 480 Senior Seminar \& Portfolio 3
Interactive Digital Design Electives (9 credits)
With the recommendation of the student's adviser, three
electives are chosen from the following list:
AR 158 Photography I 3
AR 258 Photography II 3
CSC 110 Programming \& Problem Solving 3
IDD 200 Special Topics (as needed) 3
IDD 210 Graphic Design History 3
IDD $300 \quad$ Special Topics (as needed) 3
IDD 305 Digital Photography 3
IDD 370 Typography II 3
IDD 399/499 Independent Study 3
IDD $400 \quad$ Special Topics (as needed) 3
IDD 420 Alternative Interfaces 3
IDD 440 Motion Graphics II 3
IDD 490 Internship 3
Substitutions to this list are permitted with prior approval of the student's adviser and the director of IDD.

## Minor Requirement

Students enrolled in the IDD program are required to complete a minor (typically 18 credits) that will complement their career and/or personal interests. This minor can be from any program either inside or outside the School of Communications.

## Minor in Interactive Digital Design

The IDD minor has been suspended until further notice, but IDD courses are still open (as space allows) to students wishing to explore/study the discipline without receiving a minor.

## Department of Journalism

Bachelor of Arts in Journalism
Minor in Journalism

## Bachelor of Arts in Journalism

The Quinnipiac undergraduate program in journalism focuses on the principles and practices of news writing and reporting across multiple platforms. The program's mission is to prepare journalism professionals who are superior writers and can effectively report on the diversity of the human experience.

The wide range of elective courses enables students to focus on a specific medium (such as television) or news subject (such as sports) or take courses across platforms based on their interests and career goals.

Students who graduate from the Department of Journalism will:

- demonstrate the ability to research, report, write and edit news stories that conform to professional journalism standards, including the ability to apply basic numerical and statistical concepts.
- demonstrate command of the techniques used to produce and present news in print, broadcast and digital environments, and understand the interconnectedness of these systems.
- demonstrate familiarity with the history of journalism, its social responsibility and the underpinnings of its practice in a culturally and racially diverse society.
- understand the implications of the First Amendment and the role journalism plays in a democracy.
- engage in the ethical practice of journalism.


## Journalism Core Requirements ( 46 credits)

Required School of Communications core courses (12 credits)
Course Title Credits
*JRN 160 Introduction to Media Writing 3
*MSS 101 Media Industries \& Trends 3
*MSS 220 Media History 3
MSS 340 Communications Law \& Policy 3
*must be completed by the end of sophomore year

## Required Journalism Courses (22 credits)

JRN 106 Multimedia Production Techniques 3
JRN 260 News Writing \& Reporting 3
JRN 263 Broadcast News Writing 3
JRN 380 Fundamentals of Online Reporting 3
JRN 450 Senior Seminar 3
JRN 498 Journalism Capstone 4
COM 490 Internship 3
Electives: select four, with at least two from
the "writing intensive" list (12 credits)
Writing Intensive Electives
JRN 291 Reporting for Television I 3
JRN 300 Special Topics in Journalism 3
JRN 311 Reporting for Television II 3
JRN 360 Watchdog Reporting 3
JRN 361 Sports Reporting 3
JRN 365 Effective Editing 3
JRN 470 Narrative Journalism 3
JRN 495 Advanced Reporting 3
JRN 496 Producing \& Presenting the News 3
Other courses with chair's approval

## Other Electives

JRN 315 The Art of Journalistic Interviewing 3
JRN 362 The Story of Football 3
JRN 372 Entrepreneurial Media 3
JRN 395 Broadcast Performance 3
COM 215 Social Media: Leveraging the Digital Age 3
FTM 372 Scriptwriting 3
FTM $380 \quad$ Projects in Audio Production 3
MSS 231 Media \& Society 3
MSS/WS 311 Diversity in the Media 3
MSS 345 Media Users \& Audiences 3
MSS 420 Sports, Media \& Society 3
STC $201 \quad$ Public Relations Writing 3
Other courses with chair's approval

## Minor Requirement

To ensure that Quinnipiac journalism majors acquire subject knowledge outside their primary field of study, which will complement their career and/or personal interests, all majors are required to take a minor (typically 18 credits) outside the School of Communications.

## Minor in Journalism

Students wishing to minor in journalism must complete 18 credits. Required courses are: JRN 106, JRN 160, plus either JRN 260 or JRN 263, and three electives at the 290 level or above, chosen in consultation with the department chair.

## Department of Media Studies

Bachelor of Arts in Communications Minor in Media Studies

## Bachelor of Arts in Communications

The mission of the BA in communications program is to equip students with an adaptable approach to the rapidly evolving nature of mediarelated careers. The breadth and flexibility of the major enables a strategic integration of courses in which students learn professional practices, analytical techniques and expertise on the media's wider social, cultural and economic relationships.

Communications students obtain positions in diverse professional environments, including television networks, the music industry, public relations and marketing firms, advertising agencies and media research organizations. The program also prepares students to enter graduate training in business, law, journalism, public relations and education.

The program's required courses emphasize the skills and expertise sought by both demanding employers and competitive graduate programs, fostering students' abilities to do the following:

- apply knowledge gained from their course work and creative problem solving skills to real-world situations facing media organizations, producers and users, showing a capacity for innovation and imaginative thinking
- plan, conduct, analyze and report original media research findings based on a survey, focus group, social media tracking or content analysis
- interpret secondary media research for media professionals and media consumers/users
- critically analyze current media issues, trends and events and convey in written and oral reports their observations on how media theory relates to industry practice and audience/user interpretation
- demonstrate a professional level of written and oral communication skills and the ability to effectively communicate ideas to various audiences through a variety of traditional and new media message delivery formats
- articulate the importance of media literacy and how understanding the media's influence benefits media consumers and professionals in a democracy like the U.S. and in an informationbased global economy
- recognize the diversity of groups and perspectives in a global society in relation to the media's influence on the construction of culture and identity.
$\begin{array}{llr}\text { Communications Core Requirements (42 credits) } & \\ \text { Required School of Communications core courses } & \\ \text { (12 credits) } & & \text { Credits } \\ \text { Course } & \text { Title } & 3 \\ \text { *JRN 160 } & \text { Introduction to Media Writing } & 3 \\ \text { *MSS 101 } & \text { Media Industries \& Trends } & 3 \\ \text { *MSS 220 } & \text { Media History } & 3 \\ \text { MSS 340 } & \text { Communications Law \& Policy } & 3\end{array}$
*must be completed by the end of sophomore year
Other required media studies courses ( 15 credits)
MSS 231 Media \& Society 3
MSS 332 Media Research Methods 3
MSS 450 Senior Seminar 3
COM 490 Internship 3
$\begin{array}{lll}\text { MSS } 495 & \text { Media Trend Forecasting \& } \\ & \text { Strategy (capstone) }\end{array}$
Electives-select three ( 9 credits)
MSS/WS 311 Diversity in the Media
MSS 320 Communication Technologies 3
MSS/WS 345 Media Users \& Audiences 3
MSS 346 Global Communication 3
MSS 348 Song \& Dance 3
MSS 349/PO 348 Political Communication 3
MSS 400 Special Topics 3
MSS/SPS 420 Sports, Media \& Society 3
And/or any FTM, IDD, JRN or STC courses
Other non-School of Communications courses with chair's approval
Open electives ( 6 credits)


## Minor Requirement

All students majoring in communications are required to complete a minor (typically 18 credits) that will complement their career and/or personal interests.

## Minor in Media Studies

Students from outside the School of Communications wishing to minor in media studies must complete 18 credits.
MSS 101 Media Industries \& Trends 3
MSS 220 Media History 3
300 - or 400-level media studies course 3
Plus three elective courses from media studies or another School of Communications department, depending on the student's interests

Students from within the School of Communications wishing to minor in media studies must complete 18 credits.

MSS 231 Media \& Society

MSS 450 Senior Seminar
300 - or 400 -level media studies course

## Plus three media studies elective courses

*Students wishing to double major in media studies must take MSS 332: Media Research Methods (or STC 332: Communication Research and Analysis) and MSS 495: Media Trend Forecasting \& Strategy as two of their elective courses.

## Department of Strategic Communication

Bachelor of Arts in Advertising and Integrated Communications
Bachelor of Arts in Public Relations Minor in Public Relations

## Bachelor of Arts in Advertising and Integrated Communications

The BA in advertising and integrated communications program prepares students to understand and apply principles of advertising, branding and audience analytics in creating campaigns that maximize the strategic impact of content for web, social media, mobile devices and traditional media. Students use their knowledge of planning, media systems, audience and consumer trends, principles of storytelling, visual design and multimedia production to strategize and create content appropriate for such environments as advertising, public relations and social media agencies, branded content newsrooms, media organizations and corporate communications.

By the time they have completed this program, students are able to:

- analyze, assess and strategically employ data related to audiences and media content
- understand the modern media landscape and how to capitalize on the strengths of different media technologies
- understand the principles of branding, cohesive messaging and reputation management
- understand how advertising, public relations and content creation integrate for an overall communications campaign
- understand basic multimedia production
techniques, articulate which approaches are best used for particular circumstances, and work effectively with content creators to produce sophisticated deliverables related to digital campaigns
- write effectively in a variety of formats for maximum audience impact
- manage large-scale campaigns from concept to delivery

| Advertising and Integrated Communications Core |  |  |
| :--- | ---: | ---: |
| Requirements (45 credits) |  |  |
| Required School of Communications core courses |  |  |
| (12 credits) |  |  |
| Course | Title | 3 |
| *JRN 160 | Introduction to Media Writing | 3 |
| *MSS 101 | Media Industries \& Trends | 3 |
| *MSS 220 | Media History | 3 |
| MSS 340 | Communications Law \& Policy | 3 |
| *must be completed by the end of sophomore year |  |  |
| Other required courses (33 credits) |  |  |

IDD 160 Digital Design I 3
JRN 106 Multimedia Production Techniques
orFTM 110 Fundamentals of Media Production I 3
$\begin{array}{lll}\text { STC } 101 & \begin{array}{l}\text { Principles of Advertising \& Public } \\ \\ \text { Relations }\end{array} & 3\end{array}$
STC 201 Writing for Strategic Communication 3
STC 215 Web, Mobile and Interactive Design 3
STC 320 Strategies for Social Media 3
STC 332 Communication Research \& Analysis 3
STC 335 Media Systems \& Planning 3
STC 410 Branding Strategies 3
STC 485 Integrated Campaigns 3
COM 490 Internship 3

## Minor Requirement

All students majoring in advertising and integrated communications are required to complete a minor (typically 18 credits) that will complement their career and/or personal interests. This minor can be from any program either inside or outside the School of Communications.

## Bachelor of Arts in Public Relations

The mission of the public relations major is to prepare entry-level practitioners for careers in agency, corporate, government and nonprofit public relations. Among the most important essential learning outcomes stressed in the major are critical thinking and reasoning skills. Our graduates must have the ability to be more than just communicators. They need to be able to offer strategic counsel to their employers and clients. In the senior-level Public Relations Campaigns class, students carry out activities for a realworld client including conducting primary research, reviewing secondary research, proposing strategies and objectives and producing a written campaign plan that includes collateral materials and evaluation methods. The plan is then orally presented to the client.

Students who graduate with a bachelor of arts in public relations should be able to:

- Plan, conduct, analyze and report primary research findings based on a survey, focus group or other appropriate research means, as well as interpret secondary industry research for a client.
- Propose measurable, attainable objectives for a client based on primary and secondary research findings and produce a campaign strategy designed to help the client achieve its goals.
- Demonstrate both written and oral proficiency within a variety of traditional and new industry communication vehicles and message delivery formats.
- Demonstrate an ability to work effectively and responsibly within groups and manage relationships with clients, team members and publics to achieve individual and common goals.
- Propose an evaluation of a campaign to measure the campaign's effectiveness.
Public Relations Core Requirements (45 credits) Required School of Communications core courses (12 credits)


## Course Title Credits

*MSS 101 Media Industries \& Trends 3
*JRN 160 Introduction to Media Writing 3
*MSS 220 Media History 3
MSS 340 Communications Law \& Policy 3
*must be completed by the end of sophomore year

Other required communications courses ( 18 credits)
STC 101 Principles of Advertising \& Public Relations 3
STC 201 Writing for Strategic Communications 3
STC 332 Communications Research \& Analysis 3
STC 450 Senior Seminar 3
STC 495 Public Relations Campaigns 3
COM 490 Internship 3
Electives-select two ( 6 credits)
STC 311 Sports Public Relations 3
STC 341 Corporate Public Relations 3
STC 343 Nonprofit Public Relations 3
STC 344 International Public Relations 3
STC 345 Investor Relations 3
STC 346 Health Care Public Relations 3
STC 347 Fundraising 3
STC 348 Public Relations Event Planning 3
STC 400 Special Topics 3
STC 401 Bateman Competition Research 1
STC 402 Bateman Competition Campaigns 2
Other courses with chair's approval
Open electives ( 9 credits)
Any three School of Communications electives

## Minor Requirement

All students majoring in public relations are required to take a minor (typically 18 credits) that will complement their career and/or personal interests. This minor can be from any program either inside or outside the School of Communications. However, a student majoring in public relations may not minor in public relations.

## Minor in Public Relations

Students from outside the School of Communications
wishing to minor in public relations must complete 18 credits.
JRN 160 Introduction to Media Writing 3
STC 101 Principles of Advertising \& Public Relations 3
STC 201 Writing for Strategic Communications 3
Plus three elective courses from STC or other School of Communications courses. Two of these courses must be at the $300+$ level.
Students from within the School of Communications wishing
to minor in public relations must complete 18 credits.
STC 101 Principles of Advertising \& Public Relations
STC 201 Writing for Strategic Communications 3
Plus four elective courses from STC or another School of Communications program other than the student's major. Two of these courses must be at the $300+$ level. 12
School of Health Sciences
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## School of Health Sciences

## Center for Medicine, Nursing and Health Sciences, North Haven Campus Echlin Center, second floor, Mount Carmel Campus 203-582-8710 (central office)

Administrative Officers
DeanSenior Associate Dean
Associate Dean
Assistant Dean for Career DevelopmentCoordinator of Fitness, Leisure and WellnessDirector of Student Advisement and Success
Departments/Programs
Undergraduate Programs
Athletic Training
Biomedical SciencesBiomedical Sciences
Health Science StudiesMicrobiology and Immunology
Diagnostic Medical Sonography
Radiologic Sciences
Combined Undergraduate/Graduate Programs
Entry-level Master's Physician
Assistant Program
Occupational Therapy
BSHS-MOT Occupational Therapy
Physical TherapyDPT Program
Graduate Programs
Master of Health Sciences
Biomedical Sciences
Cardiovascular Perfusion
Medical Laboratory Sciences
Pathologists' Assistant
Physician Assistant
Radiologist Assistant
Master of Social Work

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Stephanie Jacobson ..... 203-582-8907
Post-Professional Programs
Occupational Therapy
Online Occupational Therapy Doctorate (OTD) Francine Seruya ..... 203-582-6455

## Mission Statement

The Quinnipiac University School of Health Sciences offers a comprehensive spectrum of health science programs designed to address both the evolving health needs of society and the practical implementation of innovative methods and procedures based on the latest scientific discoveries. Building upon a solid foundation in the basic sciences and liberal arts, the School of Health Sciences offers a student-centered learning environment with interprofessional collaboration, innovative teaching and hands-on experience. The School of Health Sciences seeks to integrate theory, research and practice to best prepare health care practitioners and biomedical scientists who can demonstrate leadership in their disciplines and in the global community.

## Vision Statement

By fostering teamwork, critical-thinking skills, high ethical standards and respect for diverse populations, the School of Health Sciences strives to develop compassionate practitioners and scientists with broad professional competencies who value evidence-based practice and lifelong learning.

## Career Development

In the School of Health Sciences, the assistant dean for career development works with students to explore majors and career interests through individual consultations and group sessions, and guides them through a career development process. Assistance is provided with resume and cover letter writing, interview preparation, conducting a job search and graduate school applications. Students can participate in experiential learning through community service as well as internships, part-time and summer employment. A health professions career fair is held every spring at the North Haven Campus.

## Fitness, Leisure and Wellness

Quinnipiac's School of Health Sciences offers courses that promote and encourage personal growth in the areas of fitness, leisure and wellness.

In keeping with the school's mission, the courses are dedicated and focused on the development of the entire person with the goal of encouraging the essential habits of lifetime fitness, leisure and wellness. Classes take place on both the Mount Carmel and York Hill campuses, as well as at offcampus locations. See Course Descriptions section for a detailed list of offerings.

## Degrees in Health Sciences

Please note-Academic programs with clinical components use multiple clinical education centers. Students are responsible for their transportation to and from these clinical agencies.

## Background Checks

Students should be aware that certain clinical sites or internship locations may require a criminal background check before a student is placed in the clinic or intern site. The University has procedures to assist students in obtaining such a background check. The cost of the background check is the responsibility of each individual student.

## Technical Standards for Admission

Students admitted to all programs in the School of Health Sciences must be able to meet their program's technical standards and or essential functions. Technical standards are developed by accreditation agencies and organizations to establish the essential qualities and standards considered necessary to achieve the skills, knowledge and competencies for entry-level practice. Information on technical standards and essential functions may be found in the catalog, on the website or by contacting the individual program chairperson.

## Bachelor's Degrees

Athletic Training
Biomedical Sciences
Diagnostic Medical Sonography
Health Science Studies
Microbiology and Immunology
Online Health Science Studies
BS Completion Track
Radiologic Sciences

## Graduate Degrees

Five-year Master's in Biomedical Sciences
Five and one-half year BSHS-MOT
Master of Occupational Therapy
Master of Health Science
Cardiovascular Perfusion
Medical Laboratory Sciences
(with concentrations in biomedical sciences and microbiology)
Pathologists' Assistant
Physician Assistant
Radiologist Assistant
Master of Social Work
Occupational Therapy Doctorate (OTD)
Entry-level Doctor of Physical Therapy

## Five-year Master of Health Science in Biomedical Sciences

In addition to its four-year bachelor of science degree in biomedical sciences, the Department of Biomedical Sciences offers a five-year master's degree in biomedical sciences. This program allows students who qualify to complete their master's degree immediately following the fouryear undergraduate program. To qualify for this program, the student must earn a minimum GPA of 3.0 after the third year of the program. Students who do not attain this GPA may continue on with the four-year undergraduate degree program in biomedical sciences. See p. 142.

## Bachelor of Health Sciences/ Master of Occupational Therapy

This $51 / 2$-year entry-level degree program is the only track for new freshmen. As part of the program, students first earn a BS in health science studies. See p. 153.

## BS in Athletic Training/ Doctor of Physical Therapy

This seven-year dual-degree program is intended for select students who plan to pursue a career in physical therapy and who have an interest in athletic training. See page 155.

## Master of Health Science <br> Cardiovascular Perfusion

This program provides comprehensive preparation in clinical sciences and clinical internships to prepare perfusionists who provide life support during cardiopulmonary bypass. To qualify for admission, students must already have completed a bachelor's degree in the biological, medical or health sciences and prerequisite course work. Applicants must have a minimum GPA of 2.8 and at least two years of experience working in a health care field involving patient care. See p. 221.

## Master of Health Science Medical Laboratory Sciences

The medical laboratory sciences program includes two specialties: biomedical sciences and microbiology to provide laboratory professionals with the opportunity to specialize in fields such as microbiology, laboratory management and biomedical sciences. To qualify for admission, students must already have completed a bachelor's degree in the biological, medical or health sciences and prerequisite course work. See p. 222.

## Master of Health Science Pathologists'Assistant

This full-time program for pathologists' assistants provides training in pathology, anatomy and the medical sciences. To qualify for admission, students must already have completed a bachelor's degree in the biological, medical or health sciences and prerequisite course work. See p. 225.

## Entry-level Master's Physician Assistant

This six-year dual degree program is designed for qualified students who enter as freshmen earning a BS in health science studies. After successful completion of the undergraduate curriculum and program requirements, they enter the graduate physician assistant program. See pp. 162 and 227.

## Master of Health Science <br> Radiologist Assistant

This 24-month entry-level program is designed for radiologic technologists already possessing a bachelor's degree in the field. The program prepares advanced practitioners in the field of radiography. To qualify for admission, students must already have completed a bachelor's degree in the biological, medical or health sciences, be a registered radiologic technologist with the American Registry of Radiologic Technologists and prerequisite course work. See p. 230.

## Master of Social Work

This 60-credit graduate degree can be completed in two years (full-time for four terms) or three years (the first 30 credits are taken part-time). The degree prepares students for leadership in the field of social work, with a concentration in health/ behavioral health. The MSW degree meets the academic requirements for licensure as a licensed clinical social worker. Accreditation is being pursued through the Council on Social Work Education (CSWE). Requirements for admission are a bachelor's degree with 20 credits in the liberal arts and a course in statistics with a grade of C or higher. See p. 235.

## Post-professional Occupational Therapy Doctorate

This unique program is designed for practicing occupational therapists and combines online learning with residency requirements. For information, email quonlineadmissions@quinnipiac.edu. See p. 231.

## Entry-level Doctor of Physical Therapy

This six- or seven-year degree program is the only track for new physical therapy students and begins in the freshman year. As part of the program, students first earn a bachelor of science in health science studies. See p. 155.

## Department of Athletic Training and Sports Medicine

Bachelor of Science in Athletic Training

## Bachelor of Science in Athletic Training

The athletic training program in the Department of Athletic Training and Sports Medicine functions within the mission and goals of the institution. Quinnipiac University acknowledges its role in providing a supportive and stimulating environment for the intellectual and personal growth of the students. The primary mission of the athletic training program is to provide a quality education program through which students may obtain the knowledge and psychomotor skills necessary to practice as athletic trainers certified by the Board of Certification. Importance is placed upon the provision of opportunities within the curriculum for the development of skills encompassing the domains of athletic training.

Strong emphasis is placed on the practical clinical experience coupled with specific professional course work. Recognizing the importance of excellence in teaching and instruction, the faculty, in its commitment to the combination of diverse clinical and intellectual experiences, collaborates in educating students. Through successful completion of the athletic training program, graduates are prepared to enter the profession of athletic training and assume a leadership role.

The athletic training program offers a highly personalized learning environment featuring small classes and ready access to faculty, reflecting the University's commitment to excellence in teaching, as well as support for scholarship and professional development. The athletic training and sports medicine faculty share a service orientation toward the students and their needs. The program also strives to prepare graduates who manifest critical and creative thinking, effective communication skills, informed value judgments, and who possess an educational foundation for continued growth and development in a changing world of diverse cultures and people.

## Admission to the Program

Candidates applying for admission to the athletic training program from high school are required to have not less than three years of high school college preparatory mathematics, one year of biology, one year of chemistry and one year of physics. In addition, the scores of the SAT or the ACT are an important consideration. Related health care experience is highly desirable. Prospective candidates also must satisfy general Quinnipiac University admission requirements.

All applications must include three letters of reference, and a personal interview may be required with representatives of the admissions office to discuss program requirements and the applicant's professional interests and commitments.

Applications are accepted for admission to the fall semester only.

Admission to Quinnipiac University does not guarantee admission to the program in athletic training, unless officially accepted into the program. Students enrolled in the program's preprofessional component (semesters 1-3) must achieve a B- or better in AT 114, AT 115, AT 116, AT 214, AT 216 and AT 250 and a minimum cumulative GPA of 2.67 upon completion of all additional preprofessional requirements including all program science and math requirements to qualify for admission into the professional component of the program ( D and F grades in the required science and math courses are unacceptable).

All AT courses must be taken and completed at Quinnipiac University. Professional component students (semesters 4-8) must earn at least a B- in all professional component courses and maintain a GPA of 3.0 each semester during the professional component. Students who fail to maintain these grade requirements are subject to dismissal from the program.

Students enrolled in the athletic training program, or other majors that provide prerequisite requirements for the graduate DPT program may apply for entry into the three-year doctor of physical therapy graduate program using the Physical Therapy Centralized Application Service (PTCAS) during the senior year of their BS program. Admission is competitive and is based on performance and space availability.

Freshmen enrolled in the dual major AT-DPT program with the guarantee of admission into the graduate program based upon successful comple-
tion of program requirements must complete the AT-BS program prior to enrollment in the graduate program. If students enrolled in a dual program do not complete the AT-BS, they must re-apply to the graduate program via the centralized application process.

## Technical Standards for Admission

The athletic training program is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. An objective of this program is to prepare graduates to enter a variety of employment settings and to render care to a wide spectrum of individuals engaged in physical activity. The technical standards set forth by the athletic training program establish the essential qualities considered necessary for admitted students to this program to achieve the knowledge, skills and competencies of an entry-level athletic trainer, as well as meet the expectations of the program's accrediting agency: Commission on Accreditation of Athletic Training Education (CAATE).

All students admitted to the program must meet the established abilities and expectations. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted or may be dismissed from the program.

Candidates for selection to the program are required to verify they understand and meet the technical standards or that they believe that, with certain reasonable accommodations, the technical standards can be met. Verification of understanding includes the student reading, signing and returning a copy of the Technical Standards Agreement to the program director prior to arrival on campus in the fall semester. A listing of the technical standards and an agreement form for the athletic training program can be found on the program's web page (www.quinnipiac.edu). If the student fails to complete the agreement form prior to the first day of classes, the student is admitted to the University but may be required to reapply for the athletic training program.

## Background Check

All students entering the athletic training program, and the health care professions in general should be aware that most professional credentialing agencies require a background check prior to awarding professional credentials. Information regarding background checks for those seeking to become certified athletic trainers can be found at www.bocatc.org.

For athletic training, the affidavit portion of the exam application requires candidates to report any felony or misdemeanor conviction. During the application process for the national certifying examination, candidates must submit an explanation of the events that led to the conviction(s), copy of court documents(s), including, but not limited to, an arrest report, sentence recommendation, compliance of all court requirements and proof of payment of all related fines.

Candidates may request a predetermination of eligibility at any time by submitting their documentation prior to their application. The Professional Practice and Discipline Committee reviews all convictions. Candidates are notified in writing of the committee's decision. Please review the Professional Practice and Disciplinary Guidelines and Procedures for details.

Students enrolled in the Quinnipiac University athletic training program may be required to complete a criminal and sex offender background check prior to completion of clinical rotations.

## Transfer Students from Other Colleges and Universities

Transfer students from other colleges and universities may be accepted into the athletic training program based on space availability. These students must meet the course requirements, performance standards (GPA of 2.67) and technical standards of the program. The students must complete the general science requirements, AT 114, AT 115, AT 116, AT 214, AT 216 and AT 250 prior to entry into the professional component of the program or the fourth semester of the course sequence. AT 114, AT 115, AT 116, AT 214, AT 216 and AT 250 must be taken at Quinnipiac. Athletic training courses from the student's previous institution will not be considered for replacement of BMS 300, BMS 301 or any of the athletic training courses offered at Quinnipiac.

## Transfer Students from within Quinnipiac

Students currently attending Quinnipiac in another program may be accepted into the athletic training program based on space availability and review of qualification by the program director. Students may apply through the department upon completion of the general science requirements, AT 114, AT 115, AT 116, AT 214, AT 216 and AT 250 and prior to entry into the professional component of the program or the fourth semester of the course sequence. These students must meet the course requirements, performance standards (GPA of 2.67) and technical standards of the program.

## Course of Study: Athletic Training Program Preprofessional Component

Examination and an evaluation of high school units presented determine initial placement in the English and mathematics courses. The minimum mathematics requirement is MA 275. It is strongly suggested that biology and athletic training courses are completed in the appropriate semesters as indicated. The following courses must be completed with a C - or better and a minimum GPA of 2.67 .

| Course | Title | Credits |
| :--- | :--- | ---: |
| BIO 101-102 | General Biology I \& II | 8 |
| BIO 211-212 | Anatomy \& Physiology I \& II | 8 |
| CHE 101-102 | Fundamentals of General, Organic \& |  |
|  | Biological Chemistry I \& II | 8 |
| MA 275 | Biostatistics | 3 |

Where applicable, courses may be used to satisfy University Curriculum requirements. Progression to the professional component occurs in the fourth semester or second year, spring semester.

The following courses must be completed with a minimum of a B- at Quinnipiac and prior to entry into the professional component of the athletic training program. All AT courses must be taken at Quinnipiac.
AT 114 Introduction to Athletic Training/ Sports Medicine 2
AT 115 Introduction to Kinesiology 3
AT 116 Introduction to Fitness \& Conditioning 2
AT 214 Care \& Prevention of Athletic Training 3
AT 216 Emergency Management of Athletic Trauma 3
AT 250 Introduction to Evaluation \& Treatment of Musculoskeletal Injuries

## Professional Component

The Admissions Progression and Retention Committee for the program in athletic training is responsible for evaluating and screening candidates for the professional component of the program. Program requirements are established in conjunction with the guidelines established by the Educational Council of the National Athletic Trainers' Association and are acceptable to the school and University administration. While a good deal of the athletic training students' clinical assignments (clinical practicum I-V) occur at Quinnipiac, off-campus assignments also are required. Students are responsible for transportation to and from all off-campus sites and should plan to have a vehicle by the fourth semester. Most off-campus sites are within 15 miles from the main campus. Moreover, students involved in varsity athletics normally require additional semester(s) to complete the program.

The curriculum for the professional courses in the program is subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Athletic Training Curriculum Course Title <br> Credits

Fall Semester, First Year
BIO 101 (UC) science 4
CHE 101 Fundamentals of Chemistry I
EN 101 (UC) Freshman Composition
UC
FYS 101 First-year Seminar

## Spring Semester, First Year

AT 114 Introduction to AT/SM 2
AT 115 Introduction to Kinesiology 3
AT 116 Introduction to Fitness \& Conditioning* 2
BIO 102 (UC) Science 4
CHE 102 Fundamentals of Chemistry II 4
EN 102 (UC) Freshman Composition 3
Total 18
Students enrolled in the AT/DPT dual program or interested in certain graduate programs should substitute CHE 110-111 for CHE 101-102.

## Fall Semester, Second Year

AT 214 Care \& Prevention of Athletic Injuries* 3
AT 216 Emergency Management of Athletic Trauma* 3
AT 250 Introduction to Evaluation \&
Treatment of Musculoskeletal Injury* 4

BIO 211
MA 275
Anatomy \& Physiology I
(UC) Quantitative Literacy

## Spring Semester, Second Year

AT 215 Therapeutic Modalities* 4
AT 210 Evidence-based Practice 2
AT 251 Evaluation \& Treatment of Lower
Extremity Musculoskeletal Injuries* 4
AT 290 Clinical Practicum I* 3
BIO 212 Anatomy \& Physiology II 4
Total 17
Fall Semester, Third Year
AT 330 Nutrition for Sports \& Fitness 3
$\begin{array}{lll}\text { AT } 350 & \text { Evaluation \& Treatment of the Upper } \\ & \text { Extremity Musculoskeletal Injuries* }\end{array}$
AT $390 \quad$ Clinical Practicum II* 3
BMS 300 Physiology of Human Performance I 4
PSY 101 UC social science 3
Total 17
Spring Semester, Third Year
AT 351 General Medical Assessment \& Treatment* 4
AT 352 Evaluation \& Treatment of Spinal Injuries* 4
AT 391 Clinical Practicum III* 1
BMS 301 Physiology of Human Performance II 4
PSY 272 (UC) social science 3
Total 16
Fall Semester, Fourth Year
AT $450 \quad$ Administration \& Management 3
AT $490 \quad$ Clinical Practicum IV* 1
UC UC Capstone 3
UC UC electives 6
Total 13
Spring Semester, Fourth Year
AT 491 Clinical Practicum V* 3
UC UC elective 3
UC Humanities 3
UC Humanities 3
Total 12
Total Credits 127
Students admitted to the AT/DPT dual major need to take PHY 110, PHY 111 and MA 141 (Total credits 132).
*These AT courses have a laboratory and/or clinical component.
A GPA of 3.0 must be maintained each semester during the professional component; $\mathrm{C}, \mathrm{D}$ and F grades are unacceptable in the professional component of the program.

## Department of Biomedical Sciences

Bachelor of Science in Biomedical Sciences Bachelor of Science in Health Science Studies Bachelor of Science in Microbiology and Immunology
Five-year Master of Health Science (concentration in Biomedical Sciences) Minor in Biomedical Sciences Minor in Microbiology/Molecular Biology

The programs within the Department of Biomedical Sciences are designed to provide students with knowledge and skills of the rapidly expanding fields of basic science, medicine and research. The integration of courses from these areas with a broad range of courses taken from other disciplines such as the arts and sciences and business provides the student with the maximum educational background and the critical thinking skills required to succeed in the increasingly demanding field of biomedical sciences.

The department offers four programs leading to the bachelor of science degree. These include biomedical sciences, health science studies and microbiology and immunology, plus a combined five-year bachelor/master of health science. Because of the expansion of medical information and techniques, the department also offers several graduate degree programs including pathologists' assistant and medical laboratory science (with specialties in biomedical sciences and microbiology). The focus of each of these programs is to educate students for the critical thinking necessary to function successfully within their chosen profession.

The Department of Biomedical Sciences integrates and coordinates the activities of related biomedical sciences programs that may be conveniently grouped under the generic title "biomedical sciences." The inclusion of these programs, which have many elements in common, under the direction of a single administrative unit, encourages the mixing of ideas and disciplines. It allows both the lateral and the upward mobility of students enrolled in closely related curricula and permits the faculty to cut across traditional disciplinary boundaries.

The rapid expansion of basic medical information, methodology and technology in recent years has increased the demand for specially trained personnel to perform in the clinical and research laboratories of hospitals, medical schools and government health facilities, and in the pharmaceutical and biotechnology industries. The health care system has a need for development of interdisciplinary skills to keep pace with sophisticated scientific developments and their applications in the biomedical sciences.

Students in biomedical science programs can enroll in independent study courses in biomedical science, microbiology and health sciences that enable them to collaborate with faculty in research laboratories. By definition, an independent study includes course content not offered by another QU catalog course. However, it must involve contact hours and scholarly activities equivalent to any regularly offered course. These courses often include review of the scientific literature in the field of the research project and creation of a "product," such as a term essay, a series of short papers, laboratory or project reports, a portfolio or presentation at a scientific meeting. Students are limited to no more than 8 credits of biomedical science (BMS) and/or health science (HSC) independent studies.

## Bachelor of Science in Biomedical Sciences

The Department of Biomedical Sciences offers a bachelor of science degree in biomedical sciences. The curriculum for this degree program provides the student with a solid foundation in the basic and biomedical sciences, which allows the student to pursue many different avenues of opportunity depending upon his/her goals and interests. In addition to courses in science and mathematics, students are required to take a selection of University Curriculum courses (designated UC on the curriculum). The entire curriculum is designed to provide students with a strong program in basic and biomedical sciences, as well as a well-rounded educational experience through the University Curriculum.

Students completing this degree may qualify for employment in the pharmaceutical and biotechnology industries; the medical diagnostics industry; university-based biomedical research; and city, state
and federal health/research laboratories. Additionally , a student with this degree may wish to continue his/her education in graduate/professional school in: biological and/or biomedical sciences, medicine, dentistry, veterinary medicine, physician assistant, pathologists' assistant, forensic sciences, microbiological sciences, molecular biology, biotechnology, toxicology, neurobiology, plus many other areas.

Students who excel in this program ( $>3.0$ GPA overall and in science/math) may be eligible to participate in a research project with a faculty member or an internship in an area company sometime during their junior or senior year. This depends upon the availability of mentors and internships at the particular time.

Admission to this program is dependent on the applicant's potential to pursue a university program and on past academic performance. Transfer students wishing to enter this program will be given appropriate transfer credit for previous college work. To remain in good standing within the program, the student must maintain a GPA of 2.5 overall, as well as in math and science.

BMS students will have the opportunity to learn valuable skills that may be applicable in a variety of biomedical fields after graduation, including effective communication via oral and written expression; exhibition of general fine motor skills and hand-eye coordination appropriate to performing delicate procedures; reading comprehension, critical thinking, visual literacy, interpretation of scientific/medical information from professional sources, etc.

Students may choose to minor in ANY area of study, although BMS students often choose to pursue one (or more) of these particular minors: 1) microbiology, molecular biology and immunology; 2) chemistry, and/or 3) psychology. Students may take two UC courses, two UC electives and two open electives to obtain a minor outside of the sciences.

Students must attend at least two departmental intellectual experience interactive sessions a semester for discussion. Students are also required to attend 10 hours a semester (after the first year) of intellectual seminars, discussions, debates, conferences, etc. for a total of 60 hours at graduation. Students are expected to keep track of these encounters and track them by creating a portfolio of their summaries and impressions after attending each one. Approximately one-third of these encounters should be in general
topics outside of the biomedical science curriculum with the other two-thirds should be within the biomedical sciences.

The technical standards for individuals working in the biomedical field may include the following abilities: to effectively communicate via oral and written expression; exhibit general fine motor skills and hand-eye coordination appropriate to performing delicate procedures; distinguish between subtle shades of color; read comprehend, and interpret scientific/medical information from professional sources. Reasonable accommodations will be considered on a case-by-case basis. Upperlevel BMS students in good academic standing (GPA of 3.0 or greater) may be permitted to take 2-3 graduate courses (up to 9 credits) to fulfill undergraduate degree requirements. See policy on p. 185.

Biomedical Sciences Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| Fall Semester, First Year |  |  |
| BIO 150 | General Biology I | 4 |
| CHE 110 | General Chemistry I | 4 |
| EN 101 | (UC) Freshman Composition | 3 |
| FYS 101 | First-year Seminar | 3 |
| MA 140/141 | (UC) Quantitative Literacy | 3 |

Spring Semester, First Year
BIO 151 General Biology II 4
CHE 111 General Chemistry II 4
EN 102 (UC) Freshman Composition 3
(UC) Social Science 3
BMS 278 Research \& Technology 3
Total 17
Fall Semester, Second Year
UC UC elective 3
CHE 210 Organic Chemistry I 4
MA 275 or other (UC) social science 3
BIO 211 Anatomy \& Physiology I 4
Total 14
Spring Semester, Second Year
BMS 370 General Microbiology 4
CH 211 Organic Chemistry II 4
UC UC elective or open elective 3
BIO 212 Anatomy \& Physiology II
Fall Semester, Third Year
BMS 375 Immunology 4
CHE 315 or "Biotech/Genetics" 4

| PHY 110 | Physics I |
| :--- | :--- |
| MA 275 | or other (UC) social science |

MA 275
or other (UC) social science
Total 15
Spring Semester, Third Year
Science or HSC elective

| PHY 111 | Physics II |
| :--- | :--- |
| UC | UC elective or open elective |
| UC | UC elective |
|  | Open elective |

Fall Semester, Fourth Year

| BMS 318 | Pathophysiology |
| :--- | :--- |
|  | Science elective |
| CHE 315 | or "Biotech/Genetics" |
| UC | fine arts or humanities |
| UC | UC Capstone or (UC) humanities |

Total 16-17
Spring Semester, Fourth Year
Science elective
Science or HSC elective
Science elective
UC fine arts or humanities 3
UC
UC Capstone or (UC) humanities
Total 15-16
Total credits 125
BMS majors may not take 100-level "science for non-science majors" classes as electives or open electives.

Students interested in graduate or professional school should investigate research and/or a capstone project

Biotechnology/Genetics-Take one of the following (BMS 472, BIO 471 or BIO 282). Note: BMS 472 and BIO 471 count toward a microbiology minor.

Science electives-Take 9-12 credits of BMS, CHE or BIO (3- or 4-credit courses at the 200 level or above). Students may elect to take microbiology courses as electives (open, science or health science) to earn their microbiology minor.

Science or health science electives-Take at least 6 credits of BMS, BIO, CHE, PHY or HSC (3- or 4 -credit courses at the 200 level or above) or BMS 203. Students may choose to take CHE 215 as an elective (open, science or health science) to earn their chemistry minor.

Students may choose to take two UC courses, two UC electives and two open electives in a field outside of BMS to earn a minor in that field.

Independent Study Opportunities
Students in biomedical science programs may take independent study courses in biomedical science, microbiology and/or health sciences. Students who excel in the BMS program ( $>3.2$ GPA overall and in science/math) may be eligible to work on a research project, enabling them to collaborate with faculty in research laboratories. The independent study courses, BMS 482 and 483, are for microbiology topics, BMS 498 and 499 for topics in biomedical science and HSC 498 and 499 for topics in health sciences. Two 3-4 credit courses (BMS 482 and 483) may count toward the science, health science or open electives in the BMS curriculum.

By definition, an independent study includes course content not offered by another QU catalog course. However, it must involve contact hours and scholarly activities equivalent to any regularly offered course. These courses can include performing an research project, review of the scientific literature in the field of the research project and creation of a "product," such as a term essay, a series of short papers, laboratory or project reports, a portfolio, or presentation at a scientific meeting. Students are limited to no more than 8 credits of biomedical science (BMS) and/or health science (HSC) independent studies. Students register for these courses by first finding a mentor and then submitting the paper registration form (available on the second floor of Echlin).

For more information about the undergraduate biomedical sciences program, please contact the chair of the Department of Biomedical Sciences.

## Minor in Biomedical Sciences

The Department of Biomedical Sciences offers a minor in biomedical sciences, which provides students with a fundamental knowledge of the theories, principles and advances in these basic sciences. Completing this area of concentration may help students qualify for employment in the pharmaceutical and biotechnology industries; the medical diagnostics industry; university-based biomedical research; and city, state and federal health/research laboratories or to continue their education in graduate/professional school. This concentration helps students develop critical thinking skills and understand and utilize modern research laboratory technologies.

The BMS minor consists of 20-24 credits (six classes), at least two of which must be lab-
based, with a grade of "C or better. No more than two classes may be transferred in from other institutions. The same course cannot count toward a minor in microbiology and biomedical sciences.
Course Title Credits

BMS 200 Biology of Aging 3
BMS 318 Pathophysiology 3
BMS 320 Pharmacology 3
BMS 325 Toxicology 3
BMS 330 Endocrinology 3
BMS 213 Microbiology \& Pathology 4
or BMS 370 Microbiology, with lab 4
BMS $372 \quad$ Pathogenic Microbiology with lab 4
BMS 375 Immunology with lab 4
or HSC 375 Clinical Immunology 3
(take BMS 375 or HSC 375 not both)
BMS 378 Vaccines 4
BMS 470 Virology 4
BMS 472 Biotechnology 4
BMS 473 Infections of Leisure 3
BMS 474 Power of Plagues 3
BMS 475 Current Topics in Microbiology 4
BMS 482 Independent Study (may be taken twice) 3-4
Graduate Courses for the BMS Minor (permission required)
BMS 525 Vaccine Preventable Diseases 4 (take BMS 378 or BMS 525 not both)
BMS 570 Virology
(take BMS 470 or BMS 570 not both)
BMS 595 Transplantation Immunology

## Five-year Master of

Health Science Curriculum
(Concentration in Biomedical Sciences)
(BMS majors entering Fall 2015*)

| Course | Title | Credits |  |
| :--- | :--- | ---: | :---: |
| Fall Semester, First Year |  |  |  |
| BIO 150 | (UC) science |  |  |
| CHE 110 | General Chemistry I | 4 |  |
| EN 101 | (UC) Freshman Composition | 3 |  |
| FYS 101 | First-year Seminar | 3 |  |
| MA 140 | (UC) ${ }^{1}$ Quantitative Literacy | 3 |  |
|  |  |  |  |
| Spring Semester, First Year | Total 17 |  |  |
| BIO 151 | (UC) science |  |  |
| CHE 111 | General Chemistry II | 4 |  |
| EN 102 | (UC) Freshman Composition | 4 |  |
| UC | Social science | 3 |  |
| BMS 278 | Research \& Technology | 3 |  |
|  |  | 3 |  |
|  |  | Total 17 |  |

Fall Semester, First Year

Total 17

## Fall Semester, Second Year

BIO 211 Anatomy \& Physiology I 4
CHE 210 Organic Chemistry I 4
MA 275 or UC social science 3
UC UC elective 3
Total 14
Spring Semester, Second Year
BIO 212 Anatomy \& Physiology II 4
CHE 211 Organic Chemistry II 4
BMS 370 General Microbiology 4
UC UC elective 3
Total 15
Fall Semester, Third Year
BMS 375 Immunology 4
PHY 110 General Physics 4
science elective 4
MA 275 or UC social science 3
Total 15
Spring Semester, Third Year
Science or HSC elective 3
PHY 111 General Physics II 4
UC UC Capstone 3
UC elective 3
UC humanities 3
Total 16
Fall Semester, Fourth Year
BMS 518 Pathophysiology 3
Science or HSC elective 3
CH 315 Biochemistry 4
UC fine arts or humanities 3
Open elective 3
Total 16
Spring Semester, Fourth Year

| BIO 568 | Molecular \& Cell Biology | 4 |
| :--- | :--- | :--- |
| BMS 579 | or BMS 500-level science elective | 3 |
| BMS | Science elective | 3 |
| UC | fine arts or humanities | 3 |
|  | Open elective | 3 |

Total 16
Fall Semester, Fifth Year
(all graduate courses)
BMS specialization course 3-4
BMS specialization course 3
BMS elective 3-4
BMS elective 3
BMS 688 Independent Study, optional 2-4
Total 14
Spring Semester, Fifth Year
(all graduate courses)
BMS specialization course 4
BMS specialization course 3

Total 16
Total Credits 151-155
*students who entered the program prior to Fall 2015 will follow the five-year curriculum as stated in their catalog. ${ }^{1}$ Minimum mathematics requirement: MA 140 (Pre-Calculus) and MA 275 (Biostatistics)
${ }^{2}$ The comprehensive exam must be completed by April 15 of the fifth year.

## Premedical Studies Program

Students in majoring in biomedical sciences may fully participate in the premedical studies program. The curriculum in this degree program can fulfill the science prerequisites for most professional schools. Students should refer to page 28 of this catalog for more information about the premedical studies program and contact the Prehealth Advising Office for further academic advising.

## Bachelor of Science in Health Science Studies

The bachelor of science program in health science studies is designed for students entering the School of Health Sciences who have interest in the basic sciences and health-related career paths at both the undergraduate and graduate levels. Upon admission, students choosing this option are assigned to academic advisers who will assist them in designing a customized program to meet their career goals.

Qualified students may complete the bachelor of science in health science studies and apply to graduate programs such as cardiovascular perfusion, MAT (education), MBA in health care management, medical laboratory sciences, pathologists' assistant, physical therapy, physician assistant or social work. Students interested in the MBA in health care management are strongly encouraged to declare the general business minor early in their undergraduate program to ensure they have an adequate foundation for graduate business course work.

First-year students in the School of Health Sciences who are undecided about professional career goals also can use the health science studies major as preparation for graduate study in a field such as nutrition, occupational therapy, speech language pathology, optometry, chiropractic medicine or dentistry.

Consistent with other four-year specific programs in the basic and health sciences, the health science studies major provides a general
curriculum for the undeclared students. During this time, students pursue course work in biology, biomedical sciences, chemistry, mathematics, physics and the liberal arts while exploring potential areas of concentration. Students also are encouraged to enroll in a career exploration course to help them identify their interests. Given the broad applicability of course work in the first two years of study, it is possible for students to meet specific program requirements that will enable them to matriculate into a different major after their freshman or sophomore year, such as athletic training, diagnostic medical sonography, nursing, occupational therapy or radiologic sciences.

## Health Science Studies Curriculum

A total of 122 credits is required for completion of the BS in health science studies.
Course Title Credits

Fall Semester, First Year
BIO 101 (UC) General Biology I** 3
BIO 101L (UC) General Biology I Lab** 1
CHE 110 General Chemistry I 3
or CHE 101 Fundamentals of Chemistry I*
CHE 110L General Chemistry I Lab
or CHE 101L Fundamentals of Chemistry Lab I*
EN 101 (UC) Freshman Composition
FYS 101 First-year Seminar 3
MA 275 (UC) Quantitative Literacy* 3
or alternate UC requirement (social sciences, fine arts,
humanities)
Total 17
Spring Semester, First Year
BIO 102 (UC) General Biology II** 3
BIO 102L (UC) General Biology II Lab** 1
CHE 111 General Chemistry I 3
or CHE 102 Fundamentals of Chemistry I*
CHE 111L General Chemistry I Lab 1
or CHE 102L Fundamentals of Chemistry Lab I*
EN 102 (UC) Freshman Composition 3
UC Social sciences, fine arts or humanities 3
or HSC 221 Introduction to Health Care*** 2
UC Social sciences, fine arts or humanities 3
MA 275 Quantitative Literacy* 3
Total 16-17
*Chemistry courses and additional math courses depend on intended professional goal or career plan and math placement score.
**Freshman biology ( 8 cr .) must be completed after two years, unless other transferred biology credits are accepted to fulfill this requirement.
***Core course taken in freshman spring or sophomore fall semester.

Subsequent Course and GPA Requirements Following the first year of study, health science studies students meet with their academic advisers and develop a customized plan of study that incorporates their academic and career goals. To remain in good standing within the program, students must maintain an overall GPA of 2.0 and earn 122 credits for degree completion. Course selections must fulfill the following: Course Categories Credits Basic science core (biology, chemistry \& physics) 13 Health/science electives
Open electives
University Curriculum Requirements

## Premedical Studies Program

Students majoring in health science studies may fully participate in the premedical studies program. The curriculum in this degree program can fulfill the science prerequisites for most professional schools. Students should refer to page 28 of this catalog for more information about the premedical studies program and contact the Prehealth Advising Office for further academic advising.

## Online Health Science Studies BS Completion Track

This program is designed for health care professionals who already have an associate's degree in science (e.g., an AS in diagnostic imaging or respiratory therapy) and would like to pursue a bachelor's degree (BS) in health science studies. Nontraditional, adult professionals who are looking to change careers and/or increase their opportunities in the growing health care industry as well as recent AS graduates who wish to continue their studies may complete this program part time via a distance education format through QU Online with a curriculum that builds on the individual's prior educational preparation.

Admission requirements include an associate's degree from a regionally accredited college or university with a grade point average of at least 2.5 ; two letters of recommendation; transcripts from all post-secondary institutions attended; and a resume or curriculum vitae. Prerequisites for the program include 8 credits of biology.

Application procedures are managed through Quinnipiac University Online.

## Progression Requirements

To progress and remain in good standing students must maintain an overall GPA of 2.0 minimum.

## Advanced Placement Credits

Students with an associate's degree may transfer 60 credits for this program. Students who have earned more than 60 credits may request a transcript evaluation that may result in additional credits transferred to the degree.

## Advanced Core Credits

The advanced core courses developed by faculty in the College of Arts and Sciences, with the learning needs of health science adult students in mind, will enable part-time students to earn 20 credits from the University Curriculum.

The advanced core reflects the aims and goals of the traditional University Curriculum and the Essential Learning Outcomes while acknowledging the prior general education work completed at the associate's degree level. The advanced core, consisting of five 4-credit courses, are completed in seven-week blocks online and are designed to move students through in cohorts. Students can complete up to 8 credits during the fall and spring semesters and up to 7 credits in the summer. Students may start the program in the fall or spring.

Online Degree Requirements<br>Transfer Credit from Associate's Degree<br>Quinnipiac Open Elective Courses 9 credits<br>Quinnipiac Advanced Core Courses<br>Quinnipiac Health Science Courses<br>20 credits<br>33 credits

Total 122 credits

## Bachelor of Science in Microbiology and Immunology

The program in microbiology and immunology provides the student with fundamental knowledge of the theories, principles and research techniques in this exciting and rapidly evolving field. The mission of the program is to help the student develop the ability to ask significant scientific questions and then utilize critical thinking skills and modern research laboratory technology to solve these problems successfully.

Students learn about molecular biology with
hands-on student-directed laboratory projects where thinking, planning and problem-solving skills are developed. Independent research projects under the guidance of faculty allow development of these skills with "real-world" experiences.

Student skills are evaluated continuously with written and oral presentations, encouraging the refinement of communication skills critical to a successful career. Products of student research activity are presented in seminars and at regional or national scientific meetings.

## General Information

Rapid and expanding advances in the field of microbiology and immunology have created a need for employees with expertise in a variety of areas. Our graduates are prepared for exciting careers in the expanding medical, clinical, pharmaceutical, biotechnological, molecular and health industries. This program also prepares the student for advanced study in specialized graduate science, health and medical programs.

The program offers students a range of classroom, laboratory and independent research experiences. All courses consist of lecture and hands-on laboratories where students perform the most current research techniques. In addition to courses in the sciences, the University Curriculum course offerings prepare students with a broad-based conceptual understanding of science and its role in society.

Included in this program is a two-semester required undergraduate seminar/research experience performed with faculty in research laboratories. This experience allows the student to develop the expertise and experience to be successful in beginning a career or in graduate study. All of our students give formal presentations of their independent research projects. Many have presented the results of research experiences at professional scientific meetings.

Successful third- and fourth-year students may be able to obtain internships or part-time work experiences during the school year and/or summer in government labs and major pharmaceutical or biotechnology companies located in the region.

## Microbiology Curriculum <br> Fall Semester, First Year

 Course Title CreditsBIO 150 (UC) General Biology I
CHE 110 General Chemistry I
EN 101
(UC) Freshman Composition I

MA 140 (UC) Quantitative Literacy ${ }^{1}$ 3
FYS 101
First-year Seminar

## Total 17

Spring Semester, First Year
BIO 151 (UC) General Biology II 4
CHE 111 General Chemistry II 4
EN 102 (UC) Freshman Composition II 3
UC humanities elective 3
UC social sciences elective 3
Total 17

| Fall Semester, Second Year |  |  |
| :--- | :--- | :--- |
| BMS 370 | General Microbiology | 4 |
| CHE 210 | Organic Chemistry I | 4 |
| PHY 110 | General Physics I | 4 |
| UC | fine arts elective | 3 |

Total 15
Spring Semester, Second Year
CHE 211 Organic Chemistry II 4
PHY 111 General Physics II 4
BMS 372 Pathogenic Microbiology 4
UC UC elective 3
Total 15
Fall Semester, Third Year

| CHE 315 | Biochemistry | 4 |
| :--- | :--- | ---: |
| UC | UC elective 2 | 3 |
|  | Microbiology elective | $3-4$ |
|  | science elective | 4 |

Total 14-15
Spring Semester, Third Year
BMS 375 Immunology 4
Microbiology elective ${ }^{3} \quad 4$
science elective 4
UC UC Capstone 3
Total 15
Fall Semester, Fourth Year
BMS 478 Microbiology Seminar 1
Immunology elective 3-4
science elective 4
Chemistry elective ${ }^{4} \quad 4$
UC UC elective 3
Total 15-16
Spring Semester, Fourth Year
BMS 479 Microbiology research 2
Microbiology electives ${ }^{3}$ 8
UC social science elective 3
humanities elective 3
Total 16

1. Minimum mathematics requirement: MA 140 (Pre-Calculus).

For those interested in graduate or professional schools,
MA 141-142 (Calculus) is recommended.
2. MA 275 (Biostatistics) strongly recommended.
3. BIO 471 (Molecular Genetics) and BMS 470 (Virology) strongly recommended.
4. CHE 215 (Analytical Chemistry) strongly recommended.

Microbiology and Science electives
BIO 326 Animal Parasitology 4
BIO 346 Cell Physiology 4
BIO 471 Molecular Genetics 4
BMS 278 Research \& Technology 3
BMS 373 Mycology 4
BMS 470 Virology 4
BMS 472 Biotechnology 4
BMS 473 Infections of Leisure 3
BMS 474 Power of Plagues 3
BMS 476 Environmental Microbiology 4
BMS 481 Research Methods in Biomedical Sciences 3
BMS 482 Independent Study in Microbiology I 4
BMS 483 Independent Study in Microbiology II 3-4
BMS 526 Epidemiology 3
BMS 584 Emerging \& Re-emerging Infectious Disease3
BMS 585 Outbreak Control 3
Immunology (and Science) electives
BMS 378 Vaccines 4
BMS 482 Independent Study in Immunology I 3-4
BMS 483 Independent Study in Immunology I 3-4
BMS 473 Infections of Leisure 3
BMS 474 Power of Plagues 3
BMS 525 Vaccine Preventable Diseases 4
BMS 561 Immunohematology 4
BMS 595 Transplantation Immunology 3
BMS 596 Immunology of Infectious Diseases 3
Recommended Science and Microbiology electives
BIO 211-212 Anatomy \& Physiology I \& II 4
BIO 282 Human Genetics 4
BIO 317 Developmental Biology 4
BMS 332 Histology 4
Additional electives may be selected with the approval of the department chair.

## Minor in Microbiology and Immunology

The Department of Biomedical Sciences offers a minor in microbiology and molecular biology, which provides students with a fundamental knowledge of the theories, principles and research techniques in this exciting and rapidly evolving field. The program is committed to helping students develop the ability to ask significant scientific questions and then utilize critical thinking skills and modern research laboratory technology to solve these problems successfully.

Students are required to complete BMS 370
(Microbiology) and at least four of the courses indicated below with a grade of C or better.

## Required Courses

A total of 20 credits is required for completion of the microbiology and molecular biology minor.
Course Title Credits

BMS 370 General Microbiology 4
Plus, take four of the following:
BIO 326 Animal Parasitology 4
BIO 328 Clinical Human Animal Parasitology 4
BIO 346 Cell Physiology 4
BIO 471 Molecular Genetics 4
BMS 372 Pathogenic Microbiology 4
BMS 373 Mycology 4
BMS 375 General Immunology 4
BMS 378 Vaccines 4
BMS 470 Virology 4
BMS 472 Biotechnology 4
BMS 473 Infections of Leisure 3
BMS 474 Power of Plagues 3
BMS 475 Current Topics 4
BMS 476 Environmental Microbiology 4
BMS 481 Research Methods in Biomedical Sciences 3
BMS 482 Independent Study in Microbiology I 3-4
BMS 483 Independent Study in Microbiology II 3-4
Graduate courses for the Microbiology and Immunology
Minor (permission required)
BMS $570 \quad$ Virology (cannot be combined with BMS 470) 4
BMS 526 Epidemiology 3
BMS 542 Advanced Microbiology 3
BMS 569 Antimicrobial Therapy 3
BMS 573 Mycology 4
BMS 575 Food Microbiology 4
BMS 584 Emerging \& Re-emerging Infectious Disease 3
BMS 585 Outbreak Control 3
BMS 595 Transplantation Immunology 3
BMS 596 Immunology of Infectious Diseases 3

## Premedical Studies Program

Students majoring in microbiology and immunology may fully participate in the premedical studies program. The curriculum in this degree program can fulfill the science prerequisites for most professional schools. Students should refer to page 28 for more information about the premedical studies program and contact the Prehealth Advising Office for further academic advising.

## Department of Diagnostic Imaging

Bachelor of Science in Diagnostic Medical Sonography
Bachelor of Science in Radiologic Sciences

## Bachelor of Science in Diagnostic Medical Sonography

The bachelor of science in diagnostic medical sonography is a three-year accelerated degree, which also has an option to complete the degree in four years. The mission of the diagnostic medical sonography program at Quinnipiac University is to provide a quality and comprehensive education, through didactic, laboratory and clinical experiences, that will prepare students to become multicredentialed sonographers. The program offers multiple clinical assignments to provide maximum exposure to diversified sonographic procedures.

The program prepares students to be competent in the art and science of diagnostic medical sonography, both for career entry and advanced study. Graduates of the program are prepared to meet the needs of the community for highly qualified professionals.

The objectives of the program are as follows:

- Students will be clinically competent.
- Students will demonstrate effective communication skills.
- Students will demonstrate critical thinking.
- Students will grow as professionals.


## General Information

Diagnostic medical sonographers play a critical role in the health care team. The sonographer provides patient services using high-frequency sound waves that produce images of internal structures. Working under the supervision of a physician responsible for the use and interpretation of ultrasound procedures, the sonographer helps gather sonographic data to diagnose a variety of conditions and diseases, as well as monitor fetal development.

This program offers didactic, laboratory and clinical training in multiple subspecialties of sonography including abdominal and small parts, breast, vascular technology, OB/GYN and musculoskeletal imaging for the student who is
motivated to become a multicredentialed member of this profession.

To prepare students for careers in sonography and certification examinations in the subspecialty areas, Quinnipiac offers a BS in diagnostic medical sonography. Graduates are ready for entry-level employment as sonographers.

The first year of the bachelor's degree program consists of University Curriculum studies in addition to an introductory course into the field of diagnostic medical sonography. The professional component of the program begins in the second year of study. During the second and third years, the students concentrate on didactic sonography classes and laboratory sessions on campus and clinical education at multiple clinical education centers. The curriculum is structured so students can apply the knowledge and skills developed in the classroom and laboratory to the care of patients in the clinical setting. Beginning in the fall semester of the sophomore year and continuing throughout the program, didactic and clinical courses are taken simultaneously to provide the opportunity for immediate application and reinforcement.

At the end of the junior year, students are eligible for graduation with their bachelor's degree in diagnostic medical sonography, and are eligible to apply for the American Registry of Diagnostic Medical Sonography certification examinations. Graduates may take the Sonography Physics and Instrumentation examination in addition to the following ARDMS specialty examinations: abdomen and small parts, breast, vascular technology, obstetrics/gynecology and musculoskeletal imaging.

## Policies

In addition to the general policies of Quinnipiac University, such as due process and academic honesty, the following apply to students enrolled in the diagnostic medical sonography program:

## Progression in the Program

After completion of the freshman year, a cumulative GPA of 2.85 and a programmatic GPA of 3.0 are required to progress into the major. Students must maintain a cumulative GPA of 2.85 and a programmatic GPA of 3.0 to remain in academic good standing throughout the program. If a student does not maintain the GPA requirements at any point during the professional component of the program, the student may be dismissed from the program.

## Transportation

Multiple clinical education centers are used throughout the professional component of the program. Students are responsible for their own transportation to and from these sites.

## Summer Study

All students are required to perform one clinical assignment during the summer semester, second year (DMS 270). This clinical practicum is performed during summer sessions I and II and may be performed only in a clinical education site currently affiliated with Quinnipiac's diagnostic medical sonography program.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Diagnostic Medical Sonography Curriculum Course Title Credits

## Fall Semester, Freshman Year

BIO 101 (UC) science 4
EN 101 Freshman Composition 3
FYS 101 First-year Seminar 3
MA 275 (UC) Quantitative Literacy 3
UC UC elective 3
RS/DMS 100 Foundations of Diagnostic Imaging 1
Total 17
Spring Semester, Freshman Year

| BIO 102 | (UC) science |
| :--- | :--- | :--- |

PHY 101 Physics 4
EN 102 (UC) Freshman Composition 3
UC UC elective 3
DMS 101/101L Intro to Sonography 4
Total 18
Summer Semester, Freshman Year (online or on campus)
UC UC elective 3
UC UC elective 3
Total 6

| Fall Semester, Sophomore Year |  |  |
| :--- | :--- | :--- |
| BIO 211 | Anatomy \& Physiology I | 4 |

UC UC elective 3
DMS 200 Sonography Physics \& Instrumentation I 3
DMS 210/210L Abdominal \& Small Parts Sonography 4
DMS 250 Sonography Clinic I 3
Total 17
Spring Semester, Sophomore Year
BIO 212 Anatomy \& Physiology II
DMS 201 Sonography Physics \& Instrumentation II ..... 3
DMS 220/220L Vascular Sonography ..... 4
DMS 260 Clinical Education II ..... 3
RS/DMS 297/
297L Methods of Patient Care with lab ..... 3

Total 17
Summer Semester, Sophomore Year
DMS $270 \quad$ Clinical Education III ..... 5
UC UC elective ..... 3
Total 8
Fall Semester, Junior Year
RS 201/DMS 205 Gross Anatomy Lab I ..... 1
UC UC elective ..... 3
DMS 330/330L OB/GYN Sonography ..... 4
DMS $380 \quad$ Clinical Education IV ..... 3
BMS 318 Pathophysiology ..... 3
RS/DMS 414 Research Analysis \& Critique ..... 3
Total 17
J-term, Junior Year
UC UC elective ..... Total 3
Spring Semester, Junior Year
UC UC Capstone ..... 3
RS 202/DMS 206Gross Anatomy Lab II ..... 1
DMS 340/340L Breast Sonography ..... 4
DMS 350/350L Musculoskeletal Sonography ..... 4
DMS 390 Clinical Education V ..... 3
DMS 425 Thesis ..... 3
Total 18
Total for Degree 121

1. Initial placement in the English and mathematics courses is determined by placement examination and an evaluation of high school units presented. The minimum mathematics requirement is MA 275 or its equivalent.
2. BIO 101-102 and PHY 101 are required courses for the diagnostic medical sonography program and may be used to meet the University core sciences requirement.
3. All diagnostic medical sonography course requirements must be completed in the appropriate semester as indicated above.

## Bachelor of Science in Radiologic Sciences

The bachelor of science in radiologic sciences is a three-year accelerated degree, with the option to complete the degree in four years. The radiologic sciences program supports the mission statements of both Quinnipiac University and the School of Health Sciences and their commitment to excellence in education. The mission of the radiologic sciences program at

Quinnipiac University is to develop students' technical and interpersonal communication skills through a logical, organized and rigorous sequence of didactic, laboratory and clinical experiences. The program offers multiple clinical assignments to provide maximum exposure to diversified radiographic procedures and imaging protocols. In addition, the program prepares graduates competent in the art and science of radiography. Graduates of the program will meet the needs of the community as efficient and highly qualified professionals. The program prepares students for career entry or to move on to advanced study.

## General Information

Radiographers are essential members of the health care team. Their knowledge of radiation protection, physics and biology, as well as technical procedures, allows them to deliver the safest and highest quality patient care through the use of multiple imaging modalities. In the evolving world of medicine, high technology imaging has become multifaceted, both in modalities and operationally.

This program offers both knowledge and basic clinical cross-training in diverse aspects of patient care for the student who is motivated to become a member of this specialty.

To prepare students for careers in radiography and to introduce them to the subspecialty areas within diagnostic imaging, Quinnipiac offers a three-year accelerated BS degree in radiologic sciences. Students have the option, with consultation of their academic adviser, to complete the degree in four years. Graduates are ready for entry-level employment as radiographers.

The first year of the bachelor's degree program consists of University Curriculum studies. The component of the program accredited by the Joint Review Committee on Education in Radiologic Technology begins in the second year of study. During the second and third years, the students concentrate on didactic radiography classes and laboratory sessions on campus and clinical education at multiple clinical education centers. The curriculum is structured so students can apply the knowledge and skills developed in the classroom and laboratory to the care of patients in the clinical setting. Beginning in the spring semester of the sophomore year and continuing throughout the program, didactic and clinical courses are taken simultaneously to provide
the opportunity for immediate application and reinforcement.

At the end of the junior year, students will be eligible for graduation with their bachelor's degree in radiologic sciences, and are eligible to apply for the American Registry of Radiologic Technologists (ARRT) certification examination. Upon satisfactory achievement on this national examination, students are eligible for radiologic technology licensure in Connecticut and other states.

## Policies

In addition to the general policies of Quinnipiac University, such as due process and academic honesty, the following apply to students enrolled in the radiologic sciences program:

## Progression in the Program

After completion of the freshman year, a cumulative GPA of 2.5 and a programmatic GPA of 3.0 are required to progress into the major. Students must maintain a cumulative GPA of 2.5 and a programmatic GPA of 3.0 to remain in academic good standing throughout the program. If a student does not maintain the GPA requirements at any point during the professional component of the program, the student may be dismissed.

## Transportation

Multiple clinical education centers are used throughout the professional component of the program. Students are responsible for their own transportation to and from these sites.


## Summer Study

All students are required to perform one clinical assignment during the summer semester, second year (RS 253). This clinical practicum is performed during summer sessions I and II and may be performed only at a clinical affiliation currently approved by the Joint Review Committee on Education in Radiologic Technology (JRCERT) for the program.

The designated radiologic sciences course curriculum is subject to modification as deemed necessary to maintain a high-quality educational experience. Furthermore, Academic Standing and Progression Committee recommendations regarding student progression, discipline or dismissal will be considered on a case-by-case basis.

| Radiologic Sciences Curriculum |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| Fall Semester, Freshman Year |  |  |
| BIO 101 | (UC) Science | 4 |
| EN 101 | Freshman Composition | 3 |
| FYS 101 | First-year Seminar | 3 |
| MA 275 | (UC) Quantitative Literacy) | 3 |
| CHE 101 | (UC elective)* | 4 |
| or | UC elective | 3 |
| RS 100 | Foundations of Diagnostic Imaging | 1 |
| Total 17 or 18 |  |  |
| Spring Semester, Freshman Year |  |  |
| BIO 102 | (UC) Science | 4 |
| PHY 101 | (UC elective)* | 4 |
| or | UC elective | 3 |
| EN 102 | (UC) Freshman Composition | 3 |
|  | UC elective | 3 |
| RS 101 | Intro to Diagnostic Imaging | 3 |

Total 16 or 17
*Students take either CHE 101 or PHY 101. CHE 110 and PHY 110 also are acceptable. Either will count as a UC elective course. Students may take CHE 101 or PHY 101 in the fall or spring semester.
Summer Semester, Freshman Year (online or on campus)
UC elective
UC elective
Fall Semester, Sophomore Year
BIO 211 Anatomy \& Physiology I 4
UC UC elective 3
RS 241/241L Image Production \& Evaluation I with lab 4
RS 212/212L Radiographic Procedures I with lab 4
UC elective 3
Total 18

## Spring Semester, Sophomore Year

BIO 212 Anatomy \& Physiology II 4
RS 222/222L Radiographic Procedures II with lab 5
RS 242 Image Production \& Evaluation II with lab 4
RS 250 Clinical Education I 2
RS 297/297L Methods of Patient Care with lab 3
Total 18
$\begin{array}{lll}\text { Summer Semester, Sophomore Year } \\ \text { RS } 253 \quad \text { Clinical Education II } & 4\end{array}$
UC elective 3
Total 7
Fall Semester, Junior Year
RS 201 Gross Anatomy Lab I 1
RS 260 Radiation Physics \& Instrumentation 3
RS 232/232L Radiographic Procedures III with lab 5
RS 254 Clinical Education III 3
RS 318 Pathology in Imaging 3
RS 414 Research Analysis \& Critique 3
Total 18
J-term, Junior Year
RS 336DE Pharmacology-Radiologic Technologist 2
Total 2
Spring Semester, Junior Year (Graduate)
UC UC Capstone 3
RS 202 Gross Anatomy Lab II 1
RS 215 Radiation Protection \& Biology 3
RS 255 Clinical Education IV 3
RS 290/290L Radiographic Procedures IV with lab 4
RS 499 Thesis 3
Total 17
Total for Degree 120

1. Initial placement in the English and mathematics courses is determined by placement examination and an evaluation of high school units presented. The minimum mathematics requirement is MA 275 or its equivalent.
2. BIO 101-102 are required courses for the diagnostic imaging program and may be used to meet the University core sciences requirement.
3. All diagnostic imaging course requirements must be completed in the appropriate semester as indicated above.
4. The diagnostic imaging program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Dr., Suite 900, Chicago, Illinois 60606-2901; www.jrcert.org

## Department of Occupational Therapy

## Entry-level Master's Degree in Occupational Therapy

The Department of Occupational Therapy embodies three fundamental values: excellence in education, a sensitivity to students, and a spirit of community.

The foundation on which the occupational therapy professional education is built consists of University Curriculum requirements. The occupational therapy faculty's mission is to create an atmosphere that promotes student selfactualization, intellectual growth, service to the community, clinical scholarship and research.

The occupational therapy program cultivates student growth within a developmental-humanistic model. This process acknowledges that the student has physical, psychosocial and cultural needs and abilities. These abilities are developed through academic experiences that provide a general education, a professional knowledge base, and entry-level skills and judgment.

Faculty encourage clinical reasoning and problem solving, based on the principles, current philosophy and varied theories of the occupational therapy profession.

The three levels of the curriculum designfoundation, application and integration-provide a developmental framework for active learning. This design enables students to develop as entry-level therapists who can advocate for clients within the occupational therapy process using evidence to inform practice through practical and critical thinking. Graduates have the skills to learn for a lifetime with a strong professional identity in occupational therapy.

The learning outcomes for graduates of the entry-level 5.5-year combined BSHS-MOT degrees are as follows:

1. meet the essential learning outcomes of the University
2. understand the foundational concepts of occupation across the lifespan and across practice settings
3. comprehend, apply, analyze and evaluate the occupational therapy process
4. become an effective change agent through the implementation of the occupational therapy process
5. use evidence to inform practice decisions
6. solve problems in health care practice
7. assume an occupational therapy professional identity
8. meet the accreditation standards to practice as a generalist across a broad diversity of client variables and contexts including: age, cultural and ethnic background, socioeconomic, practice setting and levels of health and occupation
The faculty facilitates professional development by promoting a continuum of lifelong learning founded on classroom education, fieldwork experiences, laboratory experiential learning, contribution and service to the community. This program prepares graduates for entry-level practice and collaboration within a diverse health care community.

## General Information

Occupational therapy is a health care profession that includes the use of purposeful activities, or occupations, to assist persons in achieving their highest level of functioning or self-actualization. The definition which was adopted and approved by the Representative Assembly of the American Occupational Therapy Association (1986) states that: "Occupational therapy is the therapeutic use of self-care, work and play activities to increase independent function, enhance development and prevent disability. It may include the adaptation of tasks or the environment to achieve maximum independence and to enhance quality of life."

Occupational therapy is both an art and a science. An occupational therapist is able to administer and analyze a variety of evaluations that are utilized in the therapeutic relationship to establish intervention goals with the client involved in the occupational therapy process. The therapeutic interventions meet the needs of people of all ages who may have limitations because of physical, developmental, psychosocial, or challenges of the normal developmental process. The therapeutic interventions are adapted to meet individual needs and are in collaboration with the environment in which the person lives, works and plays. Occupational therapists are committed to promoting health, preventing injury or disability, and improving one's abilities.

Students are engaged in a variety of learning experiences to prepare them for the diverse practice of occupational therapy. The curriculum objectives include an emphasis on the arts and sciences with knowledge, skills and attitudes developed through an integration of classroom learning, experiential learning and laboratory fieldwork level I and II experiences. The content is delivered through collaborative and cooperative teaching strategies. Academic and clinical faculty promote the integration of theory into practice for individuals with diverse needs in varied practice environments, across the ages, with individual cultural, economic and social needs. Inherent within the profession and the program is the value and regard for all human beings as unique individuals who have the capacity to choose and seek their own meaning and purpose in life, reinforcing the developmentalhumanistic curriculum design. The occupational therapy student learns to become an effective change agent in the process of helping others to achieve their own satisfactory life occupations.

The occupational therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

The ACOTE address is:
c/o Accreditation Department
American Occupational Therapy Association
4720 Montgomery Lane, Ste. 200
Bethesda, MD 20814-3449
Phone: 301-652-6611 (ext. 2914)
Fax: 301-652-1417
Email: accred@aota.org
Website: www.acoteonline.org
The ACOTE on-site evaluation awarded the program full accreditation status in August 2009. The next evaluation will be 2018/2019. Graduates of the program are 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 earns credentials as an occupational therapist, registered (OTR). Most states require licensure to practice; however, state license eligibility is usually based on the results of the NBCOT certification examination. A summary of the pass rate is available upon request from the chair and is on the University website.

## Admission to the Program

The high school student applying for admission to the occupational therapy program should present four years of mathematics and four years of science. The general Quinnipiac University requirements for admissions must be met. All students applying for admission are strongly encouraged to have at least 20 hours of observation in occupational therapy. The department is prepared to provide reasonable accommodations for students who have special needs or challenges.

## Transfer Students from Other Colleges and Universities

Transfer students from other colleges and universities are accepted on a space-available basis into the occupational therapy program dependent upon successful completion of the University Curriculum and science prerequisite courses with a GPA of 3.0. Grades in math and science are considered when choosing appropriate candidates for the available slots. In addition the 20 hours of observation are strongly encouraged.

Once accepted into the program, students need to complete OT 111, 112, 210, 212 before they enter the junior year with a grade of B - or better in each course. These courses may be offered in the summer, in January and during the semester. All biology classes must be completed meeting the minimum standards set by the biology department.

## Transfer Students from within Quinnipiac

 Students currently attending Quinnipiac in other programs may qualify to be accepted into the occupational therapy program on a space-available basis. Students may apply to the department at the end of the spring semester of their freshman or sophomore year. All prerequisite courses as listed in the catalog must be completed with a GPA of 3.0. In addition, 10 hours of observation in occupational therapy are strongly encouraged. Once accepted into the program, students need to complete OT 111, 112, 210, 212 before they enter the junior year with a grade of B - or better in each course. All math and science courses must be completed prior to the junior year. Grades in math and science are considered when choosing appropriate candidates for the available slots. All biology classes must be completed according to the standards set by the biology department.
## Professional Component

Entry into the junior year (professional program) depends upon a B- or better in OT $111,112,210$, 212 , and satisfactory completion of all lower division requirements with a minimum 3.0 grade point average. A GPA of 3.0 each semester must be maintained in the occupational therapy courses during the junior, senior and graduate years. All professional courses in the junior, senior and graduate years are accepted only if the student earns a grade of "C+" or above. All fieldwork level I courses (as identified in the course descriptions and student manual) must be completed with a minimal grade of $\mathrm{B}+$. A grade lower than a $\mathrm{B}+$ in any fieldwork level I course or a course grade of C or lower with a semester GPA of less than 3.0 will result in dismissal from the program. All three fieldwork level II experiences must be completed with a "P" or pass to graduate.

If a student is dismissed from the program because of low grades, a semester GPA below a 3.0, or an "F" or "W" in Fieldwork Level II Experience (OT 500, OT 580, and/or OT 581), the student may follow the appeal process in the student manual. If the OT Department Progression and Retention Committee overturns the dismissal and places the student on probation, the terms of the probation are final and no subsequent future appeals will be allowed. If a student does not meet a probation contract, then dismissal from the program will occur without the right of appeal.

All students are responsible for transportation to all fieldwork experiences and maintaining viable health insurance, malpractice insurance, CPR certification, and immunizations according to their fieldwork placements. Membership in the American Occupational Therapy Association is required yearly.

Initial placement in the English and mathematics courses is determined by examination and an evaluation of high school units presented. The minimum mathematics requirement is MA 275 or its equivalent. BIO 101-102 are required for graduation and may be used to meet the University Curriculum sciences requirement. The occupational therapy course requirements must be fulfilled in the appropriate semester as indicated. The final three years of the program are a full-time, day program. Deviations from the sequence, waivers from occupational therapy courses and transfer courses from other occupational therapy programs must be
approved by the Occupational Therapy Progression Committee and the department chairperson.

A felony conviction may affect a graduate's ability to sit for the certification exam or attain state licensure. Criminal background checks are required in the summer prior to their junior year and are updated, if required, before each Fieldwork Level II experience.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

| Entry-level Master's Degree in |  |  |
| :--- | :--- | ---: |
| Occupational Therapy Curriculum |  |  |
| Course | Title |  |
| Credits |  |  |
| Fall Semester, First Year |  |  |
| BIO 101 | (UC) Science | 4 |
| EN 101 | (UC) Freshman Composition | 3 |
| MA 275 | (UC) Quantitative Literacy | 3 |
| UC | Social Sciences | 3 |
| FYS 101 | First-year Seminar | 3 |
| OT 111 | Fundamentals of Occupational Therapy | 1 |

Total 17
Spring Semester, First Year
BIO 102 (UC) Science 4

EN 102 (UC) Freshman Composition 3
UC Humanities 3
UC UC elective 3
UC Social Sciences 3
OT 112 Occupation Based Activity Analysis 1
Total 17
Fall Semester, Second Year
BIO 211 Anatomy \& Physiology I 4
UC Fine Arts 3
UC Elective 3
UC Elective 3
UC Humanities 3
OT 210 SL OT Skills in the Therapeutic Use of Self 2
Total 18
Spring Semester, Second Year
BIO 212 Anatomy \& Physiology II 4
OT 212 Group Leadership 2
PHY 101 Physics 101 4
UC UC elective 3
UC UC elective 3
Total 16

| Fall Semester, | Third Year |  |
| :--- | :--- | :--- |
| OT 322 | Functional Anatomy \& Kinesiology I | 3 |
| OT 322L | Functional Anatomy \& Kinesiology I Lab | 1 |
| OT 325 | Principles of Human Development \& |  |
|  | Occupation | 3 |
| OT 335 | Functional Neuroanatomy | 3 |
| OT 345 | Theory of Occupation: Wellness \& Seminar | 4 |
| OT 355 | Occupational Therapy Framework (SL) | 2 |
| OT 355L | Community Service Learning | 1 |

Total 17

## Spring Semester, Third Year

OT 323 Functional Anatomy \& Kinesiology II 3
OT 323L Functional Anatomy \& Kinesiology II Lab 1
OT 326 Principles of Human DevelopmentThe Older Adult
OT 336 Functional Neuro-behaviors 3
OT 356 Documenting OT Practice \& FW1 3
OT 357 Professional Seminar in Occupational Therapy 1
OT 364 Problem Based Learning: Risk Factors Impacting Human Occupation 1
UC UC Capstone 3
Total 18
Fall Semester, Fourth Year
OT 415 Health Conditions I 6
OT 420 Evaluative Process \& Lab with FWI 8
OT 445 Applied Theory in OT 3
Total 17
Spring Semester, Fourth Year
OT 416 Health Conditions II 6
OT 421 OT Intervention Strategies \& Lab with FW I 8
OT 446 Group Process \& Lab 4
OT 467 Problem Based Learning Groups Health Conditions \& Occupation II

Total 19
Total credits 139
Upon successful completion of the fourth year, the BS in health science studies is awarded. Award of this degree leads to matriculation into the graduate level of the program. Completion of all of the requirements for the BS degree are required to move to 500-level fieldwork and courses.

## Summer Between Fourth Year \& Graduate Year

OT 500 Fieldwork Level II 6
Twelve weeks of full-time supervised experience. All FWII policies must be followed according to the OT program manual available from the chairperson.

Fall Semester, Graduate Year

| OT 510 | Impact of Laws \& Regulations on |
| :--- | :--- |
|  | OT Practice |

OT 511 Administration \& Management in OT 4
$\begin{array}{ll}\text { OT } 535 & \text { Integrative Interventions: Sensory } \\ & \text { Integration \& Neurorehabilitation }\end{array}$
OT 550 OT Research 4
OT 560 Contemporary Modalities Lab 1


All fieldwork must be completed within 12 months from completion of course work.

All course work and fieldwork must be completed with grades as stated in the occupational therapy program manual. Retention and dismissal criteria are also written in the occupational therapy program manual which is available from the chairperson. Any variations in the program of study leading to the MOT must be approved by the Occupational Therapy Retention and Progression committee. The occupational therapy course work must be completed in the sequence provided on a full-time basis. The only exceptions, which require approval from the Occupational Therapy Retention and Progression Committee, may be transfer students.

## Department of Physical Therapy

Bachelor of Science in Athletic Training and Doctor of Physical Therapy
Doctor of Physical Therapy
(three- or four-year preprofessional option and three-year professional component)

## Bachelor of Science in Atbletic Training and Doctor of Physical Therapy (7years)

Select candidates from high school may apply to the combined AT-DPT degree. Upon completion of four years of study, students will receive a bachelor of science in athletic training/sports medicine and will be guaranteed admission into the three-year graduate DPT program. All preprofessional requirements of the professional graduate DPT program are required for those students selected for admission into the combined AT-DPT degree.

Students enrolled in the athletic training program, or other majors that provide prerequisite requirements for the graduate DPT program may apply for entry into the three-year doctor of physical therapy graduate program during the senior year of their BS program. Admission is competitive and is based on performance and space availability. Freshmen enrolled in the dual major AT-DPT program with the guarantee of admission into the graduate DPT program based upon successful completion of requirements must complete the AT-BS program prior to enrollment in the graduate DPT program. If students enrolled in the AT-DPT dual program do not complete the AT-BS, they must re-apply to the DPT program via Quinnipiac University Graduate Admissions.

See physical therapy for required standards to successfully complete the preprofessional component of that program. Additionally, all athletic training classes must be completed with a B- or better and an overall GPA of 3.2.

## Entry-level Doctor of Physical Therapy

## Program Philosophy

Excellence in physical therapy education is developed in cooperation with the larger University and health science community that is student centered and focused on academic distinction. Our program seeks to enhance the professional development of every student and faculty member through a variety of academic, scholarly and service opportunities. This philosophy is well represented by the program's physical resources and integrated curriculum that links foundational and medical sciences, clinical practice and professionalism.

## Program Mission Statement

An education in physical therapy at Quinnipiac University embodies both the University's commitment to its three core values: highquality academic programs, a student-oriented environment and a strong sense of community, and the American Physical Therapy Association's core values: accountability, altruism, compassion/caring, excellence, integrity, professional duty and social responsibility. The program in physical therapy prepares students to become competent and compassionate entry-level physical therapists, who are able to practice in a variety of settings serving diverse populations across the lifespan.

To achieve its mission, the program in physical therapy

- builds on a strong foundation of liberal arts and sciences
- cultivates critical and reflective thinking, clinical decision-making, and lifelong learning by utilizing an evidenced-based learning model, authentic assessments and a variety of learning experiences that include interactive technology. This learning model features small lab sizes, hands-on activities, visits to area clinics and opportunities to engage in professional development forums and community interdisciplinary collaboration
- provides both in-class and in-clinic opportunities for students to engage in the essential elements of patient/client management
- supports faculty teacher-scholars who are effective teachers and who collectively engage in scholarship, professional development, direct patient care and University and community service


## General Information and Department Goals

The program in physical therapy is divided into a three- or a four-year preprofessional component leading to a bachelor of science in health science studies and a three-year professional graduate component leading to the doctor of physical therapy. The preprofessional component provides a broad liberal arts education, a solid basic science foundation and a concentration area of study (completion of minor or specialty concentration) in preparation for the professional component.

Based on the stated mission, the Department of Physical Therapy has set forth the following goals for the program:

- a high-quality, entry-level education
- effective staff support
- PT clinical partnerships
- high-quality clinical education opportunities
- opportunities for student service

Student goals include the ability to demonstrate the skills necessary for entry-level clinical practice, to participate in research and/or service learning, demonstrate effective education of patients, families, peers, other health professionals and the community, and to participate in service.

Faculty goals include providing effective teaching, as well as participating in scholarship and in service.

The physical therapy program at Quinnipiac University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street,
Alexandria, Virginia 22314
telephone: 703-706-3245
email: accreditation@apta.org
website: www.capteonline.org.
At the end of the spring semester of the first undergraduate year, students are required to select and adhere to course work in either the three- or four-year preprofessional track. If the three-year track is selected, students will not be allowed transfer into the four-year curriculum at a later date. The decision for a three-year versus four-year track is individual, yet multifactorial. Factors to be considered include, but are not limited to, the following: accumulation of college credits upon entering the University, involvement in athletics, financial aid, necessity of summer and/or J-term course work and study abroad opportunities.

## Essential Function Requirements

Admission to Quinnipiac University is open to all academically qualified students without regard to age, race, color, religion, sex, handicap or national origin. One of the purposes of the Quinnipiac's physical therapy program is to provide graduates with a broad and basic preparation for professional physical therapy practice. The entry-level doctor of physical therapy program offered at Quinnipiac prepares graduates for roles in state-of-the-art practice. Therefore, a student who is accepted to the program must be able to meet the cognitive, affective and psychomotor requirements of the required curriculum. A graduate is expected by employers, consumers and other health care providers to assume specific roles and responsibilities in a competent and safe manner. Therefore, all knowledge and skills that are part of the physical therapy curriculum must be mastered for successful completion of the program. This includes successful demonstration of these skills in both campus laboratory simulations and in actual clinical settings.

The physical therapy faculty has developed a set of essential functions that provide performance guidelines necessary for mastery of the knowledge and skills necessary to meet physical therapy curriculum objectives. They are designed to ensure the safety of the student and those who are entrusted to his/her care.

For enrollment, continued progression and completion of the physical therapy program, each student must be able to perform pursuant to certain essential functions. The term "essential function" refers to all nonacademic criteria used for admission and participation in a program. They evolve from the practice of physical therapy, and apply to all students. They are not established to discriminate for or against a person with a disability, and ensure that a student can benefit from the program offerings. The skills and abilities that have been identified as necessary to meet physical therapy curricula essential function requirements include, but are not limited to, the following:

## Sensory Ability

To provide quality care, a student is expected to possess functional use of the senses of vision, touch, hearing and smell. All data received by the senses must be integrated, analyzed and synthesized in a consistent and accurate manner. In addition, the
student is expected to possess the ability to distinguish color, perceive pain, pressure, temperature, position, equilibrium and movement. The student is expected to be able to observe the patient/client to accurately assess any alteration in functional abilities. Inherent in this observational process is the functional use of the senses and sufficient motor capability to carry out the necessary assessment activities, such as auscultation, percussion and palpation. The student also should be able to observe a patient accurately and completely at both from a distance and close at hand.

## Communication Ability

The student is expected to be able to communicate verbally and nonverbally in an effective and sensitive manner, at a competency level that allows one to safely carry out the essential functions of physical therapy care. This requires the ability to see, speak, hear, read and write effectively in English, and utilize technology effectively. Students also are expected to be able to communicate effectively with fellow students, faculty and members of the health care team.

## Motor Ability

The student is expected to be able to perform gross and fine motor movements, bilaterally to provide competent care. Examples of care that the student must be able to perform include, but are not limited to, lifting, turning, transferring, transporting and ambulating individuals. The student is expected to have the manual dexterity and/or psychomotor skills necessary to perform and/or to assist with procedures, treatments, administration of medications by all routes, and emergency interventions in a variety of settings with individuals of various ages. The student must be able to administer CPR without assistance. The student is expected to have sufficient motor function to elicit information from individuals by palpation, auscultation, percussion and other diagnostic maneuvers. The student is expected to be able to maintain the physical strength, equilibrium and stamina to perform satisfactorily in clinical physical therapy experiences on multiple days per week during the semester. In addition, students are required to participate in four clinical affiliations, which involves at least eight weeks of full time patient care.

## Intellectual-Conceptual Ability

The student is expected to have the ability to develop problem-solving skills, demonstrate the ability to establish care plans, and set priorities. This includes the ability to measure, calculate, analyze and synthesize objective and subjective data and make decisions that reflect consistent and thoughtful deliberation of the appropriate data. Students need to be mindful of the degree of personal risk, and take proper precautions to prevent untoward incidents associated with commonly occurring hazards in the work environment such as blood borne pathogens, and environmental allergens such as latex or iodine preparations.

## Behavioral/Social/Professional Attributes

The student is expected to have the emotional stability required for the full utilization of his/ her intellectual abilities, the exercise of sound judgment, complete assessment and intervention activities, and develop sensitive interpersonal relationships with patients/clients, families and others responsible for health care. The individual is expected to have the ability to function effectively under stress, and exhibit the professional values of responsibility, accountability, altruism, human dignity, integrity and social justice.

## Admission to the Program

Candidates applying for admission to the physical therapy program from high school are required to have no less than three years of high school college preparatory mathematics (four years are preferred), one year of biology, one year of chemistry and one year of physics. In addition, the scores of the Scholastic Assessment Test or the College Entrance Examination board of the American College Testing program are important considerations. Related health care experience is highly desirable. Prospective candidates also must satisfy general Quinnipiac University admission requirements.

All applications must include two letters of reference, and a personal interview may be required with representatives of the admissions office to discuss program requirements and the applicant's professional interests and commitments. Applicants must have observation hours in at least two different clinical settings, preferably one in a rehabilitation facility and one in an acute care setting. A minimum of 10 hours in at least two settings ( 20 hours total) is required.

Applicants should forward to Admissions a signed note from the physical therapist at each setting verifying observation hours. Applications are accepted for admission to the fall semester only. All applications are processed and screened by the vice president and dean for admissions for selection to the program. Reference letters, other correspondence and inquiries relating to an application should be directed to the dean of undergraduate admissions. Admission to Quinnipiac does not guarantee admission to the professional graduate DPT program in physical therapy, unless officially accepted into the program as a freshman.

## Preprofessional Bachelor's Degree

## Program Requirements

To be eligible for the professional graduate DPT program, students must achieve a minimum overall GPA of 3.2 during the preprofessional component of the program. In addition, a 3.2 cumulative GPA in preprofessional program science and math course work is required for admission to the professional graduate DPT component of the program. ( D and F grades in the required preprofessional science and math courses are unacceptable.) Initial placement in the English and mathematics courses is determined by examination and an evaluation of high school units presented. The minimum mathematics requirement is MA 141. All students are required to complete a minor or concentration in a subject area of their choice. The following courses in the preprofessional component must be successfully completed with a C- or better and are calculated into the GPA for science and math course work.

## Entry-level Doctor of Physical Therapy

 Preprofessional Undergraduate Courses Calculated into 3.2 Math/Science
## Requirement

| Course | Title | Credits |
| :--- | :--- | ---: |
| BIO 101-102 | General Biology | 8 |
| BIO 211-212 | Anatomy \& Physiology | 8 |
| BMS 300-301 | Human Performance Physiology | 8 |
| CHE 110-111 | General Chemistry | 8 |
| MA 141 | Calculus of a Single Variable I | 3 |
| MA 275 | Biostatistics | 3 |
| PHY 110-111 | General Physics | 8 |

Total Credits 46

## AP Credits and Course Substitutions

A student who scores a 4 on the AP exam for biology will be awarded credit for BIO 101-102.

A student who scores a 4 on the AP exam for calculus will be awarded credit for MA 141. If AP credits are awarded and accepted for CHE 110-111, the following must be taken in its place.
CHE 210
Organic Chemistry I
CHE 210L Organic Chemistry I Lab 1
CHE 211 Organic Chemistry II 3
CHE 211L Organic Chemistry II Lab 1
No other AP credits in the math and science categories will be accepted for program substitution. AP credits for other non-math and science core curriculum requirements will be accepted.

The Review and Evaluation Committee for the program in physical therapy is responsible for evaluating and screening candidates during the preprofessional and professional graduate components of the program. Requirements for the program in physical therapy were approved in conjunction with the accreditation of the program and are acceptable to the School of Health Sciences and Quinnipiac University administration.

## Professional DPT Program Requirements

Students in the professional graduate DPT component of the curriculum are required to achieve a GPA of 3.0 in each semester. In addition, a grade of $\mathrm{C}+$ or better is required in all professional graduate component courses. Students whose averages for each semester fall below 3.0 or receive a grade below $\mathrm{C}+$ may be subject to dismissal from the program. Transfer students are considered for admission to the professional graduate DPT program on a space-available basis.

For continuation in the program, all students must successfully complete all course work in the sequence identified. In addition to these academic requirements, all DPT students must be aware that there are additional requirements necessary to participate in scheduled clinical affiliations. Specific health requirements, including but not limited to: titers for mumps, measles and rubella, varicella and hepatitis B , annual physical exams, two-step PPDs, flu shots, current CPR certification and other mandates must be completed within the timeframe established by the clinical site at which a student has been placed. In addition, criminal background check updates and
drug testing also may be required. These mandates are facility-specific and change frequently without notice. Quinnipiac University has no authority over any clinical facilities' protocols. Students must comply with what is required at their specific clinical affiliation.

Clinical education is a vital component of physical therapy student education and is a significant part of the physical therapy curriculum at Quinnipiac University. Clinical education experiences occur through both integrated and full-time clinical experiences in a variety of settings throughout the country. Placement in specific settings, locations and clinical facilities is not ever guaranteed and individual student assignment occurs at the discretion of the faculty. Students are required to travel for clinical assignments. All associated housing and travel costs are the responsibility of the student.

## Combined Athletic Training (AT) Doctor of Physical Therapy (DPT)

Select candidates from high school may apply to the combined AT-DPT degree. Upon completion of four years of study, students receive a bachelor of science in athletic training and are guaranteed admission into the three-year graduate DPT program. All preprofessional requirements of the professional graduate DPT program are required for those students selected for admission into the combined AT-DPT degree.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Curriculum for four-year BS in

 Athletic Training for Freshman Entry (4+3) AT-DPT majorsA total of 132 credits is required for completion of the BS in athletic training.
Course Title Credits

Fall Semester, First Year
BIO 101/101L (UC) General Biology I with lab 4
CHE $110 \quad$ General Chemistry I with lab 4
EN 101 (UC) Elements of Composition I 3
UC Fine Arts 3
FYS 101 First-year Seminar 3
Total 17

## Spring Semester, First Year

AT 114 Introduction to AT/SM 2
AT 115 Introduction to Kinesiology 3
AT 116 Introduction to Fitness \& Conditioning* 2
BIO 102 (UC) Science 4
CHE 111 General Chemistry II with lab 4
EN 102 (UC) Elements of Composition II 3
Total 18
Fall Semester, Second Year
AT 214 Care \& Prevention of Athletic Injuries* 3
AT 216 Emergency Management of Athletic Trauma* 3
AT 250 Introduction to Evaluation \&
Treatment of Musculoskeletal Injury* 4
BIO 211 Anatomy \& Physiology I 4
MA 275 Quantitative Literacy (UC) 3
Total 17
Spring Semester, Second Year
AT 215 Therapeutic Modalities* 4
AT 210 Evidence-based Practice 2
AT 251 Evaluation \& Treatment of Lower
Extremity Musculoskeletal Injuries* 4
AT 290 Clinical Practicum I* 3
BIO 212 Anatomy \& Physiology II 4
Total 17
Fall Semester, Third Year
AT 330 Nutrition for Sports \& Fitness 3
AT 350 Evaluation \& Treatment of Upper
Extremity Musculoskeletal Injuries* 4
AT $390 \quad$ Clinical Practicum II* 3
BMS 300 Physiology of Human Performance I 4
UC UC elective 3
Total 17

## Spring Semester, Third Year

AT $351 \quad$ General Medical Assessment \& Treatment* 4
AT 352 Evaluation \& Treatment of Spinal Injuries* 4
AT $391 \quad$ Clinical Practicum III* 1
BMS 301 Physiology of Human Performance II 4
PSY 101 Social Sciences (UC) 3
Total 16
Fall Semester, Fourth Year
AT $450 \quad$ Administration \& Management 3
AT $490 \quad$ Clinical Practicum IV* 1
PHY $110 \quad$ General Physics I with lab 4
PSY 272 Abnormal Psychology 3
UC UC Capstone 3
Total 14

| Spring Semester, Fourth Year |  |  |
| :--- | :--- | ---: |
| AT 491 | Clinical Practicum V |  |
| MA 141 | Calculus of a Single Variable (UC) | 3 |
| PHY 111 | General Physics II with lab | 3 |
| UC | Humanities | 4 |
| UC | Humanities | 3 |
|  |  | 3 |
|  |  | Total 16 |

*These AT courses have a laboratory and/or clinical component.

## Curriculum for three-year BS in Health Science Studies for Freshman Entry (3+3) PT majors

A total of 122 credits is required for completion of the $B S$ in health science studies.
Fall Semester, First Year
Title CreditsCourse
BIO 101/101L
(UC science) General Biology I with lab ..... 4
CHE 110/110 ..... 4
EN 101 (UC) Elements of Composition I ..... 3MA Quantitative Literacy
(MA 141 Calculus I, program requirement) ..... 3
FYS 101 First-year Seminar ..... 3
Total 17Spring Semester, First Year
BIO 102/102L (UC science) General Biology II with lab ..... 4
CHE 111/111L General Chemistry II with lab ..... 4
EN 102 (UC) Elements of Composition II ..... 3UC Social Sciences elective(PS 101 General Psychology)3
UC Humanities elective ..... 3
Total 17
Summer Online
Elective ..... 3
ElectiveTotal 6
Fall Semester, Second Year
BIO 211/211L Anatomy \& Physiology I with lab ..... 4
PHY 110/110L General Physics I with lab ..... 4
MA 275 Biostatistics ..... 3
MSS 150 Speech as Communication ..... 3
UC UC elective ..... 3
Spring Semester, Second Year
BIO 212/212L Anatomy \& Physiology II with lab ..... 4
PHY 111/111L General Physics II with lab ..... 4
UC Humanities elective ..... 3
HSC 315 Bioethical Issues in the 21st Century ..... 3
or PL 222 Ethics in Biomedical Research \& Health Care Delivery ..... 3
UC UC Capstone ..... 3

## Summer Online

| UC | Social Science elective <br> (Abnormal Psychology) | 3 |
| :--- | :--- | ---: |
| UC | Elective | 3 |
|  |  | Total $\mathbf{6}$ |
| Fall Semester, Third Year |  |  |
| BMS 300 | Human Performance Physiology I with lab | 4 |
| BMS 200 | Biology of Aging | 3 |
|  | Elective | 3 |
| UC | Fine Arts elective | 3 |
|  | Elective | 3 |

Total 16
J-term Online

Elective

## 3

Total 3

## Spring Semester, Third Year

BMS 301 Human Performance Physiology II with lab 4
AT 440 Biomechanics 3
AT 214 Care \& Prevention of Athletic Injuries 3
AT 214L Care \& Prevention of Athletic Injuries lab 1
HSC 262 Nutrition in Health \& Illness 3
HM 404 Legal Aspects of Health Care Delivery 3
Total 17
Summer Online
Elective courses
6
Total 6
Total Credits 122

## Curriculum for four-year BS in <br> Health Science Studies for Freshman Entry (4+3) PT majors <br> A total of 122 credits is required for completion of the BS in health science studies.

Fall Semester, First Year
Course Title Credits

BIO 101/101L (UC) General Biology I with lab 4
CHE 110/110L General Chemistry I 4
EN 101 (UC) Elements of Composition I 3
MA 141 Calculus 3
FYS 101 First-year Seminar 3
Total 17
Spring Semester, First Year
BIO 102/102L (CC science) General Biology II with lab 4
CHE 111/111L General Chemistry II with lab 4
EN 102 (UC) Elements of Composition II 3
UC Social Sciences elective
(PS 101 General Psychology) 3
UC Humanities elective 3
Total 17

Fall Semester, Second Year

| BIO 211/211L | Anatomy \& Physiology I with lab | 4 |
| :--- | :--- | :--- |
| MA 275 | Biostatistics | 3 |
| UC | UC elective | 3 |
|  | Elective | 3 |
|  | Elective | 3 |

Total 16

| Spring Semester, Second Year |  |  |
| :--- | :--- | :--- |
| BIO 212/212L | Anatomy \& Physiology II with lab | 4 |
| UC | Social Sciences elective | 3 |
| MSS 150 | Speech as Communication | 3 |
| UC | Fine Arts elective | 3 |
|  | Elective | 3 |

$\begin{array}{ll}\text { Fall Semester, Third Year } & \\ \text { BMS } 300 \quad \text { Human Performance Physiology I with lab } 4\end{array}$
PHY 110/110L General Physics I with lab 4
UC UC Capstone 3
BMS 200 Biology of Aging 3
Total 14
Spring Semester, Third Year
BMS $301 \quad$ Human Performance Physiology II with lab 4
PHY 111/111L General Physics II with lab 4
HSC 262 Nutrition in Health \& Illness 3
Elective 3
Total 14
Fall Semester, Fourth Year
AT 440 Biomechanics 3
HSC 315 Bioethical Issues in the 21st Century 3
or PL 222 Ethics in Biomedical Research \&
Health Care Delivery
Elective
Humanities elective 3
Elective 3
Total 15
Spring Semester, Fourth Year
AT 214 Care \& Prevention of Athletic Injuries 3
AT 214L Care \& Prevention of Athletic Injuries Lab 1
HM 404 Legal Aspects of Health Administration 3
Elective 3
Elective 3
Total 13
Total Credits 122
The sequencing of course work for the three- or four-year preprofessional track is flexible; however, all requirements in the curriculum must be completed prior to entry into the graduate DPT program.

## Three-year Post-bachelor's Doctor of Physical Therapy (DPT degree) for Freshman Entry PT Students, Internal and External Transfer BS Students

A total of 112 credits is required for completion of the DPT.
Fall Semester, First Year
Course Title Credits

PT 503L Physical Therapy Process lab 2
PT 505 Kinesiology I 2
PT 505L Kinesiology I lab 1
PT 512 Human Anatomy I 4
PT 512L Human Anatomy I lab 0
PT 514 Neuroanatomy I 2
PT $519 \quad$ Professional Issues in Physical Therapy 2
PT 569 Education/Community Health Wellness 2
Total 15
Spring Semester, First Year
$\begin{array}{lll}\text { PT } 502 & \text { Introduction to Clinical } \\ & \text { Decision Making }\end{array}$
PT 504L Physical Therapy Process II 4
PT $506 \quad$ Kinesiology II 1
PT 506L Kinesiology lab II 1
PT 513 Human Anatomy II 3
PT 513L Human Anatomy II lab 0
PT 515 Neuroanatomy II 2
PT 528 Musculoskeletal I 3
PT 528L Musculoskeletal I lab 1
Total 18
Summer Semester
PT $517 \quad$ Clinical Education Seminar 1
PT 520 Pathophysiology I 3
PT 523 DE Applied Pharmacology I 1
PT 529 Musculoskeletal II 2
PT 529L Musculoskeletal II lab 2
PT 531 Acute Care \& Cardiopulmonary I 3
PT 531L Acute Care \& Cardiopulmonary I lab 1
PT 548L Physical Agents 1
Total 14
Fall Semester, Second Year
PT $671 \quad$ Clinical Education I (10-12 weeks) 4
PT 675 HY Normal/Abnormal Gait 1
PT 685 HY Evidence in Practice 2
Total 7
Spring Semester, Second Year
PT 626 Pathophysiology II 3
PT 627 DE Applied Pharmacology II 1
PT 628 Acute Care \& Cardiopulmonary II 2
PT 628L Acute Care \& Cardiopulmonary II lab 1
PT $652 \quad$ Professional Issues in Physical Therapy II 1
PT $664 \quad$ Neurological Rehabilitation I 4

| PT 664L | Neurological Rehabilitation I lab | 0 |
| :--- | :--- | :--- |
| PT 666 | Capstone I | 2 |
| PT 668 | Psychosocial Aspects of |  |
|  | Physical Disability | 2 |
| PT 668L | Psych. Aspects of Physical Disability lab | 0 |

Total 16

## Summer Semester

PT $646 \quad$ Prosthetics \& Orthotics 2
PT 646L Prosthetics \& Orthotics lab 0
PT 657 Diagnostic Imaging 2
PT 658 Differential Diagnosis 3
PT 661 Administration \& Leadership in PT 3
PT 665 Neurologic Rehabilitation II 3
PT 665L Neurologic Rehabilitation II lab 0
PT $676 \quad$ Capstone II 1
Total 14
Fall Semester, Third Year
PT $730 \quad$ Musculoskeletal III
PT 730L Musculoskeletal lab III 1
PT $736 \quad$ Pediatric Rehabilitation 4
PT 736L Pediatric Rehabilitation lab 0
PT $744 \quad$ Physical Therapy Skills elective 2
PT $746 \quad$ Spinal Cord Injury Rehabilitation
PT 746L
PT 759 PBL
Spinal Cord Injury Rehabilitation lab
PT 767 Capstone III 2
Total 16
Spring \& Summer Semesters, Third Year
PT $781 \quad$ Clinical Internship II 6
PT $782 \quad$ Clinical Internship III 6
Total 12

Total Credits 112
*The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.


## Department of Physician Assistant Studies

Bachelor of Science in Health Science Studies Master of Health Science

## Entry-level Master of Health Science—Physician Assistant Preprofessional Component

The mission of the Quinnipiac University entrylevel master's physician assistant program is to begin the education and preparation of master'slevel physician assistants who practice medicine with physicians and other members of the health care team. The program has been designed to benefit from faculty expertise in both the graduate and undergraduate divisions as well as practitioners from a variety of clinical settings and specialties. These collaborative strategies are intended to prepare graduates to enter the physician assistant profession and ultimately become outstanding health care providers.

## General Information

The program offers the qualified pre-physician assistant student the opportunity to pursue a master's degree in the physician assistant program at Quinnipiac. The program is divided into a fouryear preprofessional component and a 27 -month professional component. To progress to the professional phase, all ELMPA courses and program requirements must be completed within four years. Following successful completion of the preprofessional component, students receive a bachelor of science in health science studies.

The preprofessional component provides students with a well-rounded education and a strong focus in biological and health science studies. This very structured and organized undergraduate program not only prepares students for the rigors of the professional component of the program, but also introduces students to the role and responsibilities of physician assistants as well as the six competencies for the physician assistant profession. The program addresses the need for medical experience by providing students with emergency medical technician (EMT) training as well as extensive time shadowing practicing physician assistants.

EMT ride time and preclinical experiences take place at off-campus sites generally within 50 miles of the Mount Carmel Campus. Students are responsible for transportation to and from all off-campus sites beginning in the sophomore year. In addition, students must meet specific program health and immunization requirements for participation in the preclinical experiences. Program costs associated with the preclinical affiliations and EMT course, including uniform, parking, certification exam, health requirements documentation, background check and additional program fees are the responsibility of the student.

## Program Requirements

Initial evaluation of the pre-physician assistant student by the Review and Evaluation Committee takes place at the end of the spring semester of the second year. To continue in the program, students must have a minimum cumulative GPA of 3.0 and a minimum cumulative science GPA of 3.0. Following the initial evaluation, students are evaluated after completion of each semester. Failure to maintain a minimum cumulative GPA of 3.0 and a minimum cumulative science GPA of 3.0 results in dismissal from the program. In addition, a minimum GPA (both cumulative and science) is required for participation in preclinical affiliations. All required courses must be completed with a course grade of C - or better.

By the fourth year, students are required to have accumulated at least 1,000 hours of documented direct patient contact through paid and/ or volunteer experiences (e.g., certified nurse's aide, phlebotomy technician, emergency room technician, EMT). While patient contact hours must be preapproved by program faculty, students are responsible for making their own arrangements to obtain these direct patient contact hours. In addition, all students are required to obtain student membership in the American Academy of Physician Assistants (AAPA).

## Technical Standards

All students entering the graduate physician assistant program at Quinnipiac University must be able to meet the established abilities and expectations of the graduate PA program technical standards, which can be found on the program's website. Upon admission to the ELMPA program,
students are required to review and verify that they understand the technical standards requirement. Prior to participation in the preclinical experiences, the student's primary care provider must verify, based on a complete history and physical examination, that the student meets the technical standards of the graduate PA program. In the event that a student is unable to fulfill these technical standards, he/she may not be able to participate in preclinical affiliations and may not be able to progress to the graduate PA program.

## Background Checks

Students should be aware that certain preclinical sites may require a criminal background check before a student is placed in the clinic or intern site. The University has procedures to assist students in obtaining such a background check. The cost of the background check is the responsibility of each individual student. All students are required to have a new or updated background check upon progression to the graduate physician assistant program.

## Requirements for Progression to the Graduate Physician Assistant Program

In order for a student in the entry-level master's physician assistant program to progress to the graduate physician assistant program at Quinnipiac University, the student must successfully complete all requirements to obtain a BS degree in health science studies, including all prerequisite courses for PA program admission. Students progressing to the professional phase of the program may not have any course failures or grades of incomplete, and no outstanding academic integrity or professionalism issues at the time of progression. In addition, students must meet the established requirements for direct patient contact hours and EMT certification. Prior to beginning the physician assistant program, students meet with a faculty member from the Department of Physician Assistant Studies for a final academic review. The student must meet all academic, curricular, professional, health and immunization, background check and technical standards requirements of the PA program to matriculate into the program.

## Admission to the Program

Candidates applying for admission must have: a minimum of three years of high school mathematics including geometry, algebra and precalculus; one year of biology; one year of chemistry and one year of physics. In addition, advanced electives in the biological sciences are recommended. Related health care experience is highly desirable.

Prospective candidates must also satisfy the admission requirements of Quinnipiac. Transfer students are not admitted to the entry-level master's physician assistant program. Admission into the preprofessional component of the program does not guarantee admission into the professional component of the program.

Please see the Graduate Studies section (p. 227) for information on the professional component of the entry-level master's physician assistant program.


| Summer I, Patient Contact Hours |  |  |
| :--- | :--- | :--- |
| Fall Semester, Second Year |  |  |
| BIO 211 | Anatomy \& Physiology I |  |
| CHE 210 | Organic Chemistry I | 4 |
| PHY 110 | General Physics | 4 |
| PY 388 | Clinical Training I (EMT)* | 4 |

## Spring Semester, Second Year

BIO 212 Anatomy \& Physiology II 4
CHE 211 Organic Chemistry II 4
PY $397 \quad$ Pre-Health Clinical Affiliation 3
PY $389 \quad$ Clinical Training II (EMT)* 3
UC UC elective 3
Total 17Summer II, Patient Contact Hours
Fall Semester, Third Year
BIO/BMS core science elective 3-4
BMS 318 Pathophysiology ..... 3
BMS 370 General Microbiology ..... 4
UC fine arts, humanities, social science ..... 3
UC fine arts, humanities, social science ..... 3

Total 16-17
Spring Semester, Third Year
BMS 203 Introduction to Medical Terminology ..... 2
BMS 304
or CHE 315 Biological Chemistry ..... 3-4
BIO/BMS core science elective ..... 3-4
BIO/BMS science elective ..... 3-4
UC UC Capstone ..... 3
Total 14-16
Summer III, Patient Contact Hours
Fall Semester, Fourth Year

| PY 400 | Pre-Physician Assistant Clerkship | 3 |
| :--- | :--- | ---: |
| BIO/BMS | core science elective | $3-4$ |
| PY 401 | Introduction to Clinical Problem Solving | 3 |
| BMS 200 | UC elective (Biology of Aging) | 3 |
| UC | fine arts, humanities, social science | 3 |

Total 15-17
Spring Semester, Fourth Year
PY 204 PA Seminar II ..... 1
BMS 332 Histology ..... 4
BIO/BMS science elective ..... 3-4
UC UC elective ..... 3
UC fine arts, humanities, social science ..... 3
Total 14-15
Total number of credits required for completion of the preprofessional component ..... 122*If student has current EMT licensure on admission to theprogram, two additional science electives are taken insteadof PY 388 and PY 389.

Students who have earned advanced placement credit or other college credit in an introductory-level science course are encouraged to still take BIO 101/102 and CHE 110/111 at Quinnipiac. Students opting out of those courses are required to take the equivalent number of hours at a higher level in the same area of course work. Students with AP credits in nonscience courses may elect to take only 14 credits in the fall semester of the first year.

## Acceptable Core Science Electives

(students must take at least three of the following):
BMS 310 Neuroanatomy I 3

BMS 320 Pharmacology 3
BMS 325 Toxicology 3
BMS 330 Endocrine Physiology 3
BMS 372 Pathogenic Microbiology 4

BMS 375
or HSC 375 Immunology 3-4
BIO 350 Cardiovascular Physiology 3
Additional Science Electives (students take two courses from core science electives or from this list):
BIO 282
or BIO 471 Genetics 3-4
BIO 298 Research Methods in Biology
or BMS 278 Research and Technology
BIO 317 Developmental Biology
BIO 328 Human Clinical Parasitology
BIO 329 Neurobiology
BIO 346 Cell Physiology
BIO 382 Human Genetics
BMS 276 Drug Development
BMS 378 Vaccines \& Vaccine Preventable Diseases 3
BMS 470 Virology 4
BMS 473 Infections of Leisure
or BMS 474 Power of Plagues
BMS 475 Special Topics in Microbiology 4
BMS 482 Independent Study (with permission) 2-4
BMS 595 Transplantation Immunology (with permission)
HSC 220 Health Care Essentials 3
HSC 225 Writing in the Health Professions
HSC 262 Nutrition in Health and Illness
HSC 270 Pillars of Public Health 3HSC 315 Bioethical Issues in the 21st Century3HSC 322Health Care Law3
Acceptable UC/Social Sciences
PS 101 Introduction to Psychology ..... 3
PS 232 The Concept of Personality \& Its Development ..... 3
PS 261 Social Psychology ..... 3
PS 262 Psychology of Women ..... 3
PS 272 Abnormal Psychology ..... 3
SO 101 Introduction to Sociology ..... 3
SO $280 \quad$ Illness \& Disability ..... 3
Acceptable UC Elective Outside Major
BMS 200 Biology of Aging ..... 3

## Department of Social Work

Master of Social Work
See the description of the MSW program on page 235 in the Graduate Studies section of this catalog.


## School of Nursing

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## School of Nursing

## Center for Medicine, Nursing and Health Sciences North Haven Campus

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## Mission Statement

To provide leadership in nursing and health care through innovative undergraduate and graduate education that embraces holism, interprofessionalism and inclusivity.

## Vision

To prepare transformational leaders in health care.

## Values

School of Nursing values include:

- diversity of ideas, persons and cultures
- supportive learning environments
- scholarly undertakings to advance education and practice
- ethical conduct in personal and professional arenas
- holistic nursing across the spectrum of health care
- interprofessional education and collaboration
- innovative learning methodologies
- systematic assessment and evaluation
- lifelong learning


## General Information

Nursing is a profession based on science, a culture of compassion, commitment to best practices, and connection to individuals. The practice of nursing is research-based, goal-directed, creative and concerned with the health and dignity of the whole person. The art of delivering quality nursing care depends upon the successful mastery and application of intellectually rigorous nursing knowledge.

## Career Development

In the School of Nursing, the assistant dean for career development works with students to explore majors and career interests through individual consultations and group sessions, and guides them through a career development process. Assistance is provided with resume and cover letter writing, interview preparation, conducting a job search and graduate school applications. Students can participate in experiential learning through community
service as well as internships, part-time and summer employment. A health professions career fair is held every spring at the North Haven Campus.

## Degrees in Nursing

## Bachelor's Degree

Bachelor of Science in Nursing
Traditional BSN Track for High School Graduates
Accelerated BSN Track for Second Degree Students
RN to BSN Completion Program (online)

## Graduate Degrees

Master of Science in Nursing
Post-bachelor's study Adult-Gerontology Nurse Practitioner Family Nurse Practitioner
Doctor of Nursing Practice
Post-bachelor's study:
Adult-Gerontology Nurse Practitioner Family Nurse Practitioner
Nurse Anesthesia
Post-master's study:
Care of Populations
Nurse Anesthesia
Nurse Leadership
For information about graduate studies, please see p. 238.

Please note-Courses with clinical components use multiple clinical education centers. Students are responsible for their transportation to and from these clinical agencies.

## Undergraduate Program Information

The undergraduate nursing curriculum, which integrates holism, fosters professional socialization for future roles and responsibilities within the profession. Graduates are prepared as generalists to provide evidence-based care. Bachelor's degree nursing education prepares the graduate for entry into professional nursing practice and provides the foundation for graduate study. The undergraduate nursing program is accredited by the Commission on Collegiate Nursing Education (CCNE).

## Graduate Program Information

The master of science in nursing program offers two tracks: adult-gerontology nurse practitioner and family nurse practitioner.

A doctoral-level graduate program preparing adult-gerontology, family nurse practitioners and nurse anesthetists is available for post-bachelor's degree nurses. The program also offers three doctoral-level post-master's tracks. For more information about these offerings, please see the Graduate Studies section of the catalog. The graduate program is accredited by the Commission on Collegiate Nursing Education (CCNE). The nurse anesthesia program is also accredited by the Council on Accreditation (COA) of Nurse Anesthesia Educational Programs.

## Admission Requirements: Undergraduate Nursing

The requirements for admission into the undergraduate nursing program are the same as those for admission to Quinnipiac University.

## Progression Requirements

## Preprofessional Progression Policy

1. Students must complete all preprofessional component courses, including all sciences, by the end of the spring semester of their sophomore year prior to starting the professional component in the fall.
2. Students who fail or withdraw from a course in the sophomore year and have a cumulative GPA less than 3.0 by the end of the spring semester of the sophomore year will not be approved to repeat the course toward progression in the nursing program.
3. A minimum cumulative grade point average of 3.0 is required for progression. A student who does not meet these progression requirements will be required to transfer to another major.
4. Freshman and sophomore students who cannot mathematically achieve a cumulative GPA of 3.0 by the end of their sophomore year will be advised to change their major.

## Professional Progression Policy

1. To progress and remain in good standing, junior and senior students must attain a semester GPA of $3.0(\mathrm{~B})$ and receive a grade of C or higher in each classroom and laboratory experience ( 73 or higher) and a Pass ( P ) in all clinical practica.
a. A student who received less than a $\mathrm{C}(73)$ in one nursing course ( $\mathrm{C}-, \mathrm{D}, \mathrm{F}$ ) is unable to progress to the next semester. This student will be given the opportunity to repeat the failed nursing course the next academic year.
b. A student who receives less than a $\mathrm{C}(73)$ in more than one nursing course (C-, D, F) will not be permitted to progress in the program and will be required to change his/her major out of nursing.
c. A student who receives a grade of Incomplete (I) in any nursing course (lecture, lab or practicum) must meet ALL course requirements for conversion to a letter grade or Pass ( P ) before the start of the subsequent semester. Failure to do so will require the student to withdraw from the nursing major.
2. A student who earns grades of C or better in all nursing courses yet has less than a 3.0 semester GPA will be placed on academic probation and will receive an academic plan to progress in the nursing major. This student must achieve a 3.0 semester GPA by the end of the next semester. The student who does not meet these academic criteria will be required to change his/her major out of nursing.
3. A student must have a 3.0 semester and cumulative GPA in the last semester of his/her senior year to meet the graduation requirements for the bachelor of science in nursing.
4. A student who is performing at an unsatisfactory level either academically or clinically at the midsemester point will be notified by the program chair. Written notification will be sent to the student via email. A student who is having difficulty with academic performance and needs help with study skills or test taking strategies will be advised to utilize the resources offered by the Learning Commons.
5. At the end of each semester, course grades, semester and cumulative GPAs for each nursing student are reviewed by the program chair.

## Appeal Process

1. A student wishing to appeal a progression decision must write a letter to the chair of the undergraduate nursing program within one week of receiving notice of his/her inability to progress.
2. Appeals will be considered by a Faculty Appeals Committee and results will be communicated in writing to the student.
3. A student wishing to appeal a course grade should follow the grade appeal process detailed in the University Catalog.

## Advanced Standing/Placement

The Policy for Advanced Standing/Placement, as stated in this catalog, applies to students seeking admission into the undergraduate nursing program. Advanced standing or placement is considered for entering freshmen who have completed college-level credit courses through a recognized college or university, achieved an acceptable score on an appropriate examination of: 1) the Advanced Placement Program of the College Entrance Examination Board; 2) the International Baccalaureate; or 3) the College Level Examination Program.

## Transfer Credit

Quinnipiac normally grants transfer credit for courses appropriate to the chosen curriculum, completed with a grade of C or better, at a regionally accredited post-secondary institution.

## Transfer Students from Other Colleges/Universities

Transfer students are evaluated once annually for the fall semester, and are accepted on a spaceavailable basis. A minimum GPA of 3.0 is required for consideration. A transfer student's catalog year and curriculum plan will be assigned based on their year of entry (sophomore or junior).

## Eligibility for Licensure

Graduates are eligible for registered nurse licensure in Connecticut or other states upon satisfactory achievement of the National Council Licensure Examination for Registered Nurses (NCLEX$\left.R N^{\circledR}\right)$. In Connecticut, the laws of the state limit the licensure eligibility for any person convicted of a felony (according to Public Act 11.242). A copy of the act is available for review in the nursing department.

## Clinical Requirements

Students must arrange their own transportation to and from clinical agencies. CPR certification for the health care provider or professional rescuer must be obtained prior to enrolling in the first nursing course, and maintained throughout the
program. The School of Nursing has several additional health requirements and technical standards in addition to those required by the University. A criminal background check is required; drug testing may be required.

## Bachelor of Science in Nursing

The undergraduate nursing program at Quinnipiac University prepares students with the knowledge, skills and attitudes to provide holistic care for diverse individuals, families and populations across the lifespan. Achievement of the following outcomes enables graduates to practice as nurse generalists within complex health care systems.

## Undergraduate Program Outcomes

Our bachelor's degree graduates demonstrate proficiencies in the following areas:

1. Integration of liberal education for generalist nursing practice
2. Basic organizational and systems leadership for quality care and patient safety
3. Scholarship for evidence-based practice
4. Information management and application of patient care technology
5. Health care policy, finance and regulatory environments
6. Interprofessional communication and collaboration for improving health outcomes
7. Clinical prevention and population health
8. Professionalism and professional values
9. Bachelor's degree generalist nursing practice

| BS in Nursing Curriculum** |  |  |
| :---: | :---: | :---: |
| Freshman Year, Fall Semester |  |  |
| Course | Title | Credits |
| BIO 101/101L | (UC) General Biology with Lab | 4 |
| EN 101 | (UC) Freshman Composition I | 3 |
| UC | (UC) Fine Arts | 3-4 |
| or CHE 106/ | Chemical Principles with |  |
| 106L | Biological Applications with Lab |  |
| or MA 107* | College Algebra |  |
| UC | Social Science I | 3 |
| FYS 101 | First-year Seminar | 3 |

*MA 107 may be needed based on placement exam score

| Freshman Year, Spring Semester |  |  |
| :---: | :---: | :---: |
| BIO 102/102L | (UC) General Biology with Lab | 4 |
| EN 102 | (UC) Freshman Composition | 3 |
| UC | Fine Arts |  |
| $\begin{array}{r} \text { or CHE 106/ } \\ 106 \mathrm{~L} \end{array}$ | Chemical Principles with Biological Applications with Lab | 3-4 |
| MA 275 | (UC Quantitative Literacy) Biostatistics |  |
| or MA 206 | (UC Quantitative Literacy) |  |
|  | Statistics for the Behavioral Sciences | 3 |
| UC | Social Science II | 3 |
| Total 16-17 |  |  |
| Sophomore Year, Fall Semester |  |  |
| BIO 211/211L | Principles of Anatomy \& Physiology I with Lab | 4 |
| BMS 213/213L | Microbiology \& Pathology with Lab |  |
| or UC | Fine Arts | 3-4 |
| UC | UC Elective | 3 |
| UC | Humanities I | 3 |
| UC | UC Elective |  |
| or UC | Elective | 3 |
| Total 16-17 |  |  |
| Sophomore Year, Spring Semester |  |  |
| BIO 212/212L | Principles of Anatomy \& Physiology II with Lab | 4 |
| UC | Humanities II |  |
| or |  |  |
| BMS 213/213L | Microbiology \& Pathology with Lab | 3-4 |
| UC | UC Elective | 3 |
| or UC | UC Elective |  |
|  | Open Elective* | 3 |
| or | UC Fine Arts |  |

Total 13-14
*If MA 107 is taken, this fulfills open elective requirement.
Junior Year, Fall Semester
NUR 300 Core Concepts in Nursing 3
NUR 302 Nursing Science \& Information Literacy 3
NUR 304 Health Promotion \& Wellness 3
NUR 306 Health Assessment 3
NUR 307 Core Nursing Practicum 2
NUR 330L Holistic Nursing Integration Lab I

## Junior Year, Spring Semester

NUR 322 Care of Women, Children \& Families 4
NUR 323 Women, Children \& Families Practicum 2
NUR 324 Care of Adults with Complex Health Needs I 4
NUR 325 Adult Care Practicum I 2
NUR 326 Pathophysiology \& Pharmacotherapy I 2
NUR 340L Holistic Nursing Integration Lab II 2

## Total 16

## Senior Year, Fall Semester

NUR 400 Psychiatric-Mental Health Nursing

| NUR 401 | Psychiatric-Mental Health Practicum | 2 |
| :---: | :---: | :---: |
| NUR 408 | Research \& Evidence-based |  |
|  | Nursing Practice | 2 |
| NUR 424 | Care of Adults with Complex |  |
|  | Health Needs II | 3 |
| NUR 425 | Adult Care Practicum II | 2 |
| NUR 426 | Pathophysiology \& Pharmacotherapy II | 2 |
| NUR 430L | Holistic Nursing Integration Lab III | 2 |
|  | Total 16 |  |
| Senior Year, Spring Semester |  |  |
| NUR 428 | Community \& Public Health Nursing | 3 |
| NUR 429 | Community \& Public Health Nursing | 2 |
|  | Practicum |  |
| NUR 432 | Contemporary Issues \& Roles in Nursing | 3 |
| NUR 433 | Capstone Practicum | 2 |
| NUR 434L | Capstone Seminar Lab |  |
| NUR 440L | Holistic Nursing Integration Lab IV | 2 |
| UC | UC Capstone | 3 |
|  | Tota |  |
|  | Grand Total |  |

NUR 426
Pathophysiology \& Pharmacotherapy II2
NUR 430L ..... 2

Senior Year, Spring Semester
**Note that core undergraduate curriculum and UC courses are under evaluation/revision.

The curriculum for the professional component is subject to modification as deemed necessary by the nursing faculty to provide students with the most meaningful educational experience. Initial placement in English and mathematics courses is determined by examination. The minimum mathematics requirement is MA 275 or its equivalent. Courses must be taken in the semester indicated unless prior approval is obtained from the student's academic adviser.

## Accelerated BSNTrack for Second Degree Students

The accelerated BSN track is designed for individuals with a bachelor's degree in another discipline, who are interested in pursuing nursing as a second bachelor's degree. The curriculum builds on the individual's prior educational preparation, and the degree is completed in one calendar year, starting in August with students concentrating solely on nursing courses.

Accelerated BSN students complete a traditional junior year curriculum in the nursing program and then an intensive senior summer session. The accelerated BSN must be pursued on a full-time basis and consists of one full calendar year.

Admission requirements include graduation from a regionally accredited college or university with a cumulative GPA of at least 3.0 (B) and completion of prerequisite course work. All prerequisite courses must be taken within the last five years with a grade of C or better; and must be completed prior to entering the accelerated track. Transfer credit is evaluated according to University policy. A criminal background check is required prior to attending the mandatory orientation. The application deadline is January 2; applicant information is available on the Quinnipiac website. The BSN degree under this track is 127 credits, including: prerequisites, general education requirements and nursing courses, which are distributed as follows:

## Nursing Course Prerequisites

Course Credits
Anatomy \& Physiology I \& II with labs 8
Microbiology with lab
Statistics
General Education Courses
Total Nursing Credits

Graduates are eligible to take the NCLEX-RN® examination, and qualify for entry-level nursing positions or graduate study. Those students contemplating applying for graduate study in nursing at Quinnipiac should refer to the Graduate Studies section of the catalog.

## Online RN to BSN Completion Track

The RN to BSN completion track is designed for individuals who are licensed as a registered nurse and are interested in pursuing a part-time bachelor's degree in nursing using a distance education format through QU Online. The curriculum builds on the individual's prior educational preparation and incorporates the American Association of Colleges of Nursing (AACN) Essentials of Baccalaureate Education.

Admission requirements include graduation from a regionally accredited college or university with an associate's degree or diploma in nursing with a cumulative grade point average of at least 2.7; a current registered nurse license in good standing; two letters of recommendation (one from a current supervisor); a personal statement,
transcripts from all postsecondary institutions attended; and a resume or curriculum vitae. A criminal background check is required.

Application procedures are managed through Quinnipiac University Online.

## Progression Requirements

To progress and remain in good standing, students must achieve a cumulative GPA of at least 3.0 upon the completion of the first 16 credits of advanced core. Thereafter, a semester GPA of at least 3.0 is required to progress and remain in good standing.

## BSN Completion Track Degree <br> Requirements

## Advanced Placement Credits

Students with an associate's degree in nursing may transfer between 60-68 credits for this program. Those students who transfer 60 credits can make up the deficit with additional transfer elective credits or electives taken at QU.

## Advanced Core Credits

BSN completion students take the 20 -credit advanced core. The advanced core reflects the aims and goals of the traditional University Curriculum and the Essential Learning Outcomes while acknowledging the prior general education work completed at the associate's degree level. Five 4-credit courses are completed online in sevenweek blocks that are designed to move students through in cohorts. Students can complete up to 8 credits during the fall and spring semesters and up to 7 credits in the summer. The core courses listed below are taken by degree completion students in the School of Nursing.

## Nursing Major Requirements

Students take 32 required credits for the nursing major: nursing courses ( 29 credits), and an open elective ( 3 credits). All nursing courses are offered online.
Graduation Requirement: 121 credits
Transfer Credit from Associate's Degree 68 credits*
Quinnipiac Advanced Core Courses 20 credits
Quinnipiac Required Nursing Courses 29 credits
Elective(s)
3 credits
Total 120 credits
*Note: if only 60 transfer credits are awarded, 11 credits of transfer credit and/or open electives are required.
Part-time BSN Completion Curriculum Fall Semester Entry, First Year
Course Title Credits
DE First Advanced Core Course (7 weeks) ..... 4
DE Second Advanced Core Course (7 weeks) 4
Spring Semester, First Year
DE Third Advanced Core Course (7 weeks) ..... 4
DE Fourth Advanced Core Course (7 weeks) ..... 4
Summer Session 1
Fifth Advanced Core Course (7 weeks) ..... 4
Summer Session 2
NUR 482 DE Health Disparities in Vulnerable Populations ..... 2
Fall Semester, Second Year
NUR 380 DE Health Promotion \& Wellness ..... 3
NUR 540 DE Educational Principles for the Health Care Professional ..... 3
Spring Semester, Second Year
NUR 382 DE Nursing Science \& Information Literacy ..... 3
NUR 475 DE Practice Experience I ..... 1*
NUR 478 DE Research \& Evidence-based Nursing Practice ..... 2
Summer Session 3
NUR 544 DE Introduction to Informatics ..... 3
Summer Session 4
NUR 480 DE Interprofessional Practice \& Quality Improvement ..... 3
Fall Semester, Third Year
NUR 477 DE Practice Experience II ..... $1^{*}$
NUR 484 DE Community \& Public Health Nursing ..... 3
NUR 602 DE Principles of Ethical Theory in Nursing ..... 1
Spring Semester, Third Year
NUR 479 DE Practice Experience III ..... 1
NUR 486 DE Contemporary Issues \& Roles in Nursing Practice ..... 3
Open Elective ..... 3
Total for program ..... 52

DE-online course

## Part-time Undergraduate Studies

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## Part-time Undergraduate Studies

## Office of Undergraduate Admissions Echlin Center

Director of Transfer \& Part-time Admissions
Mary Wargo
EC112
203-582-8612
Quinnipiac University recognizes that the ability to obtain a college education may be limited for the adult student. The demands of work or family may not allow continuation or completion of a degree in the traditional manner. Quinnipiac offers the part-time student an opportunity to attend classes and pursue a degree with flexible scheduling and customized degree programs. Quinnipiac offers a variety of ways to use previous collegiate and noncollegiate learning experiences to award college credit and shorten the time needed to earn a degree.

Part-time students are an integral part of the University and benefit from the resources of Quinnipiac's highly regarded Schools of Business and Engineering, Communications and Health Sciences, and the College of Arts and Sciences. Instruction is provided by faculty experienced in working with adult students. Departmental chairpersons and select faculty work with part-time students as academic advisers. Free tutoring services are available in the Learning Commons, which maintains evening hours.

Quinnipiac also recognizes student financial needs through creative payment plans and financial assistance. Part-time students receive personal service from a committed staff and faculty.

## Part-time Admission Procedures

Adult students starting college for the first time, returning to school after an absence, or considering transferring to the College of Arts and Sciences or the Schools of Business and Engineering, Communications or Health Sciences should contact the Office of Part-time Admissions at 203-582-8612 for an appointment at any time of the year to discuss the courses or programs offered by Quinnipiac.

Applications for admission may be obtained from the Quinnipiac website (www.quinnipiac.edu). The admissions requirements for undergraduate applicants listed in this catalog are the same for part-time candidates, with the following exceptions:

1. Applicants who graduated high school more than five years ago or who have successfully completed the equivalent of one year ( 30 credits) of college study are not required to submit score results for the Scholastic Assessment Test (SAT) of the College Entrance Examination Board (CEEB) or of the American College Testing Program (ACT)
2. Applicants who have earned an associate's degree from a regionally accredited college need not submit high school transcripts.
3. An interview is recommended.

## Non-Matriculated Students

Adult part-time students may take a limited number of courses without applying for admission (non-matriculated) if they are attempting to build an academic record after many years of absence from school, or are not ready to pursue a degree program. To be considered for non-matriculated study, the student must have earned a high-school diploma at least five years ago. A maximum of 6 credits may be taken in any semester. Advanced courses may require specific prerequisites and permission for registration. Non-matriculated students must contact the registrar's office for further information about registration.

A student who does not meet the above requirements may not register as a non-matriculated student and must contact the admissions office at 203-582-8612 to apply for part-time study and provide official high-school and college transcripts. Current non-matriculated students are encouraged to apply for admission/change of status as soon as possible to ensure guidance with course selection and a degree
program. No more than 12 credits may be completed by non-matriculated students in the School of Business.

## Changing Status-Non-degree to Degree

 Students who have earned credit at Quinnipiac and wish to apply for matriculation into a degree program in the College of Arts and Sciences or the Schools of Business and Engineering, Communications or Health Sciences, should initiate the admission process by filing a "Change of Status" form available from the Office of Part-time Admissions. All appropriate documents required by the University for admission should be sent to the same office. Course work already completed at Quinnipiac as a non-degree student is considered in the admission process, as well as course work transferred from other institutions. Students should contact the Office of Part-time Admissions at 203-582-8612 with any questions.
## Academic Good Standing Policy

All part-time students, whether matriculated or non-matriculated, are subject to the Academic Good Standing Policy of the University. (See Academic Information section.)

## Financial Assistance

## Quinnipiac Tuition Assistance Program

Undergraduate part-time students who are beginning their study in traditional course work and those who have special financial needs can apply for Quinnipiac Tuition Assistance (QTAP) grants. QTAP grants are awarded shortly before the start of the fall and spring semesters and may be used only to defer tuition costs. The application and a copy of the applicant's most recent tax return should be submitted by the deadline dates: Jan. 4 for the spring semester and Aug. 15 for the fall semester. Students must file a new application for each semester they request aid. Applications may be obtained through the Office of Part-time Admissions.

## Federal Financial Aid Programs

Undergraduate part-time students who have been admitted by Quinnipiac into a degree program and are registered for a minimum of 6 credits each semester are eligible to apply for federal financial
aid programs (loans and grants). The free application for Federal Student Aid (FAFSA) is available on the Web at www.fafsa.ed.gov. Students taking fewer than 6 credits may be eligible for federal Pell Grants. Contact the financial aid office for information and assistance.

## Employer Tuition Benefits

Quinnipiac University works with students to make the most of their employer's educational benefits plan. If your company does not have a formal agreement with Quinnipiac but does offer educational benefits, you can defer two-thirds of your tuition charges. All that is needed is an original employer letter verifying participation in the company tuition reimbursement plan during the semester for which they are registering. At registration, the student pays one third of the tuition plus fees and signs a promissory note for the tuition balance. The final tuition payments are due five weeks after the last day of the semester, which allows time for tuition reimbursement checks to be issued by the employer. Contact the bursar's office for information.

## Payment Plans

Students who do not participate in company tuition reimbursement plans can still set up a tuition payment plan. Plans are offered through Nelnet Business Solutions on an annual semester basis. There is a charge of $\$ 75$ to enroll. Contact the bursar's office for assistance.

## Academic Policies

The detailed academic policies that govern all students are found in the Quinnipiac University Student Handbook and in this catalog. Below are the basic academic policies that govern part-time students.

## Placement Tests

To ensure appropriate placement in English courses, all transfer students with only one semester of English transferring in from another school must take the English placement test.

A math placement exam is also required to determine appropriate placement before registering for math courses required in all majors; and a
language placement test is required for students continuing in a language from high school.

There is no fee for the placement exams, and arrangements can be made for taking the tests by calling the Office of Part-time Admissions.

## Transfer of Credit

Credits for college courses taken at other regionally accredited institutions normally may be transferred if they carry a grade of C or better. Evaluation of University Curriculum transfer credit is completed by the transcript evaluator. Additional credits are reviewed by the school to which the student has transferred. Official acceptance of transfer credit is completed upon matriculation.

## CLEP, Challenge Exam Policies

Quinnipiac University participates in the College Level Examination Program (CLEP), which provides an opportunity for adult and non-traditional students to obtain credit through examination (credits are accepted as transfer). Information regarding CLEP exams may be obtained from the Office of Part-time Admissions. Students also may petition to earn credit through challenge examinations. Applications for these exams are reviewed by the dean or associate dean of the Schools of Communications, Health Sciences or College of Arts and Sciences.

## Credit for Prior Learning

Adults with high school diplomas or equivalency who have acquired, through life experience, knowledge that they can document and verify, may have a head start on a degree from Quinnipiac.
Examples may include:

- past and present paid work
- military service
- community service work
- in-service training
- independent reading, viewing and listening
- non-credit courses

The first step is to schedule an interview with part-time admissions. We will discuss your work/ life experience and any college credit you may have accumulated previously to determine whether or not this program meets your needs. If credit for prior learning is appropriate for you, your next step is to discuss possible course equivalencies with the
dean of the school in which you are seeking credit. Students must be matriculated at Quinnipiac to earn credit for prior learning.

## Registration

Course schedules and registration forms are available at www.quinnipiac.edu/registrar. Registration may be completed in person, by mail or by FAX at the Office of the Registrar. Continuing students may register via the Web for a limited time each semester. Registration dates and procedures are listed online. Students should check course descriptions for any specific prerequisites prior to registering. Course changes and updates are posted on the Quinnipiac website: www.quinnipiac.edu. New students should make an appointment with the Office of Part-time Admissions prior to registration.

## Special Programs

## Accelerated, Online and Saturday Courses

Part-time students may be able to complete some requirements more rapidly and shorten the path to their degrees with these options. A very limited number of accelerated, online and Saturday courses are offered during the fall and spring semesters.

## Auditing Courses

Alumni and seniors (65 and older) may audit courses on a space-available basis. The student is responsible for the registration fee and any lab or course fees. In addition, seniors may take courses for credit, on a space-available basis, by paying the registration fee and any lab or course fees. Questions should be directed to the registrar's office.

## Academic Programs

## Export Marketing Certificate

This career-directed program is designed in response to the growing need and opportunity for export of American goods and services. Both small and large businesses have an increasing need for managers trained in export marketing management.

The five courses of the certificate program can be applied to the BS program in international business.

## Required:

Course Title Credits
(UC) Globalization \& International Business 3 International Marketing \& Marketing Research 3
International Finance 3

Two-way Management of the Global Supply

Chain

Total Credits 15

## International Purchasing Certificate

Facing a growing demand for trained global purchasing managers from industries, this careerdirected program is designed in response to the growing needs of manufacturing, retail and service companies moving toward global sourcing of their raw materials, components and services. How can a firm use global supply chain to hedge against fluctuations in world market demand, price or exchange rate? In integrating a global supply chain, a firm faces many challenges including areas of trade law, product safety, environment protection, as well as logistics and finance.

The five courses of the certificate program can be applied to the BS program in international business.

## Required:

| Course | Title | Credits |
| :--- | :--- | ---: |
| IB 201 | (UC) Globalization \& International Business 3 |  |
| IB 335 | International Finance | 3 |
| IB 345 | Global Supply Chain | 3 |
| IB 352 | International Management | 3 |

Plus, choose one of the following courses:
IB $324 \quad$ Negotiating Internationally
or IB $498 \quad$ Internship in Purchasing

## Total Credits 15

## Individualized Bachelor Degree Program

Many part-time students who return to college already have a substantial amount of college credit earned in an associate's degree program, Credit for Prior Learning, or part-time studies. In addition, experienced students often have unique educational goals that are not met by traditional programs. These students need degree programs which a) can accommodate the maximum amount of previously acquired credit, and b) allow maximum flexibility in choosing courses to meet individual needs without adding to the total number of credits needed to
graduate. To meet these needs, Quinnipiac offers special general studies degree programs. These bachelor's degree programs (health science studies and liberal studies) are built around Quinnipiac's University Curriculum. The dean or faculty adviser works with each student to establish a curriculum plan that makes maximum use of previously obtained credit and incorporates new courses that build in-depth knowledge in the student's area of interest. Health science studies and liberal studies programs are described in detail below.

## Bachelor of Science in <br> Health Science Studies

The health science studies program provides an excellent opportunity for health care and science professionals who hold an associate's degree to obtain the bachelor's degree. The program provides the maximum utilization of previously acquired credits from academic and clinical training. An individual curriculum plan, approved by an academic adviser, can be designed that allows flexibility in choosing courses to build concentrations in the health science fields, as well as in other areas such as business, management, psychology and sociology.
Course

## Title

Credits
EN 101
EN 102
Elements of Composition I
Elements of Composition II
Quantitative Literacy


FYS 101, UC Elective and UC Capstone
Fine Arts
Social Sciences
Humanities
UC electives
Science requirement may be satisfied through basic science core courses.

## Bachelor of Arts in Liberal Studies

The liberal studies major offers the opportunity for adult and non-traditional students to choose concentrations in a number of fields. Students have maximum flexibility in the utilization of previously earned credit and in the selection of new courses to meet their personal goals. Each program is individually designed by the student with approval by the dean of the College of Arts and Sciences. Students complete the College of Arts and Sciences requirements, 15 credits at the 300-level and $9-10$ courses in the area of concentration.


## Bachelor of Arts and Bachelor of Science Degrees-Traditional Majors

Part-time students may enroll in many of the bachelor's degree programs offered by the academic schools of the University (athletic training/ sports medicine, nursing and occupational therapy require full-time status).

The following bachelor's degree program usually can be completed through evening study and normally does not require students to take classes during the day.

## Bachelor of Science Health Science Studies

Other majors in business, arts and sciences, health sciences and communications may be pursued on a part-time basis. More information on these programs can be found in the sections for the Schools of Business and Engineering, Communications, Health Sciences and College of Arts and Sciences.

## Graduate Studies

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## Graduate Studies

Phone
Graduate Admissions ..... 203-582-8672
Graduate Financial Aid ..... 203-582-8588
Graduate Student Affairs ..... 203-582-4723
Administrators/Program Directors
College of Arts and SciencesMS in Molecular and Cell Biology
Lise Thomas ..... 203-582-8497
School of Business and Engineering
Master of Business AdministrationMS in Business AnalyticsMS in Organizational Leadership
Health Care Compliance CertificateLong Term Care Certificate
Lisa Braiewa ..... 203-582-3710
Richard McCarthy ..... 203-582-8468
Michael Taylor ..... 203-582-3949
Lisa Braiewa ..... 203-582-3710
Angela Mattie ..... 203-582-3630
School of CommunicationsGraduate Programs Director
Phillip Simon ..... 203-582-8274
School of Education
Dean
Associate Dean
Master of Arts in Teaching
MS in Instructional Design
MS in Teacher Leadership
Sixth-Year Educational Leadership
Kevin Basmadjian ..... 203-582-3497
Beth Larkins-Strathy ..... 203-582-3510
Anne Dichele ..... 203-582-3463
Ruth Schwartz ..... 203-582-8419
Gail Gilmore ..... 203-582-3289
Gail Gilmore ..... 203-582-3289
School of Health Sciences
Doctor of Physical TherapyMHS Cardiovascular PerfusionMHS Medical Laboratory SciencesMHS Pathologists' AssistantMHS Physician AssistantMHS Radiologist Assistant
Master of Social Work
Occupational Therapy Doctorate
School of Law
School of Nursing
Chair, Graduate Programs
Maureen Helgren ..... 203-582-8681
Michael Smith ..... 203-582-3427
Dwayne Boucaud ..... 203-582-3768
TBD ..... 203-582-8456
Dennis Brown ..... 203-582-3708
John Candler ..... 203-582-6205
Stephanie Jacobson ..... 203-582-6433
Francine Seruya ..... 203-582-6455
Admissions Office ..... 203-582-3400
Laima Karosas ..... 203-582-5366

## Mission Statement

Through its graduate programs, Quinnipiac University recognizes a substantial trend toward greater professionalism and the rapidly expanding body of knowledge in the fields of business, communications, education, social work, health management and the health care, rehabilitative and laboratory sciences. The provision of graduate degrees is a logical extension of Quinnipiac's special mission, which is "to provide opportunity for an integrated liberal and technical education" that will enable students to prepare for and advance in their professional careers and to "make responsible decisions in a society that increasingly demands understanding of the humanities, the social and natural sciences and technology."

All graduate programs at Quinnipiac share three foundations. Instruction is provided by a team of academicians who hold the highest available academic credentials and practicing professionals who hold advanced positions in their field. Every graduate student is provided with the opportunity to obtain practical experience through supervised residencies, thesis research, special projects or small laboratory classes. Study in all graduate programs is advanced and builds on both undergraduate education and professional experience. Additional prerequisite courses are needed by students who enter new fields at the graduate level.

## Graduate Admission

Applications for all graduate programs, except law and medicine, may be obtained and submitted from www.quinnipiac.edu/gradadmission. For information about online admissions, visit the website at www.quinnipiac.edu/qu-online. Applicants are required to submit an application fee and official transcripts of all college-level work completed at other institutions. Applicants also are required to submit a letter of intent and resume (as stipulated by each specific program) and to make arrangements to have two letters of reference submitted.

Individual graduate programs have additional application requirements. For example, GMAT or GRE scores are required for admission into the MBA program.

The Quinnipiac physician assistant program
participates in the Central Application Service for Physician Assistants. Go to www.caspaonline.org for more information regarding the application process and fees. All applications, transcripts, references and other supporting materials are submitted directly to CASPA. Applicants may contact the Office of Graduate Admissions for information.

Submission of Graduate Record Examination scores is not required for admission into Quinnipiac's master's degree programs except for the MS in public relations program and the MMSc in anesthesiologist assistant program (however, this program will accept the MCAT in lieu of the GRE). However, many program faculty find GRE scores a useful indication of a student's ability. Information about specific admissions requirements or standardized exams can be obtained from the Office of Graduate Admissions, www.quinnipiac.edu/gradadmission or www.quinnipiac.edu/qu-online.

## International Student Admission

Applications for graduate study from international students are welcomed. International applicants must complete their application at least three months prior to their intended start term. Upon application, international students are requested to submit English language descriptions of universities and colleges attended including status as a public or private institution as well as recognition by government and accrediting agencies of the respective country.

All applicants from non-English-speaking countries must, in addition to all of the regular admissions requirements, provide TOEFL (Test of English as a Foreign Language) scores (go to www.ets.org). In general, a minimum TOEFL iBT score of 90, Internet-based ( 575 paper-based, 233 computer-based) is required for admission. In lieu of TOEFL, applicants may submit IELTS (International English Language Testing System) scores (go to www.ielts.org). A minimum score of 6.5 on this exam, " B " or above on the CAE (Certificate of Advanced English), or "C" or above on the CPE (Certificate of Proficiency in English) is required. In lieu of TOEFL or IELTS, applicants may submit PTE-A (Pearson Test of English Academic) scores (available at www.pearsonPTE.com). A minimum PTE-A score of 61 is required. TOEFL, IELTS and PTE scores are valid for two years.

Candidates holding degrees from foreign institutions must provide notarized English translations and an official evaluation of their post-secondary records from an academic credential evaluation service. Applicants for the PA program must possess a bachelor's degree from a regionally accredited institution in the United States and all PA program prerequisites must be completed at a regionally accredited institution in the U.S.

International applicants are required to submit proof of adequate funds to complete their study at Quinnipiac before a visa application can be issued.

## Combined Undergraduate/Graduate Programs in the College of Arts and Sciences

The Department of Biological Sciences offers a combined BS/MS program in biology and molecular and cell biology to qualified undergraduates.

The MS degree in molecular and cell biology provides an excellent foundation for students intending to pursue studies in professional health care fields and doctoral programs. It also offers a competitive edge for students wishing to pursue a career in the biotechnology and biopharmaceutical industries. A minimum cumulative undergraduate GPA of 2.75 and 70 earned credits at Quinnipiac University are required for admission to the graduate program.

Students in the combined BS/MS program complete graduate-level biology courses during their senior year. A maximum of 9 credits may be used to fulfill undergraduate requirements. A bachelor of science in biology is granted upon satisfactory completion of all the undergraduate curriculum requirements, and is mandatory for matriculation into the degree-granting graduate program. Students complete the MS degree in molecular and cell biology in one additional year.

Students applying for admission are strongly encouraged to submit their application during the first semester of their junior year. Interested students should contact the chair of the department for an application. Meeting the minimum admissions standards does not guarantee admission to the program.

## Combined Undergraduate/Graduate Programs in the School of Health Sciences

The Department of Biomedical Sciences offers a combined BS/MS program in medical laboratory sciences to qualified undergraduates. The MS degree in medical laboratory sciences is for students intending to pursue studies in doctoral programs, medical school and professional health care fields. It also offers a competitive edge for students wishing to pursue a career in the diagnostics testing, biotechnology, biopharmaceutical and health care industries. Students in the combined BS/MS program complete graduate-level biology courses during their senior year. A maximum of 12 credits may be used to fulfill undergraduate requirements. A bachelor of science in biomedical sciences is granted upon satisfactory completion of all the undergraduate curriculum requirements. Students complete the MS degree in medical laboratory sciences in one additional year.

Students applying for admission are strongly encouraged to submit their application during the first semester of their junior year. Interested students should contact the chair of the department for an application.

## Combined Undergraduate/Graduate Programs in the School of Business and Engineering

Quinnipiac University offers outstanding undergraduate students the opportunity to enroll in linked undergraduate/graduate degree programs that can be completed in five to six years. Combined-degree programs offered in the School of Business and Engineering include the MBA, MBA-CFA ${ }^{\circledR}$ track (chartered financial analyst), MBA/HCM track (health care management) and MBA-SCM track (supply-chain management). Students may apply for admission to the combined business programs upon earning 75 credits with a cumulative GPA of at least 3.0. If admitted, students may complete up to 10 credits of MBA courses during the senior year, 9 credits of which also fulfill undergraduate open elective requirements.

## Combined Undergraduate/Graduate Programs in the School of Communications

The School of Communications offers high-performing undergraduate students combined fiveyear undergraduate/master of science degree programs in each of its four graduate programs: interactive media, journalism, public relations and sports journalism. Students with an undergraduate GPA of at least 3.0 (3.2 for public relations majors) may apply for admission to one of the five-year programs at any time during their junior year. If admitted by the graduate program director of the specific program, students may complete up to 6 credits of graduate courses in the School of Communications during the senior year, with all 6 credits applied to both undergraduate and graduate programs.

## Admission Standards

Students who meet the admission requirements are considered for matriculation into a degree granting graduate program. To apply, students must satisfy the following standards:

1. A bachelor's degree from a regionally accredited institution of higher learning.
2. A minimum overall GPA of 3.0 or better on a 4.0-point scale (or equivalent) in undergraduate studies is desired. (Note: Individual programs may have higher standards.)
3. Demonstrated potential for the desired field of graduate study.

## Note: meeting the minimum admission

 standards does not guarantee admission. If admitted, successful candidates should plan to meet with their adviser to review the program requirements for graduation.
## Conditional Admission

Students who do not meet all admissions requirements may be granted a conditional admission on a case-by-case basis. Conditional admission is not permitted in graduate business programs.

## Non-Degree Study

Some applicants may be offered an opportunity to take up to two courses as a non-degree student if they are not able to complete their entire application on time. Upon completion of these two courses, the applicant must complete the
process to be admitted to the graduate program and continue taking courses. Non-degree study is not permitted in graduate business programs or in the master of social work program.

## Transfer of Credit and Challenge Policy

Graduate course credit completed with a grade of B or better at other regionally accredited institutions may be transferred into a graduate program at Quinnipiac. The normal limit for transfer credits is 9 credits, though additional transfer credits may be considered on an individual basis. Requests for transfer of credit must be submitted to the appropriate graduate program director along with official transcripts from the institution(s) where the credits were earned. Ordinarily, transfer of credit is granted for courses demonstrated to be similar in content, level of instruction and objectives to courses within a student's graduate curriculum at Quinnipiac.

The anesthesiologist assistant, cardiovascular perfusion, physician assistant, pathologists' assistant and radiologist assistant programs do not accept transfer credits and do not accept applications for challenge examinations. The master of arts in teaching program may accept up to 6 credits. The nurse anesthesia program will only consider transfer credits of the nursing core essentials, not sciences or anesthesia courses. Challenge examinations are not accepted.

The MBA program accepts up to 9 credits. The MS in organizational leadership accepts up to 3 credits. The MS in business analytics program accepts up to 3 credits. The master of social work program may accept up to 6 credits.

Graduate level courses taken to complete a degree program at Quinnipiac may be applied to a second graduate degree. These courses must be part of the approved curriculum of the second degree. Further, a minimum of 15 credits of additional course work must be completed before the conferral of a second degree.

In individual graduate programs, students with documented graduate level training or experience may petition to earn credit through challenge examinations. Applications for challenge examinations are submitted to the appropriate graduate program director. The application must include a detailed description and documentation of the nature and scope of the student's training together with specific reference to the content
of the graduate course(s) the student wishes to challenge. Applications for challenge exams are evaluated by the normal instructor of the course(s) and are reviewed by the appropriate academic dean. If the application is approved, an examination is prepared and administered by the course instructor. The examination may be taken only once and if successfully completed, it becomes part of the student's permanent file and credit for the graduate course(s) is awarded. Challenge exams are not permitted in the MBA, MS in public relations, MS in business analytics or MS in organizational leadership. Note: There is a fee for challenge exams.

## Graduate Financial Assistance and Scholarship Information

## Graduate Financial Assistance

Financing a graduate education is a significant investment for students. To assist students, Quinnipiac provides several financial aid programs to help graduate students fund their education. Financial aid is available to both full-time and parttime students. Graduate students who are matriculated, enrolled at least half-time (5-8 credits) and making satisfactory academic progress in a degree programs are eligible to receive financial aid.

## Graduate Assistantships

Graduate assistantships are available on a limited basis to both full-time and part-time graduate students. There are two types of assistantships. Students whose services and skills are utilized in practical, clinical or research within the University receive a partial tuition waiver. Students whose services are in administrative areas within the University receive a paycheck.

The number of graduate assistantships vary each semester. Students who wish to be considered for an assistantship should contact either the program director or visit www.quinnipiac.edu/gradwork.

## Internship Waivers

Students accepted full time into the master of arts in teaching program have the opportunity to serve as graduate student interns in a single public school. Interns receive a significant tuition reduction during the internship semesters.

## Quinnipiac University Graduate Merit Scholarship

Quinnipiac University's graduate merit scholarships are awarded on a competitive basis to a select number of newly admitted full-time on-campus graduate students who demonstrate exceptional promise of achieving academic excellence. The scholarships are offered to fulltime students who are entering the following traditional on-campus programs: business administration, cardiovascular perfusion, journalism, medical laboratory sciences, molecular and cell biology, nursing, pathologists' assistant, physician assistant, radiologist assistant and social work. Candidates are evaluated based on academic potential in their chosen graduate degree field, as evidenced by academic and related performance to date. Eligibility is determined by a scholarship committee based on the program director's recommendations during the admissions application process. Financial need is not a factor in the selection.

Candidates interested in merit scholarships are encouraged to apply early in the admissions application process. Every admitted full-time applicant is considered for the scholarship and recipients are determined no later than March 15 for programs that begin in the summer. Scholarship recipients for programs that begin in the fall are determined no later than July 15. Due to limited funding, these scholarships are not available to international students.

Scholarships are renewable so long as students maintain full-time enrollment and a cumulative grade point average of 3.25 each semester.

## Graduate Assistance Program Grant

Quinnipiac University provides institutional grants to our full-time graduate students with the highest demonstrated financial need. In order to determine who should be appropriately funded by this grant, we use the Need Access application in conjunction with the FAFSA. The grant is non-renewable.

## Loan Programs

Graduate students may be eligible for several different types of loan programs offered at the University. Federal loans are available to students who: a) meet the general requirements; b) are U.S. citizens or eligible non-citizens; and c) are registered with Selective Service (male students only).

Private alternative loans also are available and do not require the same criteria as listed above. These types of loans are based on enrollment and an individual's personal credit standings.

## Applying for Financial Aid

Students seeking financial aid should complete, as soon as possible, a "Free Application for Federal Student Aid." This may be completed online at www.fafsa.gov. Be sure to indicate the federal school code 001402. In addition, a financial aid application is required to award student aid. The form can be downloaded from the "Graduate Financial Aid" section of Quinnipiac's website.

## Use of Graduate Credits to Meet the Requirements of an Undergraduate and a Graduate Degree Program

With the permission of the office of the school/college dean(s), up to 9 graduate credits may be used to fulfill undergraduate degree requirements. These credits may be applied to meet the requirements of a subsequent graduate degree program if they are a part of the approved curriculum of the graduate program. However, a minimum of 24 graduate credits must be taken after the conferral of the undergraduate degree, to earn a graduate degree. Students also must meet all of the curriculum and graduation requirements of their individual graduate degree program.

## Requirements for Graduation

## Master of Arts in Teaching Program

1. Satisfactory completion of all MAT program requirements.
2. Satisfactory completion of the Connecticut State Department of Education's certification requirement of demonstrated competence in language arts, mathematics, natural sciences, social sciences (including a U.S. history course), the fine arts, physical education and health, a world language, and computer and other technology.
3. Satisfactory results on the appropriate PRAXIS II and CT Foundation of Reading tests.
4. A preferred cumulative GPA of at least 3.0.
5. Completion of the full-time internship.

Master of Business Administration

1. Satisfactory completion of all MBA program requirements. (46 credits).
2. A cumulative GPA of at least 3.0.
3. A minimum grade of C in all MBA program courses taken at Quinnipiac.

## Master of Health Science in

 Cardiovascular Perfusion, Medical Laboratory Sciences, Pathologists' Assistant and Physician Assistant1. Satisfactory completion of the curriculum requirements for the selected graduate program
2. Satisfactory completion of specific course requirements.
3. A cumulative GPA of at least 3.0.

## Master of Health Science in

Radiologist Assistant

1. Satisfactory completion of all MHS-RA curriculum requirements.
2. Satisfactory completion of all American Registry of Radiologic Technologists (ARRT) examination requirements.
3. A cumulative GPA of at least a 3.0.

## Master of Science in Business Analytics

1. Satisfactory completion of all MS in business analytics program requirements ( 33 credits).
2. A cumulative GPA of at least 3.0.
3. A minimum grade of C in all MS program courses taken at Quinnipiac.

## Master of Science in Instructional Design

1. Satisfactory completion of all MS in instructional design program requirements, including capstone project ( 30 credits).
2. A cumulative GPA of at least 3.0 , with no course grade below B-.

## Master of Science in Interactive Media

1. Satisfactory completion of 36 credits of graduate study.
2. A cumulative GPA of at least 3.0.
3. Completion of the capstone course.

## Master of Science in Journalism

1. Satisfactory completion of 36 credits of graduate study.
2. A cumulative GPA of at least 3.0.

## Master of Science in Sports Journalism

1. Satisfactory completion of 36 credits of graduate study.
2. A cumulative GPA of at least 3.0.

## Master of Science in <br> Molecular and Cell Biology

1. Satisfactory completion of at least 34 credits of graduate study.
2. Satisfactory completion of specific course requirements.
3. Candidates must maintain a minimum cumulative GPA of 3.0 to remain in the MCB program.

## Master of Science in Nursing

1. Satisfactory completion of all core courses and appropriate specialty courses.
2. A cumulative GPA of at least 3.0.
3. Satisfactory completion of the precepted practice hour requirement.

## Doctor of Nursing Practice

1. Satisfactory completion of all core courses and appropriate specialty courses.
2. A cumulative GPA of at least 3.0.
3. Satisfactory completion of the precepted practice hour requirement.
4. Oral comprehensive exams: nurse anesthesia post-bachelor's.
5. A minimum grade of $B$ in all doctoral program nursing courses.

## Post-professional Occupational Therapy <br> Doctorate

1. Satisfactory completion of all OTD program requirements ( 32 credits).
2. A cumulative GPA of at least 3.2.

## Doctor of Physical Therapy

1. Satisfactory completion of all graduate curriculum requirements.
2. A minimum grade of $\mathrm{C}+$ in all graduate courses.
3. A cumulative GPA of 3.0 for each semester of graduate study.

## Master of Science in Organizational Leadership

1. Satisfactory completion of all MS in organizational leadership program requirements (33 credits).
2. A cumulative GPA of at least 3.0.
3. A minimum grade of C in all MS program courses taken at Quinnipiac.

## Master of Science in Public Relations

1. Satisfactory completion of 36 credits of graduate study, including a research thesis or professional project.
2. A cumulative GPA of at least 3.0.

## Master of Science in Teacher Leadership

1. Satisfactory completion of all MS in teacher leadership program requirements ( 30 credits).
2. A cumulative GPA of at least 3.0 , with no course grade below B-.
3. Satisfactory completion of the specialization area capstone project.

## Master of Social Work

1. Satisfactory completion of all MSW program requirements ( 60 credits), including a capstone project and field placements.
2. A cumulative GPA of at least 3.0.

## Sixth-year Diploma in

Educational Leadership

1. Satisfactory completion of all program course work, including the internship.
2. Satisfactory results (passing) on the Connecticut Administrator test (CAT).
3. Successful completion of all performance tasks.
4. A cumulative GPA of at least 3.0 , with no course grade below B-.

## Graduate Academic Policies

## Academic Achievement and <br> Graduation Requirements

All graduate students are expected to maintain a GPA of at least 3.0 on a 4.0 scale. Full-time graduate students are required to achieve a 3.0 GPA each semester. Part-time graduate students must have an overall GPA of 3.0 upon the completion of 9 credits and must maintain a cumulative GPA of 3.0 thereafter.

Individual programs may have additional achievement requirements. For example, a program may require students to achieve a grade of B or better (or pass in a pass/fail format) in key specified courses. Alternatively, a program may limit the number of courses in which a student is permitted to receive a grade of B- or less. Individual programs also may require that full-time graduate students complete a minimal number of credits per semester to retain full-time status within the program.

At the end of each semester, the program directors compile a list of students who do not meet academic achievement requirements. Utilizing the review process established by his or her program's faculty committee, the graduate program director prepares and forwards to the academic dean the program's decision regarding each deficient student. Deficient students are notified by the academic dean of a decision on their status. Deficient students may be: a) placed on probation, b) suspended or c) dismissed. Students placed on probation remain in their program but must meet specified performance standards. Suspended students may apply for readmission into their program after the term of their suspension has expired. Dismissed students may not apply for readmission.

Dismissed or suspended students may appeal the sanctions placed on them by their program to the academic dean. Appeals must be submitted in writing within 10 days of the receipt of a suspension or dismissed notice. Appeals should be based on errors in the facts considered by their program or extenuating circumstances. Upon hearing the appeal the academic dean may decide:

1. To concur with the program's initial decision. In this case the initial decision is final.
2. To send the matter back to be reconsidered by the program.
3. To change the sanctions decided by the program by decreasing or increasing the sanctions.

To be eligible for graduation, all students must satisfy the following requirements:

1. Meet all conditions of admission.
2. Achieve a cumulative GPA of 3.0.
3. Meet all program academic achievement requirements.
4. File an application for graduation.

## Variant Procedure Policy

All Quinnipiac University and program specific graduate policies are designed to maintain the standards and quality of graduate studies. Graduate students and faculty are bound by the policies outlined in this catalog. However, individual circumstances may warrant a student to petition to be exempted or granted a variance from a particular policy. This petition should be stated briefly on a Variant Procedure Form by the student. It is strongly recommended that the variant form be accompanied by a letter of explanation and supportive documentation.

The Variant Procedure Form must be examined in turn by the program director, academic dean and the vice president for academic affairs.

## Graduate Student Council

The Quinnipiac Graduate Student Council is comprised of concerned students whose purpose is to serve as the united governing body for all graduate students at Quinnipiac. Specifically, the organization acts as the medium for expression for graduate student concerns and serves as the official voice of the graduate student population. The Graduate Student Council also has the authority to organize, sponsor and promote activities or events deemed to further the objectives of Quinnipiac's graduate student body. For more information, please contact graduatestudentcouncil@quinnipiac.edu.

## Background Checks

Students should be aware that certain clinical sites or internship locations may require a criminal background check before a student is placed in the clinic or intern site. The University has procedures to assist students in obtaining such a background check. The cost of the background check is the responsibility of each individual student.

## Tutorial Study

Quinnipiac University makes every effort to schedule courses so graduate students can complete their curriculum in a convenient period of time. Occasionally, a student may need to take a course not scheduled during a particular semester to complete a program or meet a professional requirement. In such cases, students may request to take a course on an individual, tutorial basis. Courses taught on a tutorial basis may not have regularly scheduled class times. However, tutorial courses have the same academic standards and performance requirements of regularly scheduled courses. Applications for tutorial courses ("Individual Study Form") can be obtained from the program director, who will refer the student to the proper faculty member. The application with the instructor's signature must be filed before the first day of classes together with a registration form.

## Undergraduate Students in Graduate Courses

Advanced undergraduate students who lack a bachelor's degree may take graduate courses in some programs as part of their undergraduate curriculum. Graduate courses are taught at an advanced level and no special consideration is made for undergraduate students who have enrolled in graduate classes on a space available basis. In individual graduate programs, graduate credits taken by an undergraduate may be used to fulfill curricular requirements of a subsequent master's degree. However, a minimum of 30 additional graduate credits beyond those counted toward the bachelor's degree must be completed to obtain a master's degree. Only 9 credits may be used to satisfy the requirements of both the undergraduate and the graduate degrees.

## Academic Honors

For a full list of academic awards and honor societies, visit the website at www.quinnipiac.edu/awardshonors.

## College of Arts and Sciences

## Master of Science

Master of Science in Molecular and Cell Biology

## Master of Science in Molecular and Cell Biology

The College of Arts and Sciences offers a master's degree program in molecular and cell biology to both part-time and full-time students. Through the graduate program, the mission of the Department of Biological Sciences is to prepare students for employment in research fields available in pharmaceutical companies, universities and hospitals as well as to provide an excellent foundation for students intending to pursue studies in professional health care fields and doctoral programs. To achieve this goal, the program provides the students with highly specialized lecture and laboratory courses relevant in this rapidly growing field.

In addition to comprehensive training in advanced biochemistry, molecular genetics, cell biology and laboratory methods, electives cover a wide range of specialties such as virology, microbiology, immunology, oncology and molecular pathology. The program supplements Quinnipiac University's faculty expertise with scientists from local pharmaceutical, biotechnology and medical school settings. This provides the students with the most efficient and effective educational arena to maximize their success upon completion of their studies.

Students are provided with a choice of pursuing thesis work or opting to take the written comprehensive examination and completing additional course work in place of the thesis. To pursue the thesis option, students must have achieved and maintained a cumulative GPA of 3.5 and completed a minimum of four of the five core courses. Successful completion of an Independent Study (BIO 688) with the intended thesis mentor is required as a prerequisite to the thesis work (BIO 650 and BIO 651). Each student selecting the thesis option carries out original laboratory research under the guidance of a thesis mentor.

## Admission

Students who have a bachelor's degree in a biological, medical or scientific field are eligible for admission to the molecular and cell biology graduate degree program. Applications may be obtained from the Office of Graduate Admissions (see www.quinnipiac.edu/gradadmission) and are accepted during the fall, spring or summer semesters. A complete application consists of the following:

- application form and fee
- a letter of intent including a detailed autobiography of personal, professional and educational achievements
- two letters of recommendation
- official transcripts of all undergraduate and graduate work completed
- undergraduate course work in biochemistry, microbiology and genetics is highly recommended

Applicants must have a minimum undergraduate cumulative GPA of 2.75. Although Graduate Record Examination (GRE) scores are not required, the scores can provide another indication of a student's intellectual ability.
Applicants should refer to the graduate admission requirements found in this catalog.

## MS Program of Study

The 34 credits required for the MS degree in molecular and cell biology include five courses ( 20 credits) in the science core, elective courses chosen in consultation with the program director and a thesis or non-thesis option (the non-thesis option requires the successful completion of a comprehensive examination; the thesis option requires two additional credits, for a total of 36 credits).

## Curriculum

Course Title Credits

## Core Curriculum

BIO 515 Advanced Biochemistry
BIO 568 Molecular \& Cell Biology
BIO 571 Molecular Genetics
BIO 605 DNA Methods Laboratory
BIO 606 Protein Methods Laboratory
Total 20
Thesis Option
Core Curriculum Requirements
BIO 650 Thesis I
$\begin{array}{llr}\text { BIO } 651 & \text { Thesis II } & 4 \\ \text { BIO } 688 & \text { Independent Study } & 2 \\ & \text { Graduate electives } & 6 \\ & & \text { Total } \mathbf{3 6}\end{array}$

## Non-Thesis Option

Core Curriculum Requirements 20
BIO 675 Comprehensive examination 2
Graduate electives 12
Total 34

## Graduate Elective Courses

BIO 500 Writing \& Science 3
BIO 560 Protein Biochemistry \& Enzymology 3
BIO 562 Bioinformatics 3
BIO 580 Animal Cell Culture 4
BIO 589 Neurophysiology 3
BIO 650 Thesis I 4
BIO 651 Thesis II 4
BIO 675 Comprehensive Exam 2
BIO 688/689 Independent Study 4
BMS 510 Biostatistics 3
BMS 517 Human Embryology 3
BMS 518 Pathophysiology 3
BMS 522 Immunology 3
BMS 526 Principles of Epidemiology 3
BMS 527 Pharmacology 3
BMS 532/532L Histology 4
BMS 533 Air, Water \& Soil Microbiology 4
BMS 534 Industrial Microbiology/Biotechnology 4
BMS 542/542L Advanced Microbiology 4
BMS 564 Fundamentals of Oncology 4
BMS 565 Leukemia 3
BMS 569 Antimicrobial Therapy 3
BMS 570 Virology 4
BMS 572/572L Pathogenic Microbiology 4
BMS 573 Mycology 4
BMS 574 Microbial Physiology 4
BMS 576 Drug Discovery \& Development 3
BMS 578 Cellular Basis of Neurobio. Disorders 3
BMS 579 Molecular Pathology 3
BMS 581 Receptors \& Regulatory Mechanisms 3
BMS 583 Forensic Pathology 3
BMS 595 Transplantation Immunology 3
BMS 596 Immunology of Infectious Diseases 3
PA 515 Human Physiology 4
PY 535 Disease Mechanisms 4
CHE 552 Introduction of Biochemical Toxicology 3
The thesis involves original laboratory research performed under the guidance of a thesis committee and the director of the molecular and cell biology program. The thesis committee evaluates a student's progress by approving the
research project and subsequently advising the student whenever the need arises.

## Comprehensive Examination

The written comprehensive exam (BIO 675) is a requirement of the non-thesis option for the MS degree in molecular and cell biology. Students must demonstrate both breadth and depth of knowledge by illustrating a command of the subject matter obtained from individual courses into unified concepts, which link the student's own specialization to other fields of study. Completion of a minimum of four of the five core curriculum courses is required to register for the comprehensive examination. Minimum grade of 3.0 is required to pass the comprehensive examination. Students must meet with the program director before registering for the comprehensive exam.


## School of Business and Engineering

Master of Business Administration (MBA) MBA Program*
MBA-CFA ${ }^{\circledR}$ Track (Chartered Financial Analyst)*
MBA-HCM Track (Health Care Management)*
MBA-SCM Track (Supply Chain
Management)*
Accelerated 3+1 BS/MBA
Combined BA/MBA
Combined BS/MBA
JD/MBA (Juris Doctor)
Master of Science in Business Analytics (online only)
Master of Science in Organizational Leadership (online-only)

Health Care Management Track
Human Resources Leadership Track
Public Service/Nonprofit Leadership Track Strategic Leadership Track
Certificates in Health Care Administration
Health Care Compliance*
Long-term Care Administration
*Programs marked with an asterisk also are offered online.
For specific information about the mission and learning goals for each of the graduate programs, please visit the University website at www.quinnipiac.edu.

## Master of Business Administration

The School of Business and Engineering offers an MBA program for working professionals as well as for individuals who may not have attained significant levels of work experience. The program can be completed on a part-time or full-time basis and is available fully online.

The MBA program provides students with broad coverage of the various functional areas of the firm, as well as an understanding of how these fit together into a high-performing organization. Students also are acquainted with the theories, principles and strategies necessary to succeed in careers in business, government or nonprofit management.

Beyond acquiring the knowledge of course content and an understanding of the functionality of an organization, students are taught to be
innovative in their approach to solving problems and making decisions. The curriculum was recently revised to be fully reflective of the contemporary and dynamic domain of business practice. The phase-in of the new curriculum began in Fall 2014. The focus of the new curriculum is explicitly placed on students developing their decision-making capabilities based on a foundation of core business functions and their interrelatedness. Integral parts of the curriculum include exposure to decisionmaking models, global business considerations, financial markets and analysis, leadership, organizational behavior and strategy.

Graduates are action-oriented and encouraged to think critically so that they can effectively and immediately apply the competencies and skills acquired in the MBA program to their organizations. Students also have the option of developing domain knowledge through participation in one of the tracks offered: chartered financial analyst, health care management and supply chain management. Numerous electives are available through which students may customize their experience based on their own professional and other goals. Courses are offered in a traditional on-campus, classroom format as well as in a completely online format. Students may elect to complete their classes entirely on campus, entirely online or through a combination of on-campus and online delivery to best suit their personal and professional needs.

## Learning Objectives

The learning objectives and goals of the MBA program are to develop and emphasize skills in the following areas:

- business analytic skills-facility with quantitative methods and tools and an ability to interpret financial metrics
- people management-ability to understand models and application of leadership and social intelligence
- organization management-ability to understand organizational behavior and structures and the importance of effective communication
- strategic integration-ability to assess and diagnose a situation and to formulate and implement effective decisions and responses to business problems
- ethics-ability to identify ethical issues related to business situations and to develop appropriate situational responses consistent with organizational and societal values


## MBA Admissions

Admission to Quinnipiac's graduate business programs is competitive. The following criteria apply for admission to the MBA. Please note: Separate admissions requirements apply for Quinnipiac BS/BA-MBA students and 3+1 program students in the School of Business. Please refer to the appropriate sections of this catalog for further information on these programs. All prospective MBA students must submit the following:

1. Appropriate application form for either the online MBA or the part-time or full-time on-campus program. Online submission is preferred. Go to www.quinnipiac.edu/gradhowtoapply/.
2. Official transcripts from all institutions attended, two letters of recommendation, a current resume and a personal statement.
3. Scores obtained on the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE), unless one or more of the conditions discussed below apply.
4. A request for GMAT/GRE waiver may be submitted as part of the application process. In general, applicants meeting any of the criteria below may be eligible for such a waiver with documentation of the specific circumstances under which the waiver is being requested. These include, but are not limited to:
a. Completion of a minimum of five years of post-bachelor's, professional and progressive work experience that reflects increasing levels of responsibility, particularly in such areas as budgets, finance, operations and staff supervision.
b. Completion of a master's or doctoral level degree from an accredited institution within 10 years of the application to the QU MBA program. This includes the JD, MD, PhD and other related degrees.
c. Passage of the CPA or CMA exam series and possession of a license to practice.
d. Completion of all CFA examinations and designation as a CFA charter holder.

Eligibility for a GMAT/GRE waiver does not guarantee admission. Applicants granted a waiver and subsequently denied admission may request reconsideration of their application with the inclusion of GMAT or GRE scores.

The final determination of a testing waiver is made by Quinnipiac's School of Business and Engineering. This will be done as quickly as possible, but students are encouraged to submit their applications and any accompanying waiver requests as early in the admissions cycle as possible in case there are questions, additional information is needed or the standardized testing requirement is not waived. The admission decision is made by Quinnipiac's School of Business and Engineering.
5. Prospective international students must submit certified translations of official transcripts prepared by World Education Services (WES) www.wes.org or another acceptable organization that is approved by Quinnipiac for this purpose. In addition, prospective international students must submit the materials covered in \#1, \#2 and \#3 above.
6. All applicants from non-English-speaking countries must indicate that they have the language capability to understand business instruction in English and must provide official Test of English as a Foreign Language (TOEFL) scores. In general, a minimum TOEFL Internetbased score of 90 is required for admission (or 233 for computer based, or 575 for paper based).

In lieu of TOEFL, applicants may submit International English Language Testing System (IELTS) scores. A minimum score of 6.5 on this exam, a B or above on the Certificate of Advanced English or a C or above on the Certificate of Proficiency in English is required. TOEFL and IELTS scores are valid for two years.
7. International applicants are required to submit proof of adequate funds to complete their study at Quinnipiac University before an eligibility form (I-20) can be issued. Complete the Statement of Financial Support and submit along with supporting documentation. In addition, a copy of a passport or national ID is required. The Statement of Financial Support can be found at: www.quinnipiac.edu/gradinternational.

Applications for the MBA program are accepted throughout the year for both full- and part-time study. Students may begin their studies in January, May or August. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired.
Program of Study Course Title Credits
Foundational Course Work
MBA $601 \quad$ Foundations for Decision Making (MBA Quick Start) ..... 1
Decision Making Tools (choose one): ..... 3
EC 600 Managerial Economics CIS 600 Information Systems Strategy MBA 610 Business Decision AnalysisDecision Making and Strategic Integration (Part 1)MBA 615 Managing the Decision Making Process 3
Core Business Disciplines
MBA 620 Financial \& Managerial Accounting for Decision Making ..... 3
MBA $625 \quad$ Organizational Behavior \& Leadership for Decision Makers ..... 3
MBA 635 Decision Making for Business Operations ..... 3
MBA 640 Financial Decision Making ..... 3
MBA 645 Marketing Decision Making ..... 3
MBA 660 Decision Making in a Global Economy ..... 3**
Decision Making and Strategic Integration (Part 2) MBA 690 Integrated Strategic Decision Making Capstone ..... 3
Graduate Electives**Students also choose six graduate electives either in aspecific concentration/discipline or customized by thestudent (18 credits)MBA students take 18 credits of electives.**Students who are in the BS/MBA program are required totake MBA 660, which includes an international experience.

MBA students may choose to take elective courses within one area, creating a concentration in a specific discipline, or may choose to take electives across multiple business disciplines, enhancing a broad interdisciplinary perspective.

Electives are available in computer information systems, finance, health care management, international business, management and marketing.

## MBA-HCM Track (Health Care Management)

Quinnipiac University, as part of its long tradition of education in health sciences and health care administration, offers a master of business administration with a track in health care management. This track prepares students for administrative roles in the health care industry and emphasizes the training of managers who work collaboratively with highly trained professionals
from a variety of clinical disciplines in all health care settings. Students gain a comprehensive knowledge of business subjects that are increasingly important in the complex health care industry.

The MBA in health care management track is taught by doctorally trained or professionally qualified faculty with extensive experience in the health care industry. The program offers students new to the health care industry, as well as students already in the industry, the opportunity to expand their theoretical and practical knowledge.

The program requires a total of 46 credits. A maximum of 6 credits may be taken as a health care industry residency or as a consulting practicum to fulfill the requirements of the health care administration curriculum.

Applications are reviewed when all materials and the application fee are received by the University graduate admissions office. A complete application consists of an application form accompanied by the application fee, GMAT or GRE scores, two recommendations, a current resume and personal statement, and transcripts of all undergraduate and graduate work. International students should take note of the special requirements listed in the general MBA section of the catalog. Students seeking potential standardized test waivers also should consult the general MBA section.

Professional work experience and recommendations also are considered in the admissions process.

## Program of Study <br> Course Title

Credits
Foundational Course Work
$\begin{array}{ll}\text { MBA } 601 & \begin{array}{l}\text { Foundations for Decision Making } \\ \text { (MBA Quick Start) }\end{array}\end{array}$
Decision Making Tools (choose one):
EC 600 Managerial Economics
CIS 600 Information Systems Strategy
MBA $610 \quad$ Business Decision Analysis
Decision Making and Strategic Integration (Part 1)
MBA 615 Managing the Decision Making Process 3
Core Business Disciplines
MBA 620 Financial \& Managerial Accounting for Decision Making
MBA 625 Organizational Behavior \& Leadership for Decision Makers
MBA 635 Decision Making for Business Operations 3
MBA 640 Financial Decision Making 3
MBA 645 Marketing Decision Making 3
MBA 660 Decision Making in a Global Economy 3**

## Health Management Required Courses

HM 600 Foundations of Health Care Management 3
HM 621 Quality Management in Health Care Facilities 3
HM 663 Integrated Health Systems \& Managed Care 3
$\begin{array}{ll}\text { HM } 664 \quad \text { Financial Management in Health Care } \\ & \text { Organizations }\end{array}$
HM 668 Legal Aspects of Health Care Delivery 3
Elective Courses (choose one/3 credits)
HM 626 Epidemiology \& Population Health 3
HM 630 Corporate Compliance in the Health $\quad 3$
$\begin{array}{lll}\text { HM } 660 \quad \begin{array}{l}\text { Human Resource Management in } \\ \text { Health Care Administration }\end{array} & 3\end{array}$
HM 671 Health Care Policy \& Politics 3
$\begin{array}{lll}\text { HM } 669 & \begin{array}{l}\text { Organization \& Management of } \\ \text { Long-term Care Facilities }\end{array} & 3\end{array}$
HM 780 Internship I** 3
HM 781 Internship II 3
HM 783/784 Consulting Practicum I \& II 6
MG $603 \quad$ Project Management 3
MG 641 Supply Chain Management 3
Decision Making and Strategic Integration (Part 2)
MBA 690 Integrated Strategic Decision
Making Capstone
3
**BS/MBA students must complete HM 780 as their elective.

## MBA-CFA ${ }^{\circledR}$ Track

## (Chartered Financial Analyst)

The MBA-CFA ${ }^{\circledR}$ is a specialized track within the MBA program and targets MBA students whose career choices require more extensive finance training and preparation than the traditional MBA. Students completing the track receive an MBA from Quinnipiac University. They also are prepared to sit for Level I of the Chartered Financial Analyst ${ }^{\circledR}$ Exam. The MBA-CFA ${ }^{\circledR}$ track program has the same number of credits as the MBA program. The first 28 credits of the track are the same as the MBA program. Students then take specialized concentration courses and finance electives to complete the 46 credits required for the MBA.

A student interested in the MBA-CFA ${ }^{\circledR}$ track must designate this track to their adviser prior to completing all of the Foundations for Effective Management core courses.

The MBA-CFA ${ }^{\circledR}$ track program of study is listed below.

| Program of Study |  |  |
| :---: | :---: | :---: |
|  | Title Cre | Cre |
| Foundational Course Work |  |  |
| MBA 601 | Foundations for Decision Making (MBA Quick Start) |  |
| Decision Making Tools (choose one): |  |  |
| EC 600 | Managerial Economics |  |
| CIS 600 | Information Systems Strategy |  |
| MBA 610 | Business Decision Analysis |  |
| Decision Making and Strategic Integration (Part 1) |  |  |
| MBA 615 | Managing the Decision Making Proces |  |
| Core Business Disciplines |  |  |
| MBA 620 | Financial \& Managerial Accounting for Decision Making |  |
| MBA 625 | Organizational Behavior \& Leadership for Decision Makers |  |
| MBA 635 | Decision Making for Business Operations |  |
| MBA 640 | Financial Decision Making |  |
| MBA 645 | Marketing Decision Making |  |
| MBA 660 | Decision Making in a Global Economy |  |
| Finance Courses |  |  |
| AC 613 FIN 610 | Financial Statement Analysis |  |
|  | Global Investment Analysis |  |
| FIN 612 | Fixed Income Investments |  |
| FIN 616 | Derivatives |  |
| FIN 630 Portfolio |  |  |
| Graduate Electives** |  |  |
| Students also take one graduate finance or graduate business elective. |  |  |
|  |  |  |
| MBA $690 \quad \begin{aligned} & \text { Integrated Strategic Decision Making } \\ & \text { Capstone }\end{aligned}$ |  |  |
| **BS/MBA students must complete MBA 688 as their elective |  |  |
| MBA-SCM Track |  |  |
| (Supply Chain Management) |  |  |
| The MBA-SCM is a specialized track within the MBA program. The field of supply chain management is experiencing significant growth in the number of opportunities for individuals who combine the right education, skills and perspective. Supply chain management is a truly interdisciplinary field that requires skills in logistics and analytics with global awareness and team building. Manufacturing, distribution, retail and even banking all need to manage their supply chain efficiently and effectively in a global environment that is characterized by |  |  |

competition and change. Leadership opportunities and compensation packages are among the most competitive across industries. More information about supply chain careers can be found at: www.quinnipiac.edu/online/mba-scm.

The MBA-SCM track has the same number of credits as the MBA program. The first 28 credits of the track are the MBA core. Students then take specialized concentration courses to complete the 46 credits required for the MBA. A student interested in the MBA-SCM track should indicate this to his/her adviser early in their program.

## Program of Study

Course Title Credits

Foundational Course Work

| MBA 601 | Foundations for Decision Making <br> (MBA Quick Start) |
| :--- | :--- |
| 1 |  |

Decision Making Tools (choose one): 3
EC 600 Managerial Economics
CIS 600 Information Systems Strategy
MBA 610 Business Decision Analysis
Decision Making and Strategic Integration (Part 1)
MBA 615 Managing the Decision Making Process 3
Core Business Disciplines
MBA 620 Financial \& Managerial Accounting for Decision Making 3
MBA 625 Organizational Behavior \& Leadership for Decision Makers 3
MBA 635 Decision Making for Business Operations 3
MBA 640 Financial Decision Making 3
MBA 645 Marketing Decision Making 3
MBA 660 Decision Making in a Global Economy $3^{* *}$
Supply Chain Track Courses
MG 640 Strategic Sourcing \& Supply Management3

MG 641 Supply Chain Management 3
MG 642 Transportation Management 3
MK 615 Managing Marketing Channels 3
Graduate Electives**
Students also take two graduate electives either in a specific concentration/discipline or customized by the student ( 6 credits)**
Decision Making and Strategic Integration (Part 2)
MBA 690 Integrated Strategic Decision Making Capstone
**BS/MBA students must complete MBA 688/Graduate Internship (3 credits)

## Accelerated Four-year (3+1) BS/MBA

The accelerated four-year $3+1 \mathrm{BS} / \mathrm{MBA}$ is designed for outstanding School of Business students-those who rank in the top 20 percent of their high school class and have a combined critical reading and math SAT score of 1200 or a composite ACT of 27 . Students enter the program as freshmen and learn at an accelerated pace to earn a bachelor's degree in three years and an MBA in the fourth. This select program features total savings over the traditional five-year BS/MBA option and additional features including:

- dedicated housing for students in the program with private study hall
- dedicated resident assistant and academic adviser
- flat tuition and fees for the entire four years with any academic scholarships carrying from the third to the fourth, graduate year.
For more information about this program, please visit www.quinnipiac.edu/four-year-bs-mba.


## Fast Track Combined BA/MBA

The Fast Track BA/MBA program is designed for outstanding undergraduate students outside of the School of Business and Engineering. The program enables students from a wide variety of disciplines to add a core of business knowledge to their academic portfolio. Students with appropriate prerequisite knowledge are allowed to take courses toward an MBA during the senior year and complete their MBA in one year beyond the bachelor's degree. Students interested in pursuing the BA/ MBA option are strongly encouraged to declare the general business minor early in their undergraduate program to ensure they have an adequate foundation for graduate business course work. Interested students must apply for admission to the BA/MBA program during the last semester of the junior year using a special application form available in the School of Business and Engineering. Admission into the combined program is competitive. Only students who have earned at least 75 credits with an overall GPA of 3.0 are considered for admission to this program. Meeting the minimum criteria for consideration does not guarantee admission.

It is recommended that students interested in the Fast Track BA/MBA program take the following undergraduate courses or equivalents
early in their undergraduate program. These will prepare students for the recommended MBA classes during their senior year.

| Course | Title | Credits |
| :--- | :--- | ---: |
| AC 101 | Financial Accounting | 3 |
| EC 1111 | Microeconomics | 3 |
| or EC 112 | Macroeconomics | 3 |
| EC 271 | Applied Statistical Methods (or equivalent) 3 |  |

Students in the Fast Track program may complete up to 9 credits of graduate courses during their senior year. These courses also fulfill undergraduate open electives. Students must work with their undergraduate adviser and the MBA director to ensure that the courses fit into both degree programs. Students must present satisfactory performance in their graduate course work completed during their senior year to be officially admitted into the graduate program upon completion of their BA degree. The BA/ MBA curriculum consists of the MBA core courses including a requirement to complete MBA 660 with an international travel component and MBA 688 MBA Internship.

## Fast Track Combined BS/MBA

The Fast Track BS/MBA program is designed for outstanding undergraduate School of Business and Engineering students. The program enables students to take courses toward an MBA during the senior year and complete their MBA in one year beyond the bachelor's degree. Interested students must apply for admission to the BS/ MBA program during the last semester of the junior year using a special application form available in the School of Business and Engineering. Admission into the combined program is competitive. Only students who have earned at least 75 credits with an overall GPA of 3.0 are considered.

Students in the Fast Track program may complete up to 9 credits of graduate courses during their senior year, which also fulfill undergraduate open electives. Students must work with their undergraduate adviser and the MBA director to ensure that the courses fit into both degree programs. Students must present satisfactory performance in their graduate course work completed during their senior year to be officially admitted into the graduate program upon completion of
their BS degree. The BS/MBA curriculum consists of the MBA core courses plus a requirement to complete MBA 660 with an international travel component and MBA 688 MBA Internship.

## JD/MBA

Students may apply for acceptance to both the Law School and the MBA program and, upon completion of both programs, receive a business and a law degree. This specialized joint program shortens the length of time necessary to receive the degrees. Four law courses are used to fulfill the four-elective course requirement of the MBA program.

Admissions for these programs are handled separately, but a student should inform both admissions offices of an interest in this joint degree program. Students accepted into the School of Law are not required to take the GMAT or GRE.

Once accepted to both programs, a student typically completes one year of law studies and then begins taking courses from both programs concurrently, finishing both programs' requirements in the same semester. However, students who wish to complete the joint program in three years can accomplish this by starting their MBA courses in the summer before their first year in the School of Law. A student may be admitted to one program and, prior to meeting the graduation requirements for that program, apply for the joint degree program.

## Master of Science in Business Analytics

The MS in business analytics program is designed to develop the skills to extract, analyze, interpret and present data for business decision making. These skills are critical to decision making in every sector of industry, government and nonprofit organizations. The program emphasizes analytical and statistical tools that enable graduates to use sophisticated means to mine, analyze, evaluate and present data in a variety of organizational environments.

## Learning Objectives

1. Understand different techniques used to analyze data.
2. Understand how data is stored, accessed and retrieved.
3. Apply business analytics techniques and utilize analytical tools for organizational decision making.
4. Demonstrate skills in interpreting and presenting analytical results

## Admission

To be admitted to the program, an applicant must have completed an undergraduate degree program with a GPA of at least 3.0. Work experience and recommendations also are strongly considered in the admission process. Standardized test scores (such as GMAT or GRE) submitted by the students in support of the application also are considered, but are not required.

In addition, applicants to the MS in business analytics program must possess an undergraduate major, graduate degree or other significant course work in a quantitatively oriented area, including but not limited to mathematics, actuarial science, statistics, computer science, engineering, operations management, accounting, finance, economics or the natural sciences.

A complete application consists of the following: an application form, application fee, two professional recommendations, a recent resume, a personal statement and official transcripts of all undergraduate and graduate work completed.

| Program of Study |  |  |
| :--- | :--- | ---: |
| Required Core Courses (24 credits) |  |  |
| Course | Title | Credits |
| BAN 610 | Introduction to Business Analytics | 3 |
| BAN 615 | Predictive Modeling | 3 |
| CIS 620 | Data Management | 3 |
| CIS 627 | Data Warehousing | 3 |
| CIS 628 | Data Mining | 3 |
| BAN 620 | Text Mining | 3 |
| BAN 650 | Data Visualization | 3 |
| BAN 690 | Business Analytics Capstone | 3 |

## Elective Courses (9 credits)

Students may select any 3 courses ( 9 credits) from the list below. Additional elective business courses are available to students at the discretion of the program director. BAN 660 Optimization 3
BAN 661 Web Analytics \& Web Intelligence 3
BAN 662 Insurance Analytics 3
BAN 680 Quality Management 3
CIS 625 ERP Design \& Implementation 3
CIS 630 Business Design \& Object-oriented Analysis 3
CIS $690 \quad$ Project Management 3

## Master of Science in Organizational Leadership

The MS in organizational leadership program is a rigorous online program specifically designed to be highly valuable to working professional adult students trying to advance their careers by developing a more sophisticated understanding of leadership in their organizations.

The MS in organizational leadership program provides a rare opportunity to develop the selfawareness and understanding of others that is so essential to effective leadership. Students must have at least four years of full-time professional experience to enter the program. The core courses of study focus on communication, ethics, analysis and organizational leadership. The MSOL program is writing intensive, building on the University's emphasis on written communication. Students may focus on one of four tracks: Health Care Management, Human Resource Leadership, Public Service/Nonprofit Leadership, or Strategic Leadership.

## Learning Objectives

The learning objectives and goals of the master of science in organizational leadership foster graduate-level growth and development in six key areas of leadership:

- interpersonal and communication skills
- self-awareness and growth
- understanding, interpreting and using data to improve performance
- understanding and leading organizations and complex teams
- strategic analysis and implementation
- ethics of leadership


## Admission

Applicants to the MSOL program must possess four years of professional, post-bachelor's degree experience.

In addition to an application for admission, students also must submit:

1. official transcripts of all undergraduate and graduate programs/courses completed
2. personal statement
3. resume
4. two letters of recommendation
5. application fee

The program consists of 33 credits, including eight required core courses ( 24 credits) and three elective courses ( 9 credits) in a professional focus track.

| Program of Study |  |  |
| :--- | :--- | ---: |
| Required Core Courses (24 credits) |  |  |
| Course | Title | Credits |
| OL 601 | Foundations of Organizational Leadership | 3 |
| OL 610 | The Power \& Politics of Communication | 3 |
| OL 615 | Leadership Across Boundaries | 3 |
| OL 630 | Performance Management | 3 |
| OL 640 | Project Management | 3 |
| OL 650 | Leading Organizational Change | 3 |
| OL 662 | Ethics \& Governance | 3 |
| OL 690 | Leadership Consulting Capstone | 3 |

## Professional Focus Tracks

Each professional focus area allows students to study a specialization within organizational leadership. This builds on the leadership foundation courses and provides expertise for those seeking to enhance their leadership skills in a specific industry.

## Health Care Management Track

Students pursuing this track must complete all core requirements, plus three additional courses ( 9 credits) chosen from the following:
HM 600 Foundations of Health Care Management 3
HM 621 Quality Mgmt. in Health Care Facilities 3
HM 626 Epidemiology \& Population Health 3
HM 630 Corporate Compliance in the Health Care Industry
HM 660 Human Resource Management in Health Care Administration
HM $664 \quad$ Financial Management in Health Care Organizations
HM 668 Legal Aspects of Health Care Delivery 3
HM 669 Organization \& Management of Long-term Care Facilities
HM 671 Health Policy \& Politics 3

## Human Resource Leadership Track

Students pursuing this track must complete all core requirements plus three additional courses ( 9 credits): OL 681 Leadership in Human Resources 3 OL 682 Employment Law for the Non-Lawyer 3 OL 683 Employee Development Strategies for Organizational Leaders

Public Service/Nonprofit Leadership Track Students pursuing this track must complete all core requirements plus three additional courses ( 9 credits): OL 681 Leadership in Human Resources OL 686 Leading Public Service Organizations<br>OL 687 Strategic Planning for Public Service Organizations

## Strategic Leadership Track

Students pursuing this track complete three additional courses ( 9 credits). They may select any combination of courses from the Human Resources Leadership Track, the Public Service/ Nonprofit Leadership Track, the Health Care Management Track or from a specified list of electives across the graduate business curriculum.

## Certificates in <br> Health Care Administration

## Health Care Compliance

Quinnipiac University, through a program jointly developed by the School of Business and Engineering and School of Law, is certified by the Health Care Compliance Association to offer the first university-based program in the country to train health care compliance officers. Recognizing the importance of compliance officers in all areas of the health care industry and the need to raise the level of professionalism of those officers, the two schools jointly offer a six-course certificate program in health care compliance. This program can be completed online.

Quinnipiac's health care compliance certificate program provides qualified students with a sound academic foundation and the skills to successfully implement the administrative and management principles required to function as competent and knowledgeable health care compliance professionals.

Health care compliance certificate program courses cover: the principles and specifics of health care compliance, general management, legal aspects of health care compliance and financial management. Graduate courses in both the School of Business and Engineering and the School of Law make up the six-course certificate program. Students without a background in law are required to complete HM 668: Legal Aspects
of Health Care Delivery as a prerequisite for the other law courses in the program.

After completing these courses, Quinnipiac University awards a health care compliance certificate, which makes students eligible to immediately take the HCCA national certifying examination. Students must take the HCCA exam within one year of completing the Quinnipiac University Certificate to qualify for a waiver of residency/work experience/education requirements.
Required: 3 credits

| Course | Title | Credits |
| :--- | :--- | ---: |
| HM 630 | Corporate Compliance in the Health |  |
|  | Care Industry | 3 |

General Management: two courses ( 6 credits) required
HM 621 Quality Mgmt. in Health Care Facilities 3
HM 660 Human Resource Management in Health Care Administration
MG 600 Business Ethics \& Legal Environment 3
MG 603 Project Management 3
MG 610 Managing People \& Organizations 3
Law Courses: two courses ( 6 credits) required
$\begin{array}{lll}\text { HM } 668 & \text { Legal Aspects of Health Care Delivery } \\ & \text { (prerequisite for non-law students) }\end{array}$
LAW 345 Law \& Medicine 2
LAW 348 Advanced Law \& Medicine 2
LAW 352 Health Care Business Transactions 2
LAW 542 Regulation of Health Care Industries 2
Financial Management: 3 credits
HM 664 Financial Management in Health Care Organizations

## Long-term Care Administration

Individuals who wish to become licensed nursing home administrators in the state of Connecticut must pass a licensure examination offered by the Department of Public Health. To be eligible for this examination, applicants must complete either the master's degree outlined (MBA/HCM) above with HM 669 as part of the degree program and a residency requirement ( 500 hours) or the nondegree certificate of study.

The certificate course of study consists of two components: an academic course and a 900hour residency in a skilled nursing facility. The academic course, HM 669 Organization and Management of Long-term Care Facilities, is generally offered once a year in the fall semester.

The residency program is offered in a twocourse sequence-HM 790 and HM 791, each of
which grants 450 hours of residency (for 4 credits each). Two restrictions apply to the residency program. First, the residency must be started within one year of the completion of the academic course. (Students may petition the Department of Public Health in writing if there is justification to begin the residency at another time.) Second, at least one half of the residency ( 450 hours) must be completed at a site where the student has had no previous financial or employment relationship. Information on this program is available in the Office of Graduate Admissions.

## School of Communications

Master of Science in Interactive Media<br>Multimedia Production<br>Social Media<br>User Experience Design<br>Master of Science in Journalism<br>Broadcast/Multimedia<br>Online Writing<br>Master of Science in Sports Journalism<br>Broadcast/Multimedia<br>Online Writing<br>Master of Science in Public Relations<br>Combined BA or BS/MS in Interactive Media<br>Combined BA or BS/MS in Journalism<br>Combined BA or BS/MS in Public Relations<br>Combined BA or BS/MS in Sports Journalism

## Master of Science in

## Interactive Media

The master of science in interactive media program focuses on the principles and practices of creating and designing content interfaces and social media for distribution through the Internet, portable media devices and related digital platforms. The program's mission is to provide a master's level education in which students prepare to become interactive leaders, producers and managers for national and global organizations.

The program is offered fully online or as a blend of mostly online courses and a limited number of on-campus courses. Students may complete the program in two years, either full- or part-time, by completing six courses per calendar year. Undergraduate students may apply for the
combined, five-year bachelor/master's degree program in interactive media.

Interactive media graduates can compete for a range of job opportunities as web producers, user experience designers, multimedia content specialists, interactive content developers, digital media producers, social media specialists and managers. Graduates can find careers in organizations engaged in the creation and distribution of digital content and social media for corporate communication departments, schools and colleges, advertising agencies, news media companies, health-care institutions, and film and television production companies.

The program encourages applications from prospective students who want to apply skills acquired during their undergraduate education or professional careers. Students come from a diverse range of experiences such as journalism, programming, graphic design, web design/management, broadcasting, film making, media studies and public relations.

Three degree concentrations are available: multimedia production, social media and user experience design. Seven core courses are taught for all concentrations with four courses of specialization. One elective course is available for students to get a deeper experience in an area of interest.

The core courses cover contemporary issues, information design, introduction to front-end development, writing, ethics, project management and a capstone experience.

Students who choose the multimedia production concentration take courses in media production for audio and video, interactive techniques, animation and mobile display. Students learn how to transform traditional media and original content into multimedia productions. The combination of study in the theoretical and production aspects of media encourages students to become innovative thinkers who understand the shift from legacy media to online.

Students who choose the social media concentration take courses that cover social media practice and platforms, community management, social and web analytics and strategic development. In this concentration, students learn the fundamental theories and practices that have led to the rise of social media and how to deploy them across multiple platforms and disciplines. Students who complete this concentration have a
firm understanding of the role social media plays in today's communications landscape as well as the tools to deploy new solutions as this media continues to grow and evolve.

Students who choose the user experience design concentration take courses in all aspects of the field. The user experience design concentration includes courses covering the main subsets of the UXD profession: interface design, usability, information architecture, content strategy and prototyping. UXD has emerged as a distinct profession within the fields of web and computer application development and is a subset of human factors engineering that focuses on interactive screen experiences such as websites, mobile apps and other consumer software. Jobs in user experience design are available in all industries, businesses and major organizations.

Students also can choose to design a custom sequence of concentration courses from the complete course list. Including the elective, they have five courses to use as a unique sequence suited to their professional aspiration and skills.

The program follows a 14 -week fall/spring course semester sequence. A full selection of 12 -week courses is offered during the summer for part-time students who want to finish in two years. Full-time students also can take summer courses and finish in one and a half years. Fall, spring and summer starts are available.

Students also have the opportunity to enroll in an optional 3-credit internship. Graduate students have served as interns at local and national media companies and web development firms. Also available is an optional 3-credit independent study for students who want to do advanced work or research in a particular topic.

To earn the master's degree, students must complete 36 credits with a minimum 3.0 GPA, which includes a 3 -credit master's capstone experience. The master's capstone is a professional-level project that advances understanding of the field. Planning for the master's capstone at the outset of studies is strongly encouraged. Unique to the program is the Project Planning course requirement. The Project Planning course is essential to becoming a media producer and serves as a prequel to the master's capstone course, allowing students to create a comprehensive project plan, essentially making the master's capstone a 6 -credit experience.

## Admission

The graduate programs in the School of Communications invite applications from prospective students who wish to pursue the professional practice of interactive media. Recent graduates of a bachelor's program outside of the communications field are welcome to apply, as are prospective students who are presently working and wish to either shift careers or enhance their professional standing.

Admission to each program is competitive and is based on the following:

- undergraduate performance as measured by GPA
- experience in the chosen field either as a student or professional
- two professional recommendations
- online samples of written, visual, media or interactive work
- a 500-word personal statement (see application)


## Program of Study

When applying, applicants should indicate which program concentration they want to pursue.

Students who demonstrate advanced proficiency in ICM 502 or ICM 505 may take an elective instead with the written permission of the graduate program director.
Required Core Courses (21 credits)
Course Title Credits

ICM 501 Issues in Contemporary Media 3
ICM 502 Information Design 3
ICM 505 Introduction to Front End Development 3
ICM 506 Writing for Interactive Media 3
ICM 552 Media Ethics \& Policy 3
ICM 590 Project Planning 3
ICM 601 Master's Capstone
or ICM 602 Thesis
Multimedia Production Concentration
Required Courses ( 15 credits)
ICM 504 Interactive Animation \& Mobile Design 3
ICM 508 Multimedia Techniques 3
ICM 509 Advanced Multimedia Techniques 3
ICM 516 Advanced Interactive Animation 3
Elective
Social Media Concentration
Required Courses ( 15 credits)
ICM 522 Social Media Techniques \& Practices 3
ICM 524 Social Media Analytics, SEO \& Search 3
ICM 526 Community Management 3
ICM 527 Strategic Planning 3
Elective 3

## User Experience Design Concentration Required Courses ( 15 credits)

ICM 512 Design for the User 3

ICM 513 Information Architecture \& Content Strategy 3
ICM 514 Usability Methods
ICM 517 Prototyping
Elective

## Custom Concentration ( 15 credits)

Five 3-credit courses chosen from the three interactive media concentrations. Students must prepare a proposal providing a rationale and the courses chosen in their first semester in the program. The proposal is reviewed and a decision made by the program director and School of Communications associate dean. The degree awarded is the MS in interactive media with no concentration indicated.

## Electives

Any ICM course outside of the student's chosen concentration is available as an elective.
ICM 530 Independent Study
ICM 531 Graduate Internship
Graduate courses in journalism and public relations also are available as electives.

## Combined Bachelor's/Master's Degree in Interactive Media

The five-year BA/MS or BS/MS in the interactive media program is designed for outstanding undergraduate students who are looking to accelerate the completion of their master's degree. Through this program, eligible students are able to take six interactive media graduate credits during their senior year and complete their MS degree within 14 months of receiving their bachelor's degree. Upon completion of the undergraduate degree, students begin a fifth year plan comprised of four semesters, including two summer terms, to earn the remaining 30 graduate credits. Courses begin during the summer session following undergraduate commencement and continue with the subsequent fall, spring and summer. For more information, refer to the website at www.quinnipiac.edu/combined-ba-bsms-icm.

## Advanced Graduate Certificate in Social Media

The advanced graduate certificate in social media is directed primarily but not exclusively at two types of students. The first are professionals who realize that social media skills can successfully add

value to their existing job function and growth path. The second are individuals who are tasked by their organizations to leadership roles within a new social media function. These individuals are looking for an educational experience that is more substantial than a conference to get both a foundational underpinning and actionable tools and structures that they can deploy within their workplace.

## Admission

To be eligible for the advanced graduate certificate in social media, a student needs to have received an undergraduate degree from a regionally accredited college or university.

Admission to the certificate program is based on the following:

- completion of an admission application certifying that an undergraduate degree has been received
- professional resume


## Program of Study

Three courses are offered in the advanced social media certificate program. They can be taken separately or in combination. Certificates are awarded based on the number of courses taken. Those who are just professionally entering the field should take ICM 522 first.
Course Title Credits
ICM 522 Social Media Techniques \& Practices 3
ICM $524 \quad$ Social Media Analytics 3
ICM 526 Community Management 3

## Master of Science in Journalism

The master of science in journalism program prepares students from all academic and professional backgrounds for careers in broadcast/multimedia news and in traditional and emerging media companies that focus on long-form writing, reporting and analysis. The program offers two tracks to broadly support the specific ambitions of students:

- Broadcast/multimedia (on-campus), for students who want to pursue careers in television, radio and online news media with an emphasis on visual and online reporting
- Writing (online), for students who are interested in preparing long-form, non-fiction narratives rooted in current events for news sites, magazines and documentary films.
Both tracks feature training in the principles, tools, craft, history and ethics of contemporary journalism in the context of innovative approaches to reporting and presenting information via social media and other forms. Our goal is simple: promote knowledge, creativity and skill in service to a career described by television producer Matt Weiner as one that "smacks of adventure and intellect."

The broadcast/multimedia track prepares students for careers in local, cable and network television news, for websites with a strong visual component, and for mobile news apps.

Broadcast/multimedia track students are challenged to develop story ideas through reasoning and observation, to analyze data and public documents, to wisely conduct interviews, to learn the technical skills to acquire and edit video and audio, and, above all, to write with discipline, poise and creative vitality. In short, this program prepares students for the daily test-of-strength that is news reporting in the 21st century regardless of the distribution platform.

Students who successfully complete the program will be properly trained for a number of career opportunities including:

- on-camera reporters and anchors for broadcast, cable and network television news
- producers for broadcast, cable and network television news
- producers for news websites and mobile apps
- writers for broadcast, cable and network television news
- writers for news websites and mobile apps

The broadcast/multimedia track offers courses and labs in the Ed McMahon Mass Communications Center, the core of the School of Communications' professional all-digital broadcast production environment. The center includes a high-definition studio, a 4K video editing suite, HD editing suites for single or group projects, an audio suite, and other areas designed to support both studio and remote productions.

Video cameras, audio recorders, lights, and other gear required to capture interviews and events in the field are available to students through our well-stocked and expertly maintained equipment inventory.

The fully online writing track prepares students to use reason, observation, documents and analysis of data, among other things, to forge a concisely written, compelling story that illuminates a subject and enhances the understanding of today's complex societies and cultures. Through a combination of workshop-oriented assignments and robust online discussions, students learn how to report and write for news and long-form journalism websites, magazines, apps, documentary films, and emerging media companies that seek fresh ideas and creative approaches to current events.

Students who successfully complete the writing track are prepared to pursue abundant career opportunities, including:

- reporter and editor for news websites, magazines and apps
- long-form writer of non-fiction narratives
- writer for documentary films
- opinion writer and advocacy journalist
- content specialist and editor for multimedia news

The online writing track is delivered via Quinnipiac University Online and its Blackboard course management system.

In both of the MS in journalism tracks, students learn to:

- Understand professional journalistic practices, ethical standards and technologies and be able to apply reason to develop ideas within these structures.
- Analyze information based on journalistic practices of research, interviews and observation.
- Evaluate information in determining the story's narrative structure and reach via social media and other applications.
- Report and compose a story, either visual, multimedia or text, that informs, enlightens,
entertains and is useful to the reader or audience within professional journalistic reporting and writing practices and ethical standards.


## Admission

To qualify for admission, candidates must have earned a bachelor's degree from a regionally accredited institution of higher learning and have a minimum GPA of 2.75 . Journalism experience is not required.

Admission to the MS in journalism program in either the broadcast/multimedia track or writing track is highly competitive and based on undergraduate performance as measured by GPA, experience in any career field for students returning to school and the required documents listed below.

Applications are considered on a rolling basis, and students may apply to enter during the fall or spring. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired. Applications are evaluated once all materials and fees are received by Quinnipiac.

A complete application consists of the following:

- application form
- application fee
- two professional recommendations
- personal statement explaining decision to pursue graduate study
- current resume
- portfolio of writing or work samples (i.e., college papers, videos, audio clips or published work of any kind)
- official transcripts of all undergraduate and graduate work


## MS in Journalism <br> Broadcast/Multimedia Track

Students must complete 36 credits for the master of science in journalism-broadcast/multimedia track. Full-time students can complete the program in one calendar year. Part-time students can do it in two.

## Program of Study

Required Courses (33 credits)

| Course | Title | Credits |
| :--- | :--- | ---: |
| JRN 503 | Analytics for News Reporting | 3 |

JRN 504 Multimedia Reporting 3
JRN 521 Audio Storytelling 3
JRN 524 Broadcast Journalism 3
JRN 528 Information Graphics \& News Design 3
JRN 539 History of Journalism 3
JRN 552 Media Law \& Ethics 3
JRN 575 Critical Issues in Journalism 3
JRN 580 Investigative Reporting 3
JRN 590 Newsroom Clinical 3
JRN 601/602 Master's Project or Thesis 3
Elective Courses (3 credits)
JRN 500 Special Topics 3
JRN 527 Covering Government \& Politics 3
JRN 530 Independent Study 3
JRN 531 Internship 3
JRN 533 Advanced Reporting \& Writing 3
JRN 536 Opinion Journalism 3
JRN 540 Broadcast Performance 3
JRN 542 Graduate Seminar 3
JRN 572 Researching \& Writing News Documentary 3
Students may take any course not listed as a requirement in any track or in any School of Communications graduate program with permission of program director. Electives are offered on an as-needed basis and may not be available during a given student's program of study.

Courses and curriculum requirements are subject to change.

## MS in Journalism <br> Writing Track (Online)

Students must complete 36 credits for the master of science in journalism-writing track. Full-time students can complete the program in one calendar year. Part-time students can do it in two.

| Program of Study |  |  |
| :--- | :--- | ---: |
| Required Courses ( $\mathbf{l}$ credits) |  |  |
| Course | Title | Credits |
| JRN 503 | Analytics for News Reporting | 3 |
| JRN 504 | Multimedia Reporting | 3 |
| JRN 533 | Advanced Reporting \& Writing | 3 |
| JRN 539 | History of Journalism | 3 |
| JRN 552 | Media Law \& Ethics | 3 |
| JRN 570 | Crafting the News Feature | 3 |
| JRN 572 | Researching \& Writing the News |  |
|  | Documentary | 3 |
| JRN 575 | Critical Issues in the News | 3 |
| JRN 580 | Investigative Journalism | 3 |

Required Courses ( 33 credits)
Course Title

JRN 590 Newsroom Clinical
JRN 601/602 Master's Project or Thesis

## Elective Courses (3 credits)

JRN 500 Special Topics
JRN 527 Covering Government \& Politics
JRN 528 Information Graphics \& Design
JRN 530 Independent Study
JRN 531 Internship
JRN 536 Opinion Journalism
JRN 542 Graduate Seminar
Students may take any course not listed as a requirement in any track or in any School of Communications graduate program with permission of program director. Electives are offered on an as-needed basis and may not be available during a given student's program of study.

Courses and curriculum requirements are subject to change.

## Combined BA or BS/MS in Journalism

Quinnipiac offers a five-year combined BA/ MS or BS/MS in journalism for students who are currently enrolled in any Quinnipiac undergraduate program and who wish to pursue graduate studies at the University. Students may apply for provisional acceptance to the MS in journalism program during the second semester of their junior year. If accepted, students can take up to 6 credits of graduate courses during their senior year beginning in the fall semester with the permission of the graduate journalism director. Those credits can be applied to both undergraduate and graduate programs. Applications for this special program are available through the School of Communications. For more information, refer to the website at www.quinnipiac.edu/combined-ba-bsms-journalism.

## Master of Science in Sports Journalism

The master of science in sports journalism prepares students from all academic and professional backgrounds for careers in broadcast/multimedia sports and in traditional and emerging media companies that focus on long-form writing, reporting and analysis of sports. The program offers two tracks to broadly support the specific ambitions of students:

- Broadcast/multimedia (on-campus), for students who want to pursue careers in television, radio and online sports media with an emphasis on visual and online reporting
- Writing (online), for students who are interested in serving as sportswriters or preparing longform, non-fiction sports stories for news sites, magazines and documentary films.
Both tracks feature training in the principles, tools, craft, history and ethics of contemporary sports journalism in the context of innovative approaches to reporting and presenting information via social media and other forms. Our goal is simple: to transform a lifelong passion for sports into a successful career.

The broadcast/multimedia track prepares students for careers in local, cable and network television news, for websites with a strong visual component, and for mobile news apps.

Broadcast/multimedia track students are challenged to develop story ideas through reasoning and observation, to analyze data and public documents, to wisely conduct interviews, to learn the technical skills to acquire and edit video and audio, and, above all, to write with discipline, poise and creative vitality. In short, our program prepares students for the daily test-of-strength that is sports reporting in the 21st century regardless of the distribution platform.

Students who successfully complete the program will be properly trained for a number of career opportunities including:

- on-camera reporters and anchors for broadcast, cable and network television news
- play-by-play announcers, analysts, and talk show hosts for terrestrial, online and satellite radio
- producers for broadcast, cable and network television news
- producers for news websites and mobile apps
- writers for broadcast news, websites and mobile apps

The broadcast/multimedia track offers courses and labs in the Ed McMahon Mass Communications Center, the core of the School of Communications' professional all-digital broadcast production environment. The center includes a high-definition studio, a 4K video editing suite, HD editing suites for single or group projects, an audio suite, and other areas designed to support both studio and remote productions. In addition, students will have access to the TD Bank Sports Center for the coverage of games and interviews.

Video cameras, audio recorders, lights, and other gear required to capture interviews and events in the field are available to students through our well-stocked and expertly maintained equipment inventory.

The fully online writing track prepares students to use reason, analysis and advanced writing techniques to formulate engaging stories on the games, athletes, and the cultural and social forces that surround the sports throughout the world. It focuses on composing long-form narratives that will inform, enlighten and surprise even the most well-informed reader with useful information on topics that require an investment of thought, time and creative vitality to reveal.

Students who successfully complete the writing track are prepared to pursue abundant career opportunities, including:

- sportswriter and editor for sports websites, magazines and apps
- long-form writer of sports narratives
- writer for sports documentary films
- columnist, blogger and advocacy sports journalist
- sports content specialist and editor for multimedia sports sites and apps
The online writing track is delivered via Quinnipiac University Online and its Blackboard course management system.

In both of the MS in sports journalism tracks, students learn to:

- Understand professional sports journalistic practices, ethical standards and technologies and be able to apply reason to develop ideas within these structures.
- Analyze information based on sports journalistic practices of research, interviews and observation.
- Evaluate information in determining the story's narrative structure and reach via social media and other applications.
- Report and compose a story, either visual,
multimedia or text, that informs, enlightens, entertains and is useful to the reader or audience within professional sports journalistic reporting and writing practices and ethical standards.


## Admission

To qualify for admission, candidates must have earned a bachelor's degree from a regionally accredited institution of higher learning and have a minimum GPA of 2.75. Journalism experience is not required.

Admission to the MS in sports journalism program in either the broadcast/multimedia track or writing track is highly competitive and based on undergraduate performance as measured by GPA, experience in any career field for students returning to school and the required documents listed below.

Applications are considered on a rolling basis, and students may apply to enter during the fall or spring. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired. Applications are evaluated once all materials and fees are received by Quinnipiac.

A complete application consists of the following:

- application form
- application fee
- two professional recommendations
- personal statement explaining decision to pursue graduate study
- current resume
- portfolio of writing or work samples (i.e., college papers, videos, audio clips or published work of any kind)
- official transcripts of all undergraduate and graduate work


## MS in Sports Journalism Broadcast/Multimedia Track

Students must complete 36 credits for the master of science in sports journalism—broadcast/multimedia track. Full-time students can complete the program in one calendar year. Part-time students can do it in two.

## Program of Study

Required Courses ( 33 credits)

| Course | Title |
| :--- | :--- |
| JRN 524 | Broadcast Journalism |

JRN 524 Broadcast Journalism

Credits

JRN 560
JRN 562
JRN 563
JRN 564
JRN 565
JRN 566
JRN 573
JRN 589
JRN 595
JRN 601/602 Master's Proiect
Elective Courses (3 credits)
JRN 500 Special Topics 3
JRN 528 Information Graphics \& Design 3
JRN 530 Independent Study 3
JRN 531 Internship
JRN 542 Graduate Seminar 3
JRN 574 Crafting the Sports Feature 3
JRN 580 Investigative Reporting 3
JRN 582 American Sports History 3
JRN 588 Researching \& Writing the Sports Documentary
Students may take any course not listed as a requirement in any track or in any School of Communications graduate program with permission of program director. Electives are offered on an as-needed basis and may not be available during a given student's program of study.

Courses and curriculum requirements are subject to change.

## MS in Sports Journalism Writing Track (Online)

Students must complete 36 credits for the master of science in sports journalism-writing track. Fulltime students can complete the program in one calendar year. Part-time students can do it in two.
Program of StudyRequired Courses (33 credits)Course TitleJRN 550 Sportswriting Traditions

Credits
JRN 560 Multimedia Sports Reporting 3
JRN 562 Sports Media Law \& Ethics 3
JRN 563 Sports Analytics 3
JRN 573 Sports Literature 3
JRN 574 Crafting the Sports Feature 3
JRN 580 Investigative Journalism 3
$\begin{array}{ll}\text { JRN } 588 & \begin{array}{l}\text { Researching \& Writing the Sports } \\ \text { Documentary }\end{array}\end{array}$
JRN $589 \quad$ Critical Issues in Sports 3
JRN $595 \quad$ Sports Clinical (Writing) 3
JRN 601/602 Master's Project or Thesis 3
Elective Courses (3 credits)
JRN 500 Special Topics 3
JRN 528 Information Graphics \& Design 3
JRN 530 Independent Study 3
JRN 531 Internship 3
JRN 582 American Sports History 3
Students may take any course not listed as a requirement in any track or in any School of Communications graduate program with permission of program director. Electives are offered on an as-needed basis and may not be available during a given student's program of study.

Courses and curriculum requirements are subject to change.

## Combined BA or BS/MS in Sports Journalism

Quinnipiac offers a five-year combined BA/ MS or BS/MS in sports journalism for students who are currently enrolled in any Quinnipiac undergraduate program and who wish to pursue graduate studies at the University. Students may apply for provisional acceptance to the MS in sports journalism program during the second semester of their junior year. If accepted, students can take up to 6 credits of graduate courses during their senior year beginning in the fall semester with the permission of the graduate sports journalism director. Those credits can be applied to both undergraduate and graduate programs. Applications for this special program are available through the School of Communications.
For more information, refer to the website at www.quinnipiac.edu/combined-ba-bsms-sportsjournalism.

## Master of Science in Public Relations

The master of science in public relations program offers students the opportunity to pursue an advanced degree in a highly competitive and growing field. The program is designed for early- to mid-career professionals interested in advancing their careers in public relations and/or transitioning into public relations from complementary fields such as (but not limited to) finance, law, health care, technology, human resources, journalism and marketing. The program helps recent graduates with bachelor's degrees in public relations and other disciplines gain a competitive edge as they enter the workforce. Quinnipiac University undergraduate students may apply for the combined, five-year bachelor/master's degree program.

Graduates of the program are qualified to work as public relations specialists in both the public sector and private sector with expertise and skills applicable to corporate, nonprofit and government institutions. Students study the conceptual and theoretical foundations of public relations, learn how to conduct and analyze public relations research and evaluation, and hone their skills in contemporary public relations practices and techniques. The program stresses professional competence, global consciousness and professional and social responsibility.

## Admission

New students are admitted only in the fall term. Applications are accepted on a rolling basis. Admission is competitive and based on the following application requirements:

- application form and fee
- resume
- two letters of reference (preferably from individuals familiar with the applicant's academic potential)
- official undergraduate and graduate transcripts from all institutions attended
- responses to questions regarding the applicant's interest in and potential for graduate study in public relations (see application packet)
- professional portfolio (e.g., writing samples that demonstrate the applicant's ability to communicate effectively with diverse audiences)
- Graduate Record Exam scores (Note: the GRE requirement may be waived at the discretion of the program director for applicants holding a graduate degree from an accredited institution and/or documented professional accomplishments in their field)
- minimum 3.0 undergraduate GPA


## Program of Study

Students have three options to complete the program: fast track, full time or part time. Students on a fast track complete the 36 -credit program in one calendar year. They take 15 credits in the fall and spring terms, respectively, and complete a 6 -credit research thesis or professional project during the summer or subsequent terms. Full-time students take 9 credits every fall and spring semester and complete the program in two years. Students may also elect to complete the program on a part-time basis.
Course

Title

## Credits

## Core requirements (21 credits)

STC 501 Principles \& Theories of Public Relations 3
STC 502 Public Relations Research Methods 3
STC 503 Public Relations Research Design 3
STC 504 Law \& Ethics in Public Relations 3
STC 505 Public Relations Writing 3
STC 506 Public Relations Management 3
STC 507 Strategic Planning in Public Relations 3
Public relations elective requirements ( 6 credits)
Two courses from the following:
ICM 501 Issues in Contemporary Media 3
ICM 506 Writing for Interactive Media 3
STC 510 Crisis Management 3
STC 511 International Public Relations 3
STC 512 Investor Relations 3
STC 513 Health \& Strategic Communication 3
STC 514 Social \& Mobile Media 3
STC 515 Special Topics in Public Relations 3
STC 531 Graduate Internship in Public Relations 3
STC 606 Independent Study 3
Free elective (3 credits)
Public relations elective (from list above) or outside elective approved by adviser
Capstone requirement (6 credits)
STC 601 Professional project
or STC 602 Research thesis
Total requirements

6
36 credits

## Combined BA or BS/MS in Public Relations

Quinnipiac offers a five-year combined BA/MS or BS/MS in public relations for students who are currently enrolled in any Quinnipiac undergraduate program and who wish to pursue graduate studies at the University. Students may apply for provisional acceptance to the MS in public relation program during the second semester of their junior year. If accepted, students can take up to 6 credits of graduate courses during their senior year beginning in the fall semester with the permission of the graduate public relation director. Those credits can be applied to both undergraduate and graduate programs. Applications for this special program are available through the School of Communications. For more information, refer to the website at www.quinnipiac.edu/combined-ba-bsms-pr.

## School of Education

BA/MAT Five-year Program in Elementary Education
BA/MAT Five-year Program in Secondary Education
Graduate MAT Degree in Elementary Education
Graduate MAT Degree in Secondary Education
Certificate of Completion in Special Education MS in Instructional Design
MS in Teacher Leadership (online-only program) Sixth-year Diploma in Educational Leadership

## Master of Arts in Teaching

## Five-year BA/MAT Programs in Elementary and Secondary Education

The purpose of Quinnipiac's five-year BA/MAT program is to prepare graduates with perspectives, knowledge and skills to become master educators. The School of Education recognizes that the concept of educator is three-dimensional, and that successful educators must be teachers, learners and leaders. Therefore, graduates of the master of arts in teaching program are teachers who lead all students to learn, learners who continue to learn as they continue to teach, and leaders who
influence the culture of their schools in ways that support best practices in teaching and learning.

The program reflects the spirit and mission of Quinnipiac University with close attention to the teaching standards for the state of Connecticut and to the standards of the Council for the Accreditation of Educator Preparation. The three values of "excellence in education, a sensitivity to students, and a spirit of community" which are at the heart of Quinnipiac's mission statement are woven through the program.

## General Information

The five-year BA/MAT program offers Quinnipiac students a bachelor's degree in an academic major and a master of arts in teaching degree leading to certification through the Connecticut State Department of Education. Consistent with the University's mission, arts and sciences studies are integrated with professional studies to prepare graduates who have depth and breadth of content knowledge and strong pedagogical skills.

The five-year program is divided into a twoyear preprofessional component and a threeyear professional component. The two-year preprofessional program includes a required introductory course (ED 140-Introduction to Public Education and the Teaching Profession) that acquaints prospective teacher candidates with the teaching profession. Students are encouraged to take this course during their freshman year but no later than the fall semester of their sophomore year. Additional course options include courses in educational philosophy and diversity.

Students begin their professional component in the fall semester of their junior year. Supervised fieldwork, an integral part of the professional component, includes undergraduate observation and fieldwork, a graduate internship, and student teaching. Following completion of the fourth year of study, students receive a bachelor of arts or bachelor of science degree in their academic major. Students begin their graduate work immediately following graduation. Any teacher candidate enrolled in the five-year MAT program who does not complete all the requirements for undergraduate completion of the bachelor's degree as anticipated will not be allowed to enter any graduate fifth year without the written consent of the program director.

The School of Education is fully accredited by the Council for Accreditation of Educator Preparation (CAEP). The U.S. Department of Education recognizes CAEP as a specialized accrediting body for schools, colleges and departments of education.

Note: Because the MAT program is subject to state review on a regular basis, prospective and current students are advised to see the School of Education for up-to-date program information.

## Admission

Admission to the five-year BA/MAT program is based on a holistic review by MAT program faculty of the following admission requirements:

1. A preferred 3.0 minimum overall undergraduate GPA (from all colleges and universities attended) for 45 credits of course work with a subject area major or appropriate interdisciplinary major (applicants with overall GPAs below 2.67 will not be considered).
2. A passing score on the Praxis Core Academic Skills Test or a Praxis Core Academic Skills Assessment Waiver.
3. At least two written recommendations from individuals who have recent knowledge (within the last two years) of the applicant's suitability as a prospective educator, including one from a college instructor.
4. A written essay completed on-site that meets program standards.
5. A formal interview during which the applicant is expected to demonstrate: an ability to communicate clearly; a demeanor appropriate to the teaching profession; and a maturity and attitude necessary to meet the demands of the MAT program.
6. Effective July 1, 2010, Connecticut law requires all teacher candidates to undergo a criminal background check prior to being placed in a public school setting for field study, internship and student teaching. Because a clinical experience is an integral part of each semester, failure to abide by this law will make an applicant ineligible for admission to the program. The School of Education has procedures in place to assist candidates in obtaining the background check. The cost of the background check is the responsibility of the teacher candidate.

## Retention

Teacher candidates in the MAT program at Quinnipiac are expected to demonstrate the professional behaviors and dispositions articulated in both the School of Education's Professional Attributes and Dispositions document and the CT Code of Professional Responsibility for Teachers. Candidates must maintain an overall B- (2.67) undergraduate GPA with a C or better in all general education courses required for the MAT program. In addition, candidates must earn a B- or better in all education courses (undergraduate and graduate), as well as maintain 3.0 GPA for all education course work to remain in good standing in the program. A grade of $\mathrm{C}+$ or below in any education course (including the graduate content area courses) requires the candidate to retake the course at his/ her expense and earn the minimum B- grade.

If the candidate, once formally accepted into the MAT program, fails to maintain the minimum GPA, that candidate may be allowed to remain in the program for a single semester on probationary status. If a candidate on probation fails to meet the minimum GPA by the end of the single probationary semester, that candidate is dismissed from the program. Granting of probationary status is subject to the director's approval and is neither automatic nor guaranteed.

Candidates in the secondary program must maintain a minimum 3.0 GPA in all content area course work to remain in good standing in the program and be recommended for certification. In addition, secondary teacher candidates who earn a $\mathrm{C}+$ or below in two or more undergraduate content area courses will be required to meet with the MAT program director to discuss continuation in the program.

Candidates failing to meet professional standards in the program may be subject to suspension or dismissal. In addition, candidates who exhibit a lack of effort or enthusiasm in the program, or who reveal interpersonal skills unsuited or inappropriate for teaching, will be required to meet with the MAT program director to discuss continuation in the program.

## Completion

To qualify for teacher certification, students must complete all requirements of the MAT program. Candidates must complete all course work, fulfill the internship responsibilities and successfully
complete all performance tasks, including the required licensure tests.

## Clinical Experiences

## Field Study

Candidates are required to complete a field study course in each semester of their junior and senior year. As part of the course requirements, each candidate must complete a minimum of 20 hours per semester in her/his assigned classroom, under the guidance of the classroom teacher who serves as the field study adviser. Candidates are assigned to one school during their junior year and a different school during their senior year.

Beginning in the fall semester of junior year, teacher candidates complete a clinical component of their program of study in K-12 public schools. Candidates are responsible for their transportation to and from these clinical sites.

## Internship

Candidates participate in an internship during their graduate year. Quinnipiac has developed collaborative partnerships with school districts throughout central and southern Connecticut to provide graduate students with guided, hands-on professional practice while defraying some costs of the graduate portion of the program.

During the internship semesters, candidates serve in area schools in a variety of capacities and as substitute teachers with guidance from an on-site teacher advisor and a School of Education faculty member. Candidates have the opportunity to participate in staff meetings and take part in all school operations; in short, to become full members of the school community.

Candidates must continue serving in their internship through the last day of the public school calendar. Therefore, although classes end in May, the internship and the completion of the five-year MAT program do not occur until midto late June. Candidates are allowed to "walk" during graduation ceremonies but do not formally receive their degrees until all of the internship responsibilities are met.

## BA/MAT Five-year Program in Elementary Education

The elementary education program is designed to prepare teacher candidates with in-depth content knowledge across the elementary school curriculum and exemplary skills in teaching and classroom management. Students interested in elementary education may major in any discipline or have an interdisciplinary major.

Central to candidates' professional studies are undergraduate service-based courses (ED 301, ED 302, ED 401, ED 402) in which candidates gain 80 hours of hands-on experience, and the full-year graduate internship/student teaching experience in partner schools.

## Program of Study <br> General Requirements

The following courses meet the Connecticut State Department of Education's general education requirements. A grade of C or better is required in these courses.

- English 101
- English 102
- English at 200 level or higher'
- History 131 or History 132
- Math 110 or higher ${ }^{2}$
- World Language—Level $101^{3}$
- World Language—Level $102^{4}$
- Psychology 101
- Psychology 236
- Psychology 358
- Fine Arts-6 credits
- Science-7-8 credits
- Physical Education-1 credit

1. English majors must take EN 325
2. required even if student tests out of MA 110 and places in a higher math course
3. or test out
4. or test out

Professional Component

| Course | Title | Credits |
| :--- | :--- | ---: |
| ED 140 | Introduction to Public Education |  |
|  | and the Teaching Profession | 1 |
| ED 301 | Elementary Field Study I (SL)* | 3 |
| ED 302 | Elementary Field Study II (SL) | 3 |
| ED 315 | Diversity, Dispositions \& Multiculturalism | 3 |
| ED 320 | Social \& Philosophical Foundations |  |
|  | of Education | 3 |
| ED 401 | Elementary Field Study III (SL) | 3 |
| ED 402 | Elementary Field Study IV (SL) | 3 |



## BA/MAT Five-year Program in Secondary Education

The secondary education program is designed to prepare the teacher candidate with strong teaching skills and a depth of content knowledge in the discipline they wish to teach. Students interested in secondary education must select a major from among the following: biology, English, history, mathematics, political science, sociology or Spanish.

Central to candidates' professional studies are undergraduate service-based courses (ED 310, ED 311, ED 412, ED 413) in which candidates gain 80 hours of hands-on experience, and the full-year graduate internship/student teaching experience in partner schools.

## Program of Study General Requirements

The following courses meet both the University Curriculum requirements and the Connecticut State Department of Education's general education requirements. A grade of "C" or better is required in these courses.

- English 101
- English 102
- English at 200 level or higher ${ }^{1}$
- History 131 or History 132
- Math 110 or higher ${ }^{2}$
- World Language—Level $101^{3}$
- World Language—Level $102^{4}$
- Psychology 101
- Psychology 236
- Social Sciences-3 credits
- Fine Arts- 3 credits
- Science-7-8 credits
- Physical Education-1 credit


## Professional Component Secondary <br> Course Title Credits

ED 140 Introduction to Public Education and the Teaching Profession 1
ED 310 Field Study I (SL)* 3
ED 311 Field Study II (SL) 3
ED 325 Diversity in the Classroom 3
ED 408 Classroom Environment 3
ED 412 Field Study III (SL) 3
ED 413 Field Study IV (SL) 3
ED 421 Social \& Philosophical Foundations of Education
SPED 482 Special Education 3
ED 50_ Methods II 3
ED 509 Reading \& Writing Across the Curriculum 3
ED 514 Internship \& Seminar I 1
ED 515 Internship \& Seminar II 3
ED 524 Methods I 3
ED 550 Issues \& Research in Education 3
ED 588 Teaching in the Middle Grades 2
ED 601 Student Teaching \& Seminar 6
ED 693 Research I 1
ED 694 Research II 2
Plus 3 graduate content discipline courses

1. English majors must take EN 325
2. required even if student tests out of MA 110 and places in a higher math course
3. or test out
4. or test out
*courses marked (SL) are service learning courses.

## Graduate MAT Programs in Elementary and Secondary Education

The purpose of Quinnipiac's five-semester master of arts in teaching program is to prepare graduates with perspectives, knowledge and skills to become master educators. The School of Education recognizes that the concept of educator is threedimensional, and that successful educators must
be teachers, learners and leaders. Therefore, graduates of the master of arts in teaching program are teachers who lead all students to learn, learners who continue to learn as they continue to teach, and leaders who influence the culture of their schools in ways that support best practices in teaching and learning.

The program reflects the spirit and mission of Quinnipiac with close attention to the teaching standards for the state of Connecticut and to the standards of the Council for the Accreditation of Educator Preparation (CAEP). The three values of "excellence in education, a sensitivity to students, and a spirit of community," which are the heart of Quinnipiac's mission statement, are woven throughout the program.

## General Information

The graduate MAT program offers Quinnipiac teacher candidates a master of arts in teaching degree leading to certification through the Connecticut State Department of Education. Consistent with the University's mission, arts and sciences studies are integrated with professional studies to prepare graduates who have depth and breadth of content knowledge and strong pedagogical skills. The School of Education is fully accredited by the Council for Accreditation of Educator Preparation (CAEP). The U.S. Department of Education recognizes CAEP as a specialized accrediting body for schools, colleges and departments of education.

Note: Because the education program is subject to state review on a regular basis, prospective and current students are advised to see the School of Education for up-to-date program information.

## Admission

Admission to the graduate MAT program is based on a holistic review by MAT program faculty of the following admission requirements:

1. A preferred 3.0 minimum overall undergraduate GPA (from all colleges and universities attended) with a subject area major or appropriate interdisciplinary major (applicants with overall GPAs below 2.67 will not be considered).
2. A passing score on the Praxis Core Academic Skills Test or a Praxis Core Academic Skills Assessment waiver.
3. At least two written recommendations from individuals who have recent knowledge (within
the last two years) of the applicant's suitability as a prospective educator.
4. A written essay completed on-site that meets program standards.
5. A formal interview during which the applicant is expected to demonstrate: an ability to communicate clearly; a demeanor appropriate to the teaching profession; and a maturity and attitude necessary to meet the demands of the MAT program.
6. Effective July 1, 2010, Connecticut law requires all teacher candidates to undergo a criminal background check prior to being placed in a public school setting for field study, internship, and student teaching. Because a clinical experience is an integral part of each semester, failure to abide by this law will make an applicant ineligible for admission to the program. The School of Education has procedures in place to assist candidates in obtaining the background check. The cost of the background check is the responsibility of the teacher candidate.

## Retention

Teacher candidates in the MAT program at Quinnipiac are expected to demonstrate the professional behaviors and dispositions articulated in both the School of Education's Professional Attributes and Dispositions document and the CT Code of Professional Responsibility for Teachers. Candidates must maintain a GPA of 3.0 or higher for graduate courses in each semester with at least a B- or better in any education course. A grade of $\mathrm{C}+$ or below in any education course (including the graduate content area courses) requires the candidate to retake the course at his/her expense and earn the minimum B- grade.

If the candidate, once formally accepted into the MAT program, fails to maintain the minimum GPA, that candidate may be allowed to remain in the program for a single semester on probationary status. If a candidate on probation fails to meet the minimum GPA by the end of the single probationary semester, that candidate is dismissed from the program. Granting of probationary status is subject to the director's approval and is neither automatic nor guaranteed.

Candidates failing to meet professional standards in the program may be subject to suspension or dismissal. In addition, candidates who exhibit a lack of effort or enthusiasm in the program, or who reveal interpersonal skills
unsuited or inappropriate for teaching, will be required to meet with the MAT program director to discuss continuation in the program.

## Completion

To complete all requirements of the MAT program, a candidate must complete all course work and successfully complete all performance tasks to qualify for teacher certification.

## Internship

Candidates participate in an internship during the first two semesters of the program. Quinnipiac University has developed collaborative partnerships with school districts throughout central and southern Connecticut to provide graduate candidates with guided, hands-on professional practice and to defray some costs of the program. Candidates in the internship receive a tuition reduction during the internship semesters. (An optional second internship is available during the final two semesters, resulting in significant additional tuition reduction.)

Interns serve in area schools in a variety of capacities and as substitute teachers with guidance from an on-site adviser and from a Quinnipiac faculty member. Each intern has the opportunity to participate in staff meetings and take part in all school operations, becoming a valued member of the school faculty. In the late afternoon and early evening, candidates continue their formal studies on the Quinnipiac campus.

## Graduate MAT Degree in Elementary Education

The Quinnipiac University elementary education curriculum is an intensive five-semester program of study consisting of core certification courses that provide eligibility for teacher certification, advanced course work in literacy, numeracy and pedagogy to satisfy master's degree requirements, and a unique internship experience which provides pre-service teacher candidates the opportunity to learn about schools, students and teaching.

Applicants are accepted for admission to the fall semester only and are expected to enroll as full-time graduate students. To ensure admission into the program with a placement in an internship, applicants should complete the application process early.

## Elementary Education MAT Curriculum <br> Course Title Credits

ED 525
Diversity in the Classroom 3
ED 532 Child Development \& Psychological Theories 3
ED 534 Learning \& Teaching in the Elementary Classroom

3
ED 535 Elementary Internship \& Seminar I 1
ED 542 Cultivation, Design \& Management of an Elementary Classroom 3
ED 543 Clinical Practice in Reading 3
ED 544 Developing Literacy in the Primary Grades
ED 545 Elementary Internship \& Seminar II 1
ED 547 Philosophy of Education 3
ED 550 Issues \& Research in Education 3
SPED 552 Teaching in the Inclusive Classroom 3
ED 556 Teaching Literacy in Grades 3-6 3
ED 558
Elementary School Science: Content \& Pedagogy
ED 562 Facilitating the Arts in the Classroom 2
ED 566 Elementary School Social Studies: Content \& Pedagogy2

ED 568 Teaching Mathematics in the Primary Grades 3
ED 569 Teaching Mathematics in Grades 4-6 3
ED 575
Teacher Discourse: Language \& Communication Issues in the Elementary Classroom 3
ED 601 Student Teaching \& Seminar 6
ED 693 Research I 1
ED 694 Research II 2

## Graduate MAT Degree in Secondary Education

The Quinnipiac University secondary curriculum consists of an intensive five-semester program of study that begins in the fall semester. Each curriculum includes core certification courses that provide eligibility for teacher certification, advanced content (discipline) courses which satisfy master's degree requirements, and a unique internship experience which provides pre-service teachers the opportunity to learn about schools, students and teaching.

To ensure admission into the program with a placement in an internship, applicants should complete the application process as early as possible.


| ED 509 | Reading \& Writing Across the Curriculum | 3 |
| :--- | :--- | :--- |
| ED 510 | Adolescent Development | 3 |
| ED 521 | Social \& Philosophical Foundations | 3 |
| ED 524 | Methods I | 3 |
| ED 525 | Diversity in the Classroom | 3 |
| ED 550 | Issues \& Research in Education | 3 |
| SPED 582 | Special Education | 3 |
| ED 588 | Teaching in the Middle Grades | 2 |
| ED 601 | Student Teaching \& Seminar | 6 |
| ED 693 | Research I | 1 |
| ED 694 | Research II | 2 |
| One of the following methods courses: |  |  |
| ED 502 | Methods II: Teaching Biology | 3 |
| ED 504 | Methods II: Teaching English | 3 |
| ED 505 | Methods II: Teaching History/Social Studies 3 |  |
| ED 506 | Methods II: Teaching Mathematics | 3 |
| ED 507 | Methods II: Teaching a World Language | 3 |
| Plus three graduate content discipline courses |  |  |
|  |  |  |

## Certificate of Completion in Special Education

The Certificate of Completion in Special Education is a 12 -credit option for MAT program teacher candidates or for external applicants who hold a current teaching certificate from an approved institution of higher education and/or are practicing teachers. The certificate is not a degree or licensure program. External candidates may earn the certificate by completing 12 credits of online special education courses as listed below. Current certified teachers interested in the Special Education Certificate of Completion online program should contact the Quinnipiac School of Education.

For internal candidates for the certificate, 3 credits are earned as part of the required program of study for the MAT program. The additional 9 credits required for the Special Education Certificate of Completion are earned through two 4-credit online courses offered during the J-term, and a 1-credit independent study to be completed during the final semester in the program.

MAT program candidates interested in the Certificate of Completion in Special Education should notify the associate dean of the School of Education by Sept. 1 of their senior year (or the start of the first semester for candidates in the 5 -semester MAT program), as the first course in the optional program, SPED 545, is taken online during the J-term of the candidate's senior year.

| Program of Study for the Certificate of |  |
| :--- | :--- | ---: |
| Completion in Special Education |  |
| Course Title  <br> Credits   <br> SPED 545 Introduction to the Exceptional Child 4 <br> SPED 482 Special Education 3 <br> or SPED 552 Teaching in the Inclusive Classroom  <br> or SPED 582 Special Education  <br> SPED 565 Characteristics of Students with Emotional 4  <br>  \& Learning Disabilities  <br> or SPED 566 Autism \& Related Communication Disorders  <br> SPED 567 Independent Research in Special Education 1  <br>  (required)  |  |

## Master of Science in Instructional Design

## Admission

Applications for the online master of science in instructional design program are considered on a rolling basis. Students may apply to enter during the fall or spring semester. We encourage candidates to submit applications as early as possible to ensure consideration for the semester desired. To qualify for admission to the program, students must have earned a bachelor's degree from an accredited institution with a minimum GPA of 3.0. Candidates must submit:

1. completed application form
2. resume
3. letter of intent
4. official transcripts of all undergraduate and graduate work completed
5. two letters of recommendations (professional and/or academic)
Candidates will be interviewed in person, by phone or online as appropriate.

## MS in Instructional Design

The field of instructional design seeks to apply what we know about how people learn to the thoughtful and systematic design and implementation of instructional materials, such as websites, videos, podcasts, online courses, social media sites, interactive simulations and educational games and exhibits provided online or offline. The online program in instructional design, offered through the School of Education, prepares candidates for professional work or advanced study in instructional design by
providing them with the opportunity to develop a solid grounding in core competencies, including learning theory, theoretical approaches to the design of instructional digital media, specific technical competencies in the production of digital media, guidelines for selecting instructional resources, and the integration and evaluation of digital materials in learning environments. A range of elective courses allows students to focus on their own interests and goals, such as teaching with technology in the K-12 classroom, designing digital media for museums or afterschool programs, or producing instructional materials for higher education or corporate environments.

Students who successfully complete this program are prepared for career opportunities as instructional designers and curriculum developers in settings such as higher education, educational software and media design, educational publishing, schools or school districts, nonprofit groups or corporate environments.

The program requires 30 credits of course work, composed of foundations, electives and the Capstone Experience.

Foundations: 15 credits, required for all candidates, focus on the areas of Theoretical Foundations of Education and Design Foundations. Theoretical Foundations of Education addresses learning theories, instructional paradigms, theoretical approaches to multimedia design, instructional design models, and elements of the instructional design process, including the needs assessment, generation of a design solution, and formative and summative evaluation of an instructional resource. Design Fundamentals courses address the process of working in a team to plan and implement an instructional resource design as well as applications of theory to short-term design projects fostering essential competencies in a range of media and applications (e.g., audio- and videocasts; websites; social media; games and simulations; learning systems; design for hand-held devices and public spaces). Foundations courses include extensive exposure to research literature investigating the efficacy of media for educational applications: The ability to understand and apply research allows instructional designers to bridge the gap between theory and practice.

Electives: An additional 9 credits in the
program are taken as 3 elective courses, which individuals select according to their own areas of specialized interest. Topics include in-depth theoretical and practical aspects of producing educational resources with specific applications (e.g., web design using Adobe Dreamweaver, learning management systems using Blackboard, video using Camtasia) as well as selecting, implementing, and evaluating digital resources for instruction in specific environments ( $\mathrm{K}-12$ classroom; higher education; industry and nonprofit organizations; informal learning).

Capstone Experience: A 6-credit capstone experience is required of all candidates. It is comprised of two parts. First, candidates prepare their e-Portfolios for presentation and final review. Throughout their course work, students are required to post their best work on their e-Portfolio for critique. Consistent with program objectives, this allows the student to demonstrate competence with a range of software applications. The portfolio also serves to present student work to prospective employers.

The second part of the capstone experience is the thesis project. Each student chooses a topic of personal and/or professional interest, researches existing approaches to and resources for instruction on this topic, and prepares a proposal for the design of a learning resource. The proposal includes a needs analysis, design details and evaluation plan. The final step is the creation and presentation of a working prototype of the proposed resource. This project serves to demonstrate the candidate's fluency with elements of an instructional design analysis as well as with the use of theory to inform design.

## Retention

To remain in the program, a student must maintain a GPA of 3.0 in each semester, with a grade of B- or better in every course. Any student who receives a grade of $\mathrm{C}+$ or below in a course must retake the course and earn a minimum grade of B-. A student who fails to maintain the minimum GPA in any semester may be allowed to remain in the program with probationary status at the discretion of the dean of the School of Education.

Granting of probationary status is subject to the dean's approval and is neither automatic nor guaranteed.
Curriculum
Required Foundation Courses (15 credits) Course Title CreditsTheoretical Foundations of Education
IDN 525 Instructional Design for Digital Environments3
IDN 526 Cognitive Science \& Educational Design 13
IDN 527 Cognitive Science \& Educational Design 23
Design Foundations
IDN 528 Designing Digital Environments for Education 1 ..... 3
IDN 529 Designing Digital Environments forEducation 23
Elective Courses (9 credits)
Production, Implementation \& Evaluation
IDN 530 Web Design for Instruction ..... 3
IDN 531 Design of Interactive Educational Environments ..... 3
IDN 532 Design \& Development of Online Learning 3IDN 533 Producing Educational Video \&Digital Training3
IDN 534 Implementing Digital Media for Learning ..... 3
IDN 535 New Directions in Digital Environmentsfor Learning3
IDN 536 Independent Study ..... 3
Capstone Experience ( 6 credits)
May be taken over 1 semester or 2 consecutive semesters.ID 540 Thesis/portfolio6
Master of Science in Teacher Leadership

## Admission

Applications for the online master of science in teacher leadership program are considered on a rolling basis, and students may apply to enter during the fall or spring semesters. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired.

To qualify for admission to the program, students must:

- have earned a bachelor's degree in education or a related field from an accredited institution with a minimum GPA of 3.0.
- have a record of excellent teaching as evidenced by recommendations of supervisors
- demonstrate satisfactory writing skills as evidenced by a written essay
- demonstrate satisfactory dispositions concerning the value of diversity, the efficacy of teacher
leaders, and the belief that all children can learn as evidenced by a written essay and during the application interview
In addition to an application for admission, students also must submit:

1. official transcripts of all undergraduate and graduate work completed
2. a letter of intent
3. resume
4. two letters of recommendation
5. application fee
6. essay

## MS in Teacher Leadership Program

The online master of science in teacher leadership program, offered through the School of
Education, intends to prepare teacher leaders who have a clear vision of the educated person and can work collaboratively with others toward aligning students' experiences and school programs to support that vision. The objectives of the program are aligned with the standards of the Educational Leadership Constituent Council.

Graduates will understand current research on learning theory and human motivation and be able to promote the continuous improvement of student learning. They will value and understand diverse perspectives, establish goals and work cooperatively with colleagues and school administrators to improve the quality of school programs, and utilize multiple strategies to help shape the school culture in a way that fosters collaboration among all stakeholders to establish rigorous academic standards for all students.

The program consists of a planned sequence of 30 credits. The first 21 credits are required of all candidates and focus on the following themes:

- Transforming School Culture
- Leading Instruction to Improve Student Learning
- Understanding Research on Best Practices in Literacy Instruction
- Embracing Diversity in Classroom and School Communities
- Leading School Improvement

The additional 9 credits in the program are related to the teacher's area of specialization, including literacy leadership, mathematics leadership, or program improvement leadership. Each area of specialization has its own capstone experience.

## Curriculum

| Required Courses ( 21 credits) |  |  |
| :--- | :--- | :--- |
| Course | Title |  |


| EDL 501 | Teacher Leadership to Transform |  |
| :--- | :--- | :--- |
|  | School Culture | 3 |

EDL 503 Leading the Instructional Program to Improve Student Learning
EDL 505 Research-based Literacy Practices 3
EDL 509 Leading School Improvement 6
EDL 525 Diversity in the Classroom
Specialization Courses (9 credits)
Literacy Leadership Specialization
EDL $511 \quad$ Cycles of Inquiry within the Literacy Classroom
EDL 513 Coaching Teachers of Literacy 3
EDL 515 Action Research in Literacy Leadership 3
Mathematics Leadership Specialization
EDL $517 \quad$ Cycles of Inquiry within the Mathematics
EDL 519 Coaching Teachers of Mathematics 3
EDL 521 Action Research in Mathematics Leadership 3
Program Improvement Leadership Specialization
EDL 523 Leading Organizational Learning 3
EDL 609 Educational Program Evaluation 3
EDL 527 Financing Program Improvement Initiatives 3

## Sixth-year Diploma in <br> Educational Leadership

The purpose of Quinnipiac University's sixth-year diploma in educational leadership is to prepare graduates with the perspectives, knowledge and skills to become exceptional school leaders. The School of Education recognizes that the concept of educational leader is three-dimensional, and that successful educational leaders must be teachers, learners and leaders. Therefore, graduates of the sixth-year diploma in educational leadership program are master teachers who have a deep understanding of the teaching and learning process, learners who continue to learn as they continue to lead, and leaders who influence the culture of their schools in ways that support best practices in teaching and learning.

The program reflects the spirit and mission of Quinnipiac University with close attention to the leadership standards for the state of Connecticut and to the standards of the National Council for the Accreditation of Teacher Education. The three values of "excellence in education, a sensitiv-
ity to students, and a spirit of community," which are the heart of Quinnipiac's mission statement, are woven throughout the program.

## General Information

The sixth-year diploma in educational leadership program offers Quinnipiac students a postmaster's credential, which prepares them to assume a variety of school leadership roles such as department chair, assistant principal, principal, curriculum coordinator and central office administrator below the rank of superintendent. Candidates who complete the first 18 credits of the 30 -credit program, the internship, and pass the Connecticut Administrator Test fulfill the Connecticut State Department of Education certification requirements as an Intermediate Administrator/Supervisor (092).

The program is fully accredited by the Connecticut State Department of Education, which participates in the NASDTEC Interstate Contract.

Note: Because the education program is subject to state review on a regular basis, prospective and current students are advised to see the School of Education for up-to-date program information.

## Admission

Students are admitted into the sixth-year diploma in educational leadership program upon meeting the following requirements:

1. A master's degree in education or a related field from an accredited institution with a minimum GPA of 3.0;
2. Evidence of four years of full-time teaching experience in a PK-12 setting;
3. Completion of at least 36 hours (equivalent to 3 credits), of a special education course*;
4. A record of excellent teaching as evidenced by recommendations of supervisors;
5. Satisfactory writing skills as evidenced by a written essay; and
6. Satisfactory leadership dispositions and a professional maturity to meet the demands of the program as evidenced during a formal interview.
*Applicants who have not met the special education requirement may be admitted on the condition that they enroll in a state-approved course.

## Retention

To remain in the program, students must maintain academic standards and honor and follow Connecticut's Code of Professional Responsibilities for Teachers in all interactions in the schools. Students must maintain a 3.0 GPA for graduate courses in each semester with at least B- or better in any leadership course. A grade of $\mathrm{C}+$ or below in any program course requires the student to retake the course and earn a minimum of B-. If a student fails to maintain the minimum GPA, that student may be allowed to remain in the program for a single semester with probationary status. If a student on probation fails to meet the minimum GPA by the end of the single probationary semester, that student is dismissed from the program. Granting of probationary status is subject to the dean's approval and is neither automatic nor guaranteed. Students failing to meet professional standards in the program may be subject to suspension or dismissal.

## Completion

To fulfill all requirements of the sixth-year diploma in educational leadership program, students must complete all course work, including the internship, and successfully complete all performance tasks including passing the Connecticut Administrator Test.

## Internship

Candidates must participate in an internship after completing EDL 601, 603 and 605 to gain authentic leadership experience. The Internship in Educational Leadership (EDL 607) consists of a series of coordinated activities related to the national standards for school leaders as established by the Educational Leadership Constituent Council (ELCC). The specific experiences are cooperatively planned by the candidate, a faculty member and a school district mentor. To demonstrate mastery of the ELCC standards, each candidate compiles an internship portfolio, which includes a description and analysis of activities related to the national standards, evidence of evaluating a portion of a school program for the purpose of improving student learning, evaluations from the administrator, mentor and University supervisor, a reflection journal describing leadership strengths and needs, a weekly log of activities and hours (a minimum of 216 hours
are required), and artifacts from the internship. The internship is scheduled only during the fall or spring semester to ensure the most authentic experience possible.


## School of Health Sciences

Master of Health Science
Biomedical Sciences (see p. 142)
Cardiovascular Perfusion
Medical Laboratory Sciences
Pathologists' Assistant
Physician Assistant
Radiologist Assistant
Occupational Therapy Doctorate
(Post-professional online-only program) Post-bachelor's Doctor of Physical Therapy Master of Social Work

The state of Connecticut is a growing center of nationally known medical facilities, biotechnology development and pharmaceutical research and manufacture. These institutions have increased demands for individuals with up-to-date training. The master of health science program offers several majors that meet these standards. The cardiovascular perfusion program provides comprehensive preparation in clinical sciences and clinical internships to prepare perfusionists who provide life support during cardiopulmonary bypass. The medical laboratory sciences/ biomedical sciences program provides laboratory professionals with the opportunity to specialize in fields such as microbiology, laboratory management and biomedical sciences. A fulltime program for pathologists' assistants provides
training in pathology, anatomy and the medical sciences. The physician assistant studies program provides full-time instruction in the basic medical and clinical sciences needed for certification and a graduate degree in a growing profession. The social work program prepares students for achievement and leadership in the field of social work. The radiologist assistant program provides students with full-time advanced training in the field of radiology, which is needed for certification and to obtain a master's degree.

## Admission

Students who hold a bachelor's degree in the biological, medical or health sciences are eligible for admission to the master of health science degree program. A detailed autobiography of personal, professional and educational achievements as well as two letters of reference must be submitted with a student's application. Applications may be obtained from the Office of Graduate Admissions. Applicants should refer to the graduate admission requirements found previously in this catalog.

The Quinnipiac University physician assistant studies program participates in the Central Application Service for Physician Assistants (CASPA). Go to www.caspaonline.org for more information regarding the application process and fees. All applications, transcripts, references and other supporting materials are submitted directly to CASPA. The physician assistant studies program admits students on a yearly basis. The deadline for completed applications to CASPA is September 1. Interviews are conducted from the early fall through mid-December. Classes begin in late May/early June.

## Cardiovascular Perfusion Program

The mission of the cardiovascular perfusion program is to: 1 ) provide excellent education in both the didactic and clinical learning environment; 2) provide research opportunities that contribute to the clinical and scientific knowledge base in the field of extracorporeal circulation; and 3) foster a sense of commitment to continuing education and professional development.

This mission is consistent with the mission of Quinnipiac University, which is to provide a supportive and stimulating environment for the
intellectual and personal growth of undergraduate, graduate and continuing education students.

## General Information

The perfusionist provides consultation to the physician in the selection of the appropriate
equipment and techniques to be used during extracorporeal circulation. During cardiopulmonary bypass, the perfusionist provides life support to the patient while the heart and lungs are stopped to enable the surgeon to operate. Perfusionists administer blood products, anesthetic agents and drugs through the extracorporeal circuit. The perfusionist is responsible for the induction of hypothermia and other duties, when required. Perfusionists have a role in the implementation and operation of ventricular assist devices designed to provide long-term circulatory support for the failing heart.

This program is fully accredited by the Accreditation Committee-Perfusion Education (6663 S. Sycamore St., Littleton, CO 80120) under the Commission on Accreditation of Allied Health Education Programs.

## Admission

Interested candidates must hold a bachelor's degree from a regionally accredited institution in the U.S. or Canada. Scores for the tests of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) are required if the applicant is from a non-English speaking country. Applicants must have the following course prerequisites:

- two semesters of basic biology (or equivalent)
- two semesters of anatomy and physiology
- two semesters of general chemistry
- one semester of physics
- one semester of microbiology
- one semester of college algebra or calculus
- certification in Basic Life Support from the American Heart Association
Applicants to the program should have a strong background in the health sciences, and be able to work for long periods under intense conditions. Individuals already working in the fields of nursing, respiratory care, physician assistant, physical therapy, paramedical and biomedical engineering are ideally suited for admission into the program.

Applicants must have a minimum undergraduate cumulative GPA of 3.0, and at least two years of
experience working in a health care field involving patient care.

Applications can be obtained from the Office of Graduate Admissions. Applicants should refer to the graduate admission requirements found in this catalog.

A detailed autobiography of personal, professional and educational achievements, and three letters of recommendation must accompany the student's application.

All applications, transcripts, reference letters and supporting materials must be submitted to the Office of Graduate Admissions.

Admission to the program is competitive. Personal interviews, required for admission, are offered to the most qualified candidates.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Curriculum

| Course Title | Credits |
| :--- | :--- |
| First Year (college-based didactic course work) |  |
| Fall Semester I |  |

PA 535 Disease Mechanisms 4

PR 500 Theoretical Foundations of Cardiovascular Perfusion

PR 502 Systems Anatomy \& Physiology I ..... 3

PR 508

Extracorporeal Circuitry \& Laboratory I ..... 1
PR 516 Physiologic Monitoring ..... 4
Total 14
Spring Semester I
PR 503 Systems Anatomy \& Physiology II ..... 3
PR 506 Pharmacological Intervention ..... 4
PR 509 Extracorporeal Circuitry \& Laboratory II ..... 1
PR 510 Surgical Techniques ..... 2
PR 512 Pediatric Perfusion ..... 4Second Year (hospital-based clinical training session)Summer Session
PR $514 \quad$ Special Topics in Cardiovascular Perfusion 2
PR 600 Cardiovascular Perfusion Practicum I 5
Total 7
Fall Semester II
PR 520 Research Methods in Cardiovascular Perfusion ..... 2
PR 602 Cardiovascular Perfusion Practicum II 5

Spring Semester II
PR 522 Research Methods in Cardiovascular Perfusion II2

PR 604 Cardiovascular Perfusion Practicum III 5
Total 7
During the first two didactic semesters, students are introduced to the operating room environment by weekly orientation sessions in one of several affiliated hospitals. Students are required to join the American Society of Extracorporeal Technology and maintain student membership for the duration of the program.

Failure to maintain an overall GPA of 2.67 in each of the two didactic semesters (Fall I and Spring I) will result in automatic dismissal from the program.

## Medical Laboratory Sciences Program

The mission of Quinnipiac University's medical laboratory sciences program is to provide students with the cutting-edge skills they need to manage the more complex operations carried out today in hospitals and research facilities, as well as allowing students to develop their critical thinking skills and knowledge of the biomedical sciences, sought after by PhD programs and medical schools. The two specialties included in the program (biomedical sciences and microbiology) and the integration of courses from these individual specialties provides the student with a comprehensive knowledge to meet the education and technical needs of the biomedical profession in pharmaceutical, biotechnology, diagnostics and medical research. Students are guided in the principles and methods of scientific research, and they gain knowledge of the latest advances in biomedical, biotechnological and laboratory sci-ences-all directly applicable to real-world work environments.

## General Information

Medical laboratory research and diagnostic testing are among today's most exciting professions. The last decade has brought many exciting breakthroughs in the diagnosis and treatment of disease as well as new challenges such as AIDS, Lyme disease and the resurgence of tuberculosis. These new developments and challenges require laboratory professionals to stay on the cutting edge of
their field. New techniques have to be mastered, new theories and concepts understood, and new means of managing the more complex operations of laboratories developed. The medical laboratory sciences program at Quinnipiac is specially designed to meet the educational needs of students to complete their education toward a degree in medicine or PhD programs or employment in the research/development industry and diagnostic companies. The program provides the training that is necessary to stay current with today's rapidly changing technology and to assume positions of greater responsibility. A laptop is required for all students in the MLS degree program. The University does not provide shuttle transportation services to the North Haven Campus.

## Admission

Students who have a bachelor's degree in the biological, medical or health sciences and have a minimum undergraduate GPA of 2.75 are eligible for admission to the medical laboratory sciences program. A detailed autobiography of personal, professional and educational achievements as well as two letters of reference must be submitted with a student's application. Applications may be obtained from the Office of Graduate Admissions. Applicants should refer to the graduate admission requirements found in this catalog. Applications to this program are accepted throughout the year. Incoming students can start the program in either the fall or spring semester.

## Program of Study

Students may choose either a thesis or a nonthesis option in the medical laboratory sciences program. Both options require students to take four courses or more in their specialization while allowing students to choose a number of electives to meet their individual needs.

The curriculum of the medical laboratory sciences program is designed to allow students to achieve the following objectives:

1. Have an advanced understanding of translational science in biomedical and microbiological topics.
2. Have an advanced understanding of the scientific process including research, research ethics, communication, critical analysis of the scientific literature and experimental design.
3. Gain scientific knowledge and critical thinking skills necessary to implement evidence-based translational research.
4. Gain skills and knowledge necessary to apply to PhD and professional programs.

## Thesis Option Requirements (based on availability of faculty)

The curriculum includes a minimum of 35 credits including 8 credits of thesis (BMS 650, 651). A total of $14-15$ credits of core classes in an area of specialization is required along with three classes ( $9-12$ credits) of electives within the specific area of specialization. Open elective courses could be chosen from any area of specialization.

| Courses | Credits |
| :--- | ---: |
| BMS 650, 651 Thesis | 8 |
| Core courses in area of specialization | $14-15^{\star}$ |
| Three areas of specialization electives | $9-12^{*}$ |
| Open electives | $1-4$ |

Total Minimum of 35 credits

## Non-thesis Option Requirements

The curriculum includes a minimum of 38 credits including 2 credits of comprehensive examination (BMS 670). A total of 14-15 credits of core classes in an area of specialization is required along with three elective classes ( $9-12$ credits) within the specific area of specialization. Open elective courses could be chosen from any area of specialization. Courses

Credits
Comprehensive Exam
Core courses in area of specialization 14-15*
Three areas of specialization electives 9-12*
Open electives
9-13*
Total Minimum of 38 credits
*Since most courses are either 3 or 4 credits, the total credits from area of specialization and total number of elective courses are based on the number of credits for individual courses.

## Comprehensive Examination

The comprehensive examination in medical laboratory sciences ( 2 credits) is a requirement for the non-thesis option in the medical laboratory science program. The purpose of the exam is twofold. First, the student must demonstrate broad and specific knowledge expected of someone holding a master's degree. Second, the student must be able to integrate knowledge obtained from individual courses into unified concepts which link the student's own specialization to
other fields of study. The student is given two opportunities to demonstrate competency. A written essay exam is administered by a designated faculty member. Students should schedule an appointment with the program director before registering for the comprehensive exam.

## Biomedical Sciences (core courses)

| Course | Title | Credits |
| :--- | :--- | ---: |
| BMS 502 | Research Methods | 4 |
| BMS 518 | Pathophysiology | 3 |
| BMS 522 | Immunology | 3 |
| BMS 532 | Histology | 4 |

Biomedical Sciences (specialization electives) Course Title Credits
BIO 515 Advanced Biochemistry 4
BIO 568 Molecular \& Cell Biology 4
BIO 571 Molecular Genetics 4
BIO 605 Molecular \& Cell Laboratories I 4
BIO 606 Molecular \& Cell Laboratories II 4
BMS 508 Advanced Biology of Aging 3
BMS 518 Pathophysiology 3
BMS 520 Neuropharmacology 3
BMS 521 Advances in Hematology 3
BMS 522 Immunology 3
BMS 527 Pharmacology 3
BMS 532 Histology 4
BMS 535 Histology \& Histochemistry 3
BMS 552 Toxicology 3
BMS 561 Immunohematology 3
BMS 562 Blood Coagulation \& Hemostasis 3
BMS 563 Anemia 3
BMS 564 Fundamentals of Oncology 4
BMS 565 Leukemia 3
BMS 576 Drug Discovery \& Development 3
BMS 578 Cellular Basis of Neurobiological Diseases 3
BMS 579 Molecular Pathology 3
BMS 583 Forensic Pathology 3
BMS 591 The New Genetics \& Human Future 3
BMS 598 Synaptic Organization of the Brain 3
BMS 599 Biomarkers 3
PA 515 Human Physiology 4

| Microbiology (core courses) |  |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| BMS 502 | Research Methods | 4 |
| BMS 522 | Immunology | 3 |
| BMS 570 | Virology | 4 |
| BMS 572 | Pathogenic Microbiology | 4 |

Microbiology (specialization electives)
BIO 568 Molecular \& Cell Biology 4
BIO 571 Molecular Genetics 4
BIO 605 Molecular \& Cell Laboratories I 4
BIO 606 Molecular \& Cell Laboratories II 4
BMS 502 Research Methods 3
BMS 525 Vaccines 4
BMS 528 Advanced Clinical Parasitology 4
BMS 569 Antimicrobial Therapy 3
BMS 573 Mycology 4
BMS 575 Food Microbiology 4
BMS 576 Drug Discovery \& Development: 3
BMS 579 Molecular Pathology 3
BMS 584 Emerging \& Re-emerging Infectious Diseases 3
BMS 585 Outbreak Control 3
Medical Laboratory Sciences Open Electives
BIO 500 Writing \& Science 3
BIO 515 Advanced Biochemistry 4
BIO 568 Molecular \& Cell Biology 4
BIO 571 Molecular Genetics 4
BIO 580 Animal Cell Culture 4
BIO 589 Neurophysiology 3
BIO 605 Molecular \& Cell Laboratories I 4
BIO 606 Molecular \& Cell Laboratories II 4
BMS 508 Advanced Biology of Aging 3
BMS 510 Biostatistics 3
BMS 511 Writing for Scientists 3
BMS 517 Human Embryology 3
BMS 518 Pathophysiology 3
BMS 520 Neuropharmacology 3
BMS 521 Advances in Hematology 3
BMS 525 Vaccine \& Vaccine Preventable Diseases 3
BMS 526 Principles of Epidemiology 3
BMS 527 Pharmacology 3
BMS 528 Advanced Clinical Parasitology 4
BMS 532 Histology 4
BMS 535 Histochemistry 3
BMS 552 Toxicology 3
BMS 561 Immunohematology 3
BMS 562 Blood Coagulation \& Hemostasis 3
BMS 563 Anemias 3
BMS 564 Fundamentals of Oncology 3
BMS 565 Leukemia 3
BMS 569 Antimicrobial Therapy 3
BMS 570 Virology 4
BMS 572 Pathogenic Microbiology 4
BMS 573 Mycology 4
BMS 575 Food Microbiology 4
BMS 576 Drug Discovery \& Development 3
BMS 578 Cellular Basis of Neurobiological Disorders3

BMS 579
BMS 583
BMS 584
BMS 585

## BMS 591

BMS 598
BMS 599
BMS 688
BMS 689

$$
\text { PA } 515
$$

PA 535
Molecular Pathology
Forensic Pathology
3
enging \& Re-emerging Infectious Diseases 3
Outbreak Control
The New Genetics \& Human Future
Synaptic Organization of the Brain
Biomarkers
Independent Study
Independent Study
Human Physiology

Pathologists'Assistant Program
The mission of Quinnipiac University's pathologists' assistant program is to prepare students with comprehensive knowledge in the practice and operation of an anatomic pathology laboratory. The program aims to maximize the students' technical proficiency and creative thinking by successfully integrating didactic biomedical knowledge with hospital-based training. The culmination of this type of training assures that the graduates of the program are able to carry out a myriad of functions critical in becoming a successful pathologists' assistant.

Students are admitted to the pathologists' assistant program on a rolling basis. Applications are accepted until Oct. 1. Interviews are conducted during the summer and fall semester. The sixsemester class cycle begins with summer semester I.

## General Information

The purpose of this program is to train qualified candidates to be pathologists' assistants. Upon successful completion of their training, graduates are employed by pathologists in hospital laboratories, private laboratories and medical research centers. Currently, there is a nationwide demand for pathologists' assistants. This demand results from the tremendous explosion in medical information and technology, the demand for new and more sophisticated pathological determinations and a national decline in the number of medical residents in pathology. Through their graduate studies, pathologists' assistant students are able to:

1. Develop a comprehensive knowledge of scientific facts, principles and data that contribute to the practice and operation of a pathology laboratory.
2. Understand performance-based education to
assist the anatomic pathologist in the hospital or in other medical environments.
3. Compare the structure and physiological functions of normal organs, tissues and cells to those of abnormal ones.
4. Understand the characteristics of stains and the staining properties of normal and abnormal cells and their cellular constituents.
5. Assist the pathologist who is determining the pathogenesis of disease by:
a. Properly collecting and handling specimens and keeping appropriate records using biomedical/photography techniques.
b. Submitting tissues and selecting the necessary and appropriate techniques for processing and proper staining procedures.
c. Reviewing histological slides for technical quality and collecting clinical information and laboratory data for final diagnosis by the pathologist.
6. Perform a postmortem examination and relate the clinical history to the results of the dissection.
7. Recognize and record anatomic and morphologic changes in relation to clinical manifestations and laboratory data for the pathologist's interpretation.
8. Understand the operation and services provided by the anatomic pathology laboratories and develop skills for the operation and management of the autopsy suite and surgical cutting room.
9. Interact with the pathologist by integrating didactic biomedical knowledge with practical hospital-based training.
10. Through management training and experience, supervise and coordinate the work of other laboratory professionals.
The program is a cooperative educational endeavor involving Quinnipiac University; the Veterans Affairs Medical Center, West Haven, CT; Yale-New Haven Hospital Saint Raphael Campus, New Haven, CT; Norwalk Community Hospital, Norwalk, CT; St. Vincent's Medical Center, Bridgeport, CT; St. Francis Hospital, Hartford, CT; CT State Medical Examiner Office, Farmington, CT; UConn Health Center, Farmington, CT; Yale University School of Medicine, New Haven, CT; Baylor University, Houston, TX; Massachusetts General Hospital, Boston, MA; Mayo Clinic, Rochester, MN;

UCLA Medical Center, Los Angeles, CA; Crouse Hospital, Syracuse, NY; Yale-New Haven Hospital, New Haven, CT; Bridgeport Hospital Campus, Bridgeport, CT; Brigham and Women's Hospital, Boston, MA; and Dahl Chase Diagnostics, Bangor, ME. The program consists of both classroom and clinical training. Quinnipiac University is a charter member of the Association of Pathologists' Assistant Training Programs, and its program meets criteria established by the American Association of Pathologists' Assistants. This program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 West Bryn Mawr Avenue, Suite 670, Chicago, IL 60631-3415, Tel: 773-714-8880.

## Admission

Interested candidates who have a bachelor's degree in the biological or health sciences from regionally accredited institutions in the United States or Canada are eligible for admission to the program. Applicants who hold a bachelor's degree from a different field must possess, at a minimum:

- two semesters of basic biology (or equivalent)
- two semesters of general chemistry
- two semesters of anatomy and physiology
- one semester of organic chemistry
- one semester of mathematics
- 16 credits of biology, particularly courses in microbiology, physiology, biochemistry.
All applicants must possess a minimum undergraduate cumulative GPA of 3.0 and a one semester course in microbiology, anatomy and physiology (or a two-semester anatomy and physiology course).

All prerequisites must be completed at a regionally accredited institution in the United States or Canada. Scores from the Graduate Record Examination are not required.

Applications may be obtained from the Office of Graduate Admissions. Applicants should refer to the graduate admission requirements found in this catalog.

A detailed autobiography of personal, professional and educational achievements as well as letters of reference must be submitted with a student's application.

All applications, transcripts, references and other supporting materials are submitted to the Office of Graduate Admissions.

Admission to the program is competitive. Personal interviews, required for admission, are offered to the most qualified individuals. Personal computers (desk or laptop) are required.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Curriculum

Course Title Credits

First Year (college-based didactic course work) Summer Session
PA 502 Medical Terminology: Advanced 2
PA 511 Human Microscopic Anatomy 4
PA 512 Human Anatomy 4
PA 515 Human Physiology 4
PA 526 Biomedical Photography/Forensic Imaging 4
(portion online) Total 18

## Fall Semester

BMS 517 Human Embryology (online) 3
BMS 532 Histology 4
PA 513 Basic Human Pathology I 3
PA 518 Laboratory Management 3
PA 535 Disease Mechanisms 4
Total 17

## Spring Semester

BMS 535 Histochemistry 3
BMS 572 Pathogenic Microbiology 4
PA 514 Basic Human Pathology II 3
PA $516 \quad$ Clinical Pathology 4
PA 517 Applied Anatomic Pathology 4
Total 18

## Second Year

(12-month hospital-based clinical training session) Summer Session

| PA 520 | Autopsy Pathology I | 6 |
| :--- | :--- | ---: |
| PA 523 | Surgical Pathology I | 6 |

Fall Semester
PA 521 Autopsy Pathology II 6
PA 524 Surgical Pathology II 6
Total 12

## Spring Semester

| PA 522 | Autopsy Pathology III | 6 |
| :--- | :--- | :--- |
| PA 525 | Surgical Pathology III | 6 |

Total 12
In addition to the college-based classroom course work taken during the first year, the student
is introduced and oriented to the pathologists' assistant profession by weekly attendance at clinical and gross conferences during their second year. This facilitates integration of the classroom course work with intensive clinical training during the second year. Failure to maintain an overall GPA of 3.0 at the end of the spring semester of the first year will result in automatic dismissal from the program.

## Physician Assistant Program

The vision of the physician assistant program at Quinnipiac University is to create a PA workforce that provides high-quality, affordable health care that is accessible to all people in all settings by fostering teamwork, critical-thinking skills, high ethical standards and respect for diverse populations.

The PA program fosters the development of compassionate, professional and highly skilled health care providers who will embody the competencies of the PA profession. These competencies include "the effective and appropriate application of medical knowledge, interpersonal and communication skills, patient care, professionalism, practice-based learning and improvement, sys-tems-based learning as well as an unwavering commitment to continual learning, professional growth and the physician-PA team, for the benefit of patients and the larger community being served." ${ }^{1}$

The mission of the program is to increase access to quality health care through the education and development of caring, knowledgeable and competent physician assistants who are dedicated to:

1. Clinical Competence-Developing highly qualified health care providers who demonstrate an investigative and analytic approach to clinical situations and provide care that is effective, safe, high quality and equitable.
2. Professionalism-Providing care with respect, compassion and integrity with a commitment to excellence and ongoing professional development.
3. Leadership-Working effectively with health care professionals as a member or leader of a health care team or other professional/community group. Mentoring and developing future leaders within the profession and the community.
4. Community Outreach—Demonstrating responsibility and accountability to patients,
society and the profession through active community involvement and volunteerism.
5. Cultural Competence-Enhancing sensitivity and developing the ability to function effectively to meet the needs of a diverse patient population. The PA program core values reflect a commitment to the ethical concepts that guide the PA profession. They stand as the program's pledge to the profession as well as the patients, families, and communities with which the PA students engage.

These core values include:
Excellence-A commitment to teaching excellence and championing quality, patientcentered, evidence-based health care in an innovative and supportive learning environment that fosters the student's personal effectiveness.

Accountability-Demonstrating responsibility to students, the University, patients, society and the PA profession utilizing a continuous process improvement system.

Integrity-Honesty and adherence to the highest standards of professional behavior and ethical conduct.

Teamwork and Collaboration-Building respectful partnerships within the University and the community to transform the health care system.

Advocacy and Equity-Seeking to eliminate disparities and barriers to effective, quality health care through patient advocacy and advocacy of the PA profession.

Intellectual Curiosity-Exhibiting selfreflection, intellectual curiosity and initiative, critical thinking and the enthusiastic pursuit of lifelong learning within a supportive environment that encourages research and scholarly work.
${ }^{1}$ Competencies for the Physician Assistant Profession. National Commission on Certification of Physician Assistants (2012).

## General Information

This program educates qualified individuals to be highly skilled licensed health care providers who practice team-based medicine in collaboration with physicians. Currently there is tremendous demand for this sought-after professional who works in a number of health care facilities ranging from private practices to tertiary care hospitals. Graduates of this program:

1. Manifest critical and creative thinking, display effective communication skills, make
informed value judgments and possess an educational foundation for continued growth.
2. Elicit a detailed and accurate history and perform the appropriate physical examination; record and present pertinent data, including interpretive recommendations, in a manner meaningful to the physician.
3. Perform and/or interpret routine diagnostic studies such as common radiologic studies, routine laboratory procedures and electrocardiographic studies.
4. Perform such routine procedures as injections, suturing, wound management, incision and drainage of superficial infections, cast application and simple fracture follow-up.
5. Perform patient rounds, record patient progress notes and pertinent case summaries, determine and implement diagnostic procedures and therapeutic plans.
6. Prescribe medications.
7. Instruct, counsel and prescribe for patients regarding physical and mental health, including proper diet, disease prevention, therapy, normal growth and development, family planning, lifestyle risks, situational adjustment reactions and other health care matters.
8. Deliver or assist in the delivery of services to patients requiring continuing care in homes, nursing homes and extended care facilities, including reviewing and monitoring treatment and therapy plans.
9. Perform independent evaluation and initiate therapeutic procedures in life-threatening events.
10. Facilitate referral to community resources, health facilities and agencies and arrange appropriate patient follow-up.
11. Critically evaluate medical literature, policies and systems to enhance their leadership qualities in community and professional endeavors. Quinnipiac is a member of the Physician Assistant Education Association (PAEA) and accredited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA).

## Admission

The Quinnipiac University physician assistant program is committed to accepting a diverse group of qualified individuals from a variety of backgrounds and experiences. The program selects students who reflect varied social, economic, ethnic, educational and health care experience
backgrounds. The program seeks students who possess intellectual capacity, personal maturity, communication and interpersonal skills.

Interested candidates must possess, at a minimum:

- a bachelor's degree from a regionally accredited institution in the United States
- 16 credits of biology with labs (credits must be in mammalian or human biology), including 3-4 credits of microbiology (with labs) and 6-8 credits of anatomy and physiology (with labs) prior to application
- 8-12 credits of chemistry with labs, including 3-4 credits of organic (with labs) or biochemistry prior to application
- 3 credits of college algebra, statistics, or equivalent prior to application
- all prerequisites must be completed at a regionally accredited institution in the United States
- scores from the tests of English as a Foreign Language (TOEFL) or (IELTS) International English Language Testing System if the applicant is from a non-English speaking country
- scores from Graduate Record Examination are not required
The most competitive applicants typically possess at a minimum:
- a cumulative GPA of 3.2 and science GPA of 3.2
- a minimum of one year ( 2,500 hours) direct patient care experience in the U.S. health care system
The physician assistant program is a full-time program. There is no part-time status. The program does not accept: transfer credits, advanced placement applications for challenge examinations and/or credits for experiential learning. Admission to the program is highly competitive. Applications are reviewed relative to undergraduate, post-bachelor's and graduate cumulative and science GPA, direct patient care experience, completion of narrative and letters of reference. Personal interviews, required for admission, are offered to the most qualified individuals.

Quinnipiac University has a pre-PA program known as the entry-level master's physician assistant program (ELMPA). Students who have successfully completed all requirements of the ELMPA program as well as the admissions requirements listed above, also will be granted admission to the master of health science physician assistant program.

The Quinnipiac physician assistant program participates in the Central Application Service
for Physician Assistants (CASPA). Go to www.caspaonline.org for more information regarding the application process and fees. All applications, transcripts, references and other supporting materials are submitted directly to CASPA. Applicants may contact CASPA or the Office of Graduate Admissions for more information.

## PA Program Technical Standards

The physician assistant program is a rigorous and intense program that places specific requirements and demands on the students enrolled in the program. The PA certificate/master of health science degree signifies that the holder is prepared for entry into the practice of medicine. It follows that the graduate PA student must have the skills and knowledge to function in a broad variety of clinical situations and to render a wide spectrum of patient care. The technical standards set forth by the physician assistant program establish the essential qualities considered necessary for students admitted to this program to achieve the knowledge, skills and competencies of the physician assistant profession as well to meet the expectations of the program's accrediting agency: The Accreditation Review Commission on Education for the Physician Assistant Inc. (ARC-PA).

All students entering the graduate physician assistant program at Quinnipiac University must be able to meet the established abilities and expectations of the PA program technical standards. Students must possess ability, aptitude and skills in the following areas: observation, communication, motor, intellectual-conceptual-integrative, behavioral, social and physical. PA students must be able to meet the requirements and worker attributes of a physician assistant as defined by the Bureau of Labor and Statistics, U.S. Department of Labor/ Employment and Training Administration's Occupational Information network (O*NET) Handbook. In the event a student is unable to fulfill these technical standards, he/she will not be admitted or may be dismissed from the program.

Students matriculating into the PA program are required to verify they understand and meet the technical standards. Verification of understanding includes the student reading, thoroughly reviewing with their medical provider, signing and returning a copy of the Technical Standards Agreement to the program prior to arrival on campus in the summer semester.

A listing of the technical standards for the PA program can be found on the program's website. Both the student and medical provider must sign the document and return it to the PA program prior to the start of class.

## Background Check and Drug Screen

To ensure their safety and maintain high quality care of patients, clinical affiliates of the University require students to have a criminal background check. All students entering the Quinnipiac University PA program are required to undergo a criminal background check (through the University vendor) prior to beginning classes and prior to beginning the clinical year. This is a mandatory component of the program. In addition, PA students may be required to undergo a criminal background re-check and/or a drug screen prior to any of their clinical rotations. The results are made available to the student through their own personal and secure online portal. Whenever a QU PA student may need proof of criminal background check for pre-clinical clerkships or clinical rotations, the student will release the information directly from their personal portal to the clinical site. The cost of the criminal background check and any re-checks and/or drug screens is the responsibility of each individual student.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Physician Assistant Program of Study Course Title Credits First Year, Summer Session

PY 501 Human Physiology 4
PY 503 Principles of Interviewing 3
PY 507 Principles of Electrocardiography 1
PY 508 Diagnostic Methods I 2
PY 515 Clinical Pathology 3
PY 517 Human Anatomy 4
Total 17

## Fall Session

PY 502 Physical Diagnosis 4
PY 505 Clinical Pharmacology I 2
PY 506 Principles of Medicine 6
PY 514 Diagnostic Methods II 1
PY 572 Medical Microbiology \& Infectious Diseases 4
Total 17

## Spring Session

| PY 504 | History, Roles \& Responsibilities of the Physician Assistant |
| :---: | :---: |
| PY 509 | Principles of Obstetrics \& Gynecology 3 |
| PY 510 | Principles of Pediatrics 3 |
| PY 511 | Principles of Surgical \& Emergency Management |
| PY 512 | Psychosocial Issues in Health Care 2 |
| PY 513 | Behavioral Medicine |
| PY 516 | Clinical Pharmacology II 2 |
|  | Total 18 |
| Second Year |  |
| PY 611 | Clinical Residency I 3 |
| PY 612 | Clinical Residency II 3 |
| PY 613 | Clinical Residency III |
| PY 614 | Clinical Residency IV |
| PY 615 | Clinical Residency V 3 |
| PY 616 | Clinical Residency VI 3 |
| PY 617 | Clinical Residency VII 3 |
| PY 618 | Clinical Residency VII |
| PY 619 | Clinical Residency IX 3 |
|  | Total 27 |
| Third Year |  |
| Summer Session |  |
| PY 526 | Principles of Epidemiology 3 |
| PY 536 | Biostatistics 3 |
| PY 546 | Ethics in Health Care Delivery 3 |
| PY 608 | Graduate Seminar 4 |
| PY 676 | Comprehensive Examination 2 |

In addition to the intensive classroom study during the first year, students are introduced to the clinical application of their training by being paired with a graduate physician assistant or physician one half day a week. This is designed to facilitate application of the skills and knowledge acquired in the classroom setting to the care of the patient.

## Requirements for Graduation

Upon successful completion of the 27-month Quinnipiac University physician assistant program, students are granted a master of health science and a certificate of completion as a physician assistant. Students must meet all of the following requirements in $\mathbf{2 7}$ months:

1. Satisfactory completion of the PA curriculum requirements (including academic, clinical, medical writing, clinical logging, professionalism and community service requirements).
2. Satisfactory completion of the PA program core competencies and essential learning outcomes.
3. Satisfactory completion of all PA course requirements.
4. Satisfactory completion of the capstone comprehensive examination.
5. A cumulative GPA of at least 3.0/4.0.

For the most accurate and up-to-date information about the graduate PA program, please visit the PA program website at www.quinnipiac.edu/mhspa

## Radiologist Assistant Program

The Quinnipiac University master of health science program for radiologist assistants is designed to prepare advanced practitioners in the field of radiology. The mission of the program is to develop students' technical and interpersonal communication skills through a logical and organized sequence of didactic, laboratory and clinical experiences. The program offers multiple clinical assignments to provide maximum exposure to diversified radiographic and interventional procedures and imaging protocols. In addition, the program prepares skilled graduates who are competent in the art and science of radiography, fluoroscopy and interventional procedures. Graduates of the radiologist assistant program are prepared for career entry and are capable of meeting the needs of the community for highly qualified professionals.

## General Information

The radiologist assistant position was developed by the American College of Radiology and the American Society of Radiologic Technologists to meet the increasing demands of imaging technology. Radiologist assistants function as physician extenders whose focus is strictly within the radiology department. They provide expanded patient management, perform complex procedures and conduct research and teaching. One of the radiologist assistant's most important functions is providing direct patient care including preprocedure consultations and procedure preparation. In clinical practice, the radiologist assistant works under the supervision of a Board-certified radiologist. The radiologist assistant program at Quinnipiac University is formally recognized by the American Registry of Radiologic Technologists.

## Program Outcomes

The master of health science in radiologist assistant education prepares graduates to:

- Integrate professional, ethical and legal standards, and interdisciplinary collaboration into radiologist assistant practice.
- Integrate effective written, oral and nonverbal communication skills into radiologist assistant practice.
- Utilize information technology and informatics to communicate, manage knowledge, mitigate error, and support clinical decision making in radiologist assistant practice.
- Synthesize clinical data and scientific evidence, apply appropriate modalities, evaluate findings, and make recommendations within the scope of radiologist assistant practice.
- Provide patient centered care.
- Assume a leadership role in applying quality improvement methods.


## Admission to the Program

Candidates applying for admission to the careerentry master's radiologist assistant program are required to be a radiologic technologist in good standing with the American Registry of Radiologic Technologists. They must have a bachelor's degree, documented evidence of at least 2,000 hours of direct patient care contact postradiography certification, certification in CPR for Healthcare Professionals and have completed the following prerequisite course requirements:

- 4 credits of chemistry
- 3 credits of college-level mathematics
- 16 credits of biology with labs, including anatomy and physiology
- 3 credits of pathophysiology

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## MS in Radiologist Assistant Curriculum Course Title Credits Summer Semester I <br> PA 502 <br> Medical Terminology: Advanced <br> RA 505 <br> Clinical Pharmacology <br> Human Anatomy

## Fall Semester I

RA 518 Imaging Pathophysiology 3
RA 530 Image Critique \& Pathologic Pattern Recognition I3

RA 532

Interventional Procedures I/Clinical
Observation ..... 3

RA 542

Patient Assessment, Management \&
Education ..... 3
RA 545 Research Methods \& Design ..... 3
Total 15
Spring Semester I
RA 531 Image Critique \& Pathologic Pattern Recognition II ..... 3
RA 535 Interventional Procedures II ..... 3
RA 550 Clinical Seminar I ..... 1
RA 570 Radiologist Assistant Clinical I ..... 3
RA 590 Thesis I ..... 1
Total 11
Summer Semester II
RA 551 Clinical Seminar II ..... 1
RA 571 Radiologist Assistant Clinical II ..... 5
RA 591 Thesis II ..... 2
Total 8
Fall Semester II
RA 552 Clinical Seminar III ..... 3
RA 572 Radiologist Assistant Clinical III ..... 5
Total 8
Spring Semester II
RA 573 Radiologist Assistant Clinical IV ..... 5Total 5
Total Credits 58

## Clinical Experiences

Clinical experiences enable students to apply the knowledge learned in the first two semesters of the program. In total, the program requires approximately 2,100 hours of clinical experience. Quinnipiac provides all clinical placements and clinical preceptors throughout the program. Clinical placements include sites in Connecticut, Massachusetts, New York and Rhode Island.

## Occupational Therapy Doctorate (OTD) Online Program

Occupational therapy helps individuals develop, maintain or adapt meaningful occupations despite the challenges of age, environment or health conditions. The occupational therapy doctorate is designed for practicing registered occupational therapists who want to merge their experience
and practical skills with prevailing professional knowledge and scholarship.

The program enables registered occupational therapists to advance their skills to become future leaders and evidence-based scholars of the profession. The degree can be completed in five semesters online with minimal on-campus requirements tailored for the working professional.

Courses run in seven-week modules during the fall and spring semesters. During the summer, courses run in 12-week sessions concurrently. Students are required to attend a one-week, on-campus class offered during the summer as well as the Symposium Day at the end of the curriculum. Attendance at the on-campus orientation is also recommended.

The online program offers an opportunity for practicing occupational therapists to continue their education without interrupting their careers. The pace of the program permits steady accumulation of skills that can be applied immediately to the workplace. Practitioners develop refined skills allowing increased specialization and direct practical application. This program is designed to further the American Occupational Therapy Association "Centennial Vision" by creating practitioners who are equipped to lead the profession to meet society's occupational needs and to be "agents of change" within their communities and the occupational therapy profession.

## Admission Requirements

To qualify for admission to the occupational therapy doctorate (OTD) program, a student must meet the following admissions criteria:

1. A bachelor's degree in occupational therapy with a GPA of 3.0 or higher, and related master's degree, OR a master's degree in occupational therapy with a GPA of 3.0 or higher.
2. Official transcript(s), indicating the year of graduation from an Accreditation Council for Education of Occupational Therapy (ACOTE) or a World Federation of Occupational Therapy (WFOT) accredited entry-level professional program.
3. Proof of initial certification by the National Board for Certification of Occupational Therapy (NBCOT) or American Occupational Therapy Certification Board (AOTCB) initial certification (prior to NBCOT).
4. Verification of employment as an occupational therapist: minimum of 6,000 hours of OT practice (three years FTE) or 4,000 hours (two FTE years or four to six part-time years) within the last six years.
5. Proof of active licensure to practice (if applicable in the state of current practice).
6. Current membership to the American Occupational Therapy Association.
7. When applicable, completion of the Test of English as a Foreign Language (TOEFL).
8. A background check completed through the Quinnipiac University system.

In addition, the student must submit the following documents, which will be used to evaluate the applicant's fit and potential for success in the OTD program:
9. Two professional references. Examples of acceptable references include those from a supervisor, a professional peer or a faculty member from an academic program you attended.
10. A personal essay that sets forth the applicant's professional goals and compatibility with the program's learning objectives. The essay must address focused questions that coincide with the program's mission. Question prompts may include:
"Why do you desire to be an agent of change for the profession of occupational therapy?" "How will this program facilitate your ability to become an agent of change?"
"What in your practice area would you like to change and why?"
(Essay prompts are subject to modification as deemed necessary to ensure currency).

The essay will be evaluated based on depth of content as well as writing ability. A score of 3 or better using a 4-point scale is required for admission to the program. Applicants who score below a 3 but are accepted to the program will be required to take OT 612 (a 1-credit writing course) prior to the start of classes. A grade of B or better is required in OT 612 to be admitted to the OTD Bridge and the OTD program.

Classes begin in August for the fall term. Candidates are advised to submit applications as early as possible.

## Graduation Requirements

Completion of all courses with a cumulative GPA of 3.0

## Program Requirements

1. Students in the OTD program are required to achieve a GPA of 3.0 upon the completion of their first 9 credits, and must maintain a cumulative GPA of 3.0 thereafter, as stated in the Graduate Student Handbook.
2. A student must earn a grade of "C+" or above in all course work. Any student who receives a grade below a $\mathrm{C}+$ in a course will be required to repeat and repay for that course.
In the event that a student does not achieve a 3.0 upon completion of the first 9 credits, he/she will be referred to the Progression and Retention Committee and placed on academic probation. The student must achieve a 3.0 semester GPA thereafter to demonstrate progression.

In the event that the student does not meet the GPA requirement in any semester after the first 9 credits, he/she will referred to the Progression and Retention Committee and placed on academic probation.

If the student does not achieve a 3.0 per semester subsequent to being placed on academic probation, he/she will be dismissed from the program. A student may appeal dismissal by writing a letter to the dean. Please refer to the Graduate Handbook for specific policies regarding the appeal process.

## Program Philosophy

Because the program philosophy is humanistic and developmental in nature, a mentor is assigned to each student from the beginning of the core classes. This allows the mentor to guide the student throughout the entire process of the OTD curriculum.

## Quinnipiac University Mission

The Quinnipiac University Mission has three core values: high-quality academic programs a student-oriented environment and a strong sense of community. The online, post-professional occupational therapy doctorate (OTD) program's mission aligns with these three values.

## Program Mission

The occupational therapy doctorate (OTD) program's mission is to provide excellent online educational opportunities that build upon the clinical experience of each student, enable students to become an "agent of change" for their professional community and to foster lifelong learning and continued professional growth in the field of occupational therapy.

## Program Outcomes

To provide students the opportunity to become an "agent of change," the following student outcomes are to be achieved by the end of the program.

Upon graduation, each student will be able to:

1. Integrate clinical experience with current theoretical concepts within the clinical literature (for example a student might work with a population on the development of an injury prevention program as a consultant and will need to include theoretical concepts as they relate to behavior change and/or environmental modifications).
2. Incorporate advanced concepts of policy, ethics and advocacy into practice to promote the profession (for example a student may advocate for and participate in the development of guidelines for including occupational therapy into primary care practices).
3. Develop clinical questions as a basis for clinical application of evidence and the development of clinical scholarship to inform best practice (for example a student may wish to determine if constraint induced movement therapy is an effective intervention for an adult neuro-rehab population of clients).
4. Conduct a needs assessment for practice trends and emerging practices (for example students might complete a needs assessment of their clinic to determine the feasibility of an older adult wellness program).
5. Apply leadership theories to practice to promote the growth of the profession (for example a student who practices in a public school may write a testimony for including sensory breaks during standardized testing to improve the attention of all students).
The program outcomes will be measured through assignments in each course, the capstone project, an exit survey, electronic focus groups, evidence of advancement in employment and employer feedback.

## Bachelor of Science to Occupational Therapy Doctoral Degree (BS to OTD)

It is recognized that a number of experienced practitioners entered the field of occupational therapy when the bachelor's degree was the accepted entry-level degree. As demands within health care have evolved, current students graduate with a master's degree. The clinical experience requirements listed above ensure practitioners begin this program with significant current experience. This expertise creates the foundational requirement for a clinical doctoral degree such as the OTD. For that reason a system to allow a BS to OTD bridge program has been designed. This program begins each spring and requires two semesters of course work.

All students currently holding an entry-level BS in occupational therapy with initial National Certification Board for Occupational Therapy (NBCOT)/AOTCB certification will be required to take the courses below prior to entering the OTD curriculum.
OT 600 Evidence-based Practice in OT
OT 602 Practice Trends in OT OT 610 Legal Research \& Practice Implications OT 611 Administration/Management $\quad 3$ Total credits: 12

Entry-level Master's in Occupational Therapy to Occupational Therapy Doctoral Degree (MOTto OTD)
All students currently holding an entry-level MOT in occupational therapy will be required to take all courses in the OTD curriculum.

## Tracks

Each student designates one course for each of the two specialization tracks at the end of the first year of study. Tracks are designed to offer the students the ability to focus on a particular area of interest. The tracks are designed to cover a variety of populations and settings, allowing the student latitude to focus study to a particular area within the track if desired. The tracks are as follows: 1. Innovations and Emerging Issues in Practice 2. Leadership

## Occupational Therapy Core Curriculum

Required courses ( 32 credits)
Professional Development
Course Title Credits
OT 650 Application of Theory \& Exploration of Occupation
Systems
OT 652 Doctoral Seminar 1
OT 653 Policy/Ethics 2
OT 655 Professional Seminar (residency class) 3
Critical Inquiry of Scholarship
(courses must be completed in the order listed)
OT 654 Critical Inquiry of Scholarship I 3
OT 640 Directed Study in Evidence-based Practice 3
OT $656 \quad$ Critical Inquiry of Scholarship II 4
OT 680 Capstone I 1
OT 681 Capstone II 3
Courses within the Tracks
OT 660 Innovations \& Emerging Issues in Community-based Services/Children \& Youth

3
OT 661 Innovations \& Emerging Issues in
OT $662 \quad$ Innovations \& Emerging Issues in the
OT 670 Leadership in Program Development/ Business
OT 671 Leadership in Higher Education 3
OT 672 Leadership in Practice 3

## Residency Requirement

All students are required to attend one summer course at Quinnipiac University for the duration of one week (OT 656 Scholarship II). Students also are required to attend the Symposium Day at the completion of the second year to present their final project.

## Class Schedule

Classes begin in the fall. Program requires five semesters: two academic years and summer between.
Occupational Therapy Core
Fall Semester, First Year
OT 651 Systems 3
OT 652 Doctoral Seminar 1
OT 654 Critical Inquiry of Scholarship I 3
Spring Semester, First Year
OT 640 Directed Study in Evidencebased Practice

# OT 650 

Application of Theory \& Exploration of Occupation
Summer Session: 12-week courses
OT 655 Professional Seminar 3
OT $656 \quad$ Critical Inquiry of Scholarship II 4
A portion of this course is taken at Quinnipiac University to
fulfill the residency requirement.

Second Year: Tracks
Fall Semester
OT 653 Policy/Ethics
OT 660, 661
or 662 Innovations or Emerging Issues
OT 680 Capstone I

## Spring Semester

OT 670, 671
or 672 Leadership
OT 681 Capstone II

## Post-bachelor's Doctor of Physical Therapy (DPT)

## General Information

An education in physical therapy at Quinnipiac University embodies both the University's commitment to its three core values: highquality academic programs, a student-oriented environment and a strong sense of community, and the American Physical Therapy Association's core values: accountability, altruism, compassion/ caring, excellence, integrity, professional duty and social responsibility. The program in physical therapy prepares students to become competent and compassionate entry-level physical therapists, who are able to practice in a variety of settings serving diverse populations across the lifespan.

To achieve its mission, the program in physical therapy:

- builds on a strong foundation of liberal arts and sciences
- cultivates critical and reflective thinking, clinical decision-making, and lifelong learning by utilizing an evidenced-based learning model, authentic assessments and a variety of learning experiences that include interactive technology. This learning model features small lab sizes, hands-on activities, visits to area clinics and opportunities to engage in professional development forums and community interdisciplinary collaboration
- provides both in-class and in-clinic opportunities
for students to engage in the essential elements of patient/client management
- supports faculty teacher-scholars who are effective teachers and who collectively engage in scholarship, professional development, direct patient care and University and community service
Based on the stated mission, the Department of Physical Therapy has set forth the following goals for the program:
- a high-quality, entry-level education
- continuing education for the clinical community
- effective staff support
- PT clinical partnerships
- high-quality clinical education opportunities
- opportunities for student service

Student goals include the ability to demonstrate the skills necessary for entrylevel clinical practice, to participate in research and/or service learning, demonstrate effective education of patients, families, peers, other health professionals and the community, and to participate in service.

Faculty goals include providing effective teaching, as well as participating in scholarship and in service.

For information concerning the course of study and admission to the program, see pp. 155-162 of this catalog.

## Master of Social Work

The mission of the Quinnipiac University MSW program is to prepare social workers for advanced practice in the context of health and behavioral health settings through a curriculum that focuses on clinical practice, organizational practice and interprofessional teamwork. This program is guided by a person and environment construct, a global perspective, respect for human diversity and knowledge based on scientific inquiry, for the purpose of educating social work professionals to promote human and community well-being. The program's core values are as follows and reflect the NASW Code of Ethics for Social Workers: service, social justice, the dignity and worth of the person, the importance of human relationships, integrity, competence, human rights and scientific inquiry.

The MSW program has the following four goals:

1. Prepare social workers to be advanced
practitioners in diverse systems of various sizes,
emphasizing competent, ethical clinical and organizational practice toward the advancement of the human condition. The advanced curriculum will build upon the foundation curriculum of generalist knowledge and practice skills with individuals, families and groups and communities.
2. Prepare social workers to practice without discrimination with diverse populations.
3. Prepare social workers to engage in professional activities that promote interprofessional collaboration and advocacy within diverse environments toward the enhancement of the human condition.
4. Prepare students for lifelong professional development.

The master of social work program prepares students for achievement and leadership in the field of social work. The curricular approach of the MSW program is unique in that it directly engages students in interprofessional education and the health care team approach.

Quinnipiac's MSW program embraces the University's commitment to the development of professional expertise through practice experience. The two field placements offer students the opportunity to practice skills learned in the classroom in real-world settings. A seminar that supports the student in integrating academic and fieldwork is held monthly. Upon completion of the MSW degree, the student will have at least 1,000 hours of professional preparation in the field.

## General Information

The 60 credits required for the MSW degree include 30 credits in the foundation curriculum and 30 credits in the advanced curriculum. The degree can be completed full-time in four terms of study or through an extended plan, where the foundation curriculum begins with part-time courses ( 6 credits) for one or two semesters, and is completed full time over two semesters of study (with foundation field and courses for 9 or more credits each term) and the advanced curriculum is completed full time over two semesters.

The curriculum includes a course in interprofessional education. An electronic portfolio is used throughout the program to include all major assignments from courses and field placements.

The advanced curriculum has a concentration of health/behavioral health. Also, each student chooses one of four specializations: aging services, child and family welfare and justice, health/ mental health/substance abuse, or school social work. An integrative seminar/capstone project is completed in the final semester of study and requires an integrative paper or project related to the specialization. The MSW program at Quinnipiac University does not give credit for life or work experience.

The MSW degree also meets the academic requirements for licensure as a Licensed Clinical Social Worker (LCSW). Accreditation is being pursued through the Council on Social Work Education (CSWE).

## Admission

To qualify for the program, students must have earned a bachelor's degree from a college or university accredited by a recognized regional accrediting association, with a preferred minimum GPA of 3.0 and at least 20 semester credits in liberal arts, and a course in statistics (with a grade of C or higher).

## Background Check and Drug Screening

To ensure their safety and maintain high-quality care of patients, clinical affiliates of the University require students to have a criminal background check. All students entering the Quinnipiac MSW program are required to undergo a criminal background check (through the University vendor) prior to beginning classes. This is a mandatory component of the program. In addition, MSW students may be required to undergo a criminal background re-check and/or drug screen prior to any of their field placements. The results are made available to the student through their own personal and secure online portal. Whenever a QU MSW student may need proof of their criminal background check for field placements, the student will release the information directly from their personal portal to the clinical site. The cost of the criminal background check and any re-checks and/or drug screens is the responsibility of each individual student.

## Program of Study

Students can choose among three plans of study for the MSW.

The curriculum for the professional courses in the program are subject to modification as deemed necessary to maintain a high-quality educational experience and keep current with best practices in the profession.

## Two-year Full-time MSW

Students in this plan of study enter the MSW program in the fall semester and complete the degree over four terms of study in two academic years. In addition to their classes, students are required to complete foundation and advanced field placements.

## Fall Semester, First Year ( 15 credits)

Course Title Credits

SW $500 \quad$ Foundation Field Education Practicum I with seminar3
SW $501 \quad$ Social Work Practice I: Individuals \& Families ..... 3

SW 504
Social Welfare Policy ..... 3

SW 505
Social Work Research ..... 3

SW 506 Human Behavior in the Social Environment I-Theories3

Spring Semester, First Year ( 15 credits)
SW 502 Foundation Field Education Practicum II with seminar3
SW 503 Social Work Practice II: Groups, Organizations \& Communities ..... 3

SW $507 \quad$ Human Behavior in the Social Environment II-Issues of Diversity \& Oppression 3
SW 508 Psychopathology 3

SW 509 Interprofessional Education (IPE)
Fall Semester, Second Year ( 15 credits)
SW 600 Advanced Field Education Practicum I in Health/Behavioral Health with seminar4
SW 601 Advanced Clinical Social Work Practice ..... 3

SW 604
Evaluation Research

$$
\text { Two electives* } 6
$$

## Spring Semester, Second Year (15 credits)

SW 602 Advanced Field Education Practicum II in Health/Behavioral Health with seminar 4
SW 603 Advanced Organizational SW Practice: Program Management, Supervision \& Professional Ethics
SW 605 Integrative Seminar/Capstone Project 2 Two electives*

## Extended MSW (completed in six semesters with fall admission)

Students are admitted in the fall to complete the foundation curriculum over two years with parttime and full-time terms and then attend classes full time during the last nine months of study (fall and spring) to complete the advanced concentration curriculum. In addition to their classes, students are required to complete foundation and advanced field placements.
Fall Semester, First Year (6 credits)

| Course | Title | Credits |
| :--- | :--- | ---: |
| SW 505 | Social Work Research | 3 |
| SW 506 | Human Behavior in the Social |  |
|  | Environment I-Theories | 3 |

Spring Semester, First Year (6 credits)
$\begin{array}{llr}\text { SW 507 } & \text { Human Behavior in the Social Environment II: } \\ & \text { Issues of Diversity \& Oppression } & 3 \\ \text { SW 509 } & \text { Interprofessional Education (IPE) } & 3\end{array}$
Fall Semester, Second Year (9 credits)
$\begin{array}{lll}\text { SW 500 } & \begin{array}{l}\text { Foundation Field Education } \\ \text { Practicum I with seminar }\end{array}\end{array}$
SW 501 Social Work Practice I: Individuals \& Families3
SW 504 Social Welfare Policy ..... 3
Spring Semester, Second Year (9 credits)SW 502 Foundation Field EducationPracticum II with seminar3
SW 503 Social Work Practice II: Groups, Communities \& Organizations ..... 3
SW $508 \quad$ Psychopathology ..... 3
Fall Semester, Third Year (15 credits)SW 600 Advanced Field EducationPracticum I in Health/BehavioralHealth with seminar4
SW 601 Advanced Clinical Social Work Practice ..... 3
SW 604 Evaluation Research ..... 2
Two electives* ..... 6
Spring Semester, Third Year (15 credits)SW 602 Advanced Field Education Practicum II inHealth/Behavioral Health with seminar4
SW 603 Advanced Organizational SWPractice: Program Management,Supervision \& Professional Ethics3
SW 605 Integrative Seminar/Capstone Project ..... 2
Two electives* ..... 6
*Of the four elective courses, one must be an advanced clinical course and another must support the chosen specialization.

## Extended MSW (completed in five semesters with spring admission)

Students are admitted in the spring semester to complete the foundation curriculum in three semesters (with part-time and full-time terms) and then attend classes full-time during the last nine months of study (fall and spring) to complete the advanced concentration curriculum. In addition to their classes, students are required to complete foundation and advanced field placements.
Spring Semester, First Year (6 credits)
Course Title Credits

SW $507 \quad$ Human Behavior in the Social Environment II: Issues of Diversity \& Oppression 3
SW 509 Interprofessional Education (IPE) 3
Fall Semester, Second Year ( 15 credits)
SW 500 Foundation Field Education Practicum I with seminar
$\begin{array}{lll}\text { SW } 501 \text { Social Work Practice I: Individuals } \\ & \text { \& Families }\end{array}$
SW 504 Social Welfare Policy 3
SW 505 Social Work Research 3
SW 506 Human Behavior in the Social Environment I: Theories for Practice 3
Spring Semester, Second Year (9 credits)
SW 502 Foundation Field Education Practicum II with seminar
SW 503 Social Work Practice II: Groups, Communities \& Organizations
SW 508 Psychopathology 3
Fall Semester, Third Year ( 15 credits)
SW 600 Advanced Field Education Practicum I in Health/Behavioral Health with seminar 4
SW 601 Advanced Clinical Social Work Practice 3
SW 604 Evaluation Research 2
Two electives* 6
Spring Semester, Third Year ( 15 credits)
SW 602 Advanced Field Education Practicum II in Health/Behavioral Health with seminar 4
SW 603 Advanced Organizational SW Practice: Program Management, Supervision \& Professional Ethics
SW 605 Integrative Seminar/Capstone Project
Two electives* 6
*Of the four elective courses, one must be an advanced clinical course and another must support the chosen specialization.

## School of Law

For information about the course of study and admission to the School of Law, see page 14 of this catalog and/or contact the school's Office of Admissions at 203-582-3400; the email address is ladm@quinnipiac.edu.

## School of Medicine

For information concerning the course of study and admission to the Frank H. Netter MD School of Medicine, see page 14 in this catalog and contact the Office of Admissions at 203-582-7766. Interested students also can visit the admissions website at www.nettersom.quinnipiac.edu.

## School of Nursing

Master of Science in Nursing
Post-bachelor's study
Adult-Gerontology Nurse Practitioner
Family Nurse Practitioner
Doctor of Nursing Practice
Post-bachelor's study
Adult-Gerontology Nurse Practitioner
Family Nurse Practitioner
Post-master's study
Care of Populations
Nurse Anesthesia
Nursing Leadership

## Mission Statement

To provide leadership in nursing and health care through innovative undergraduate and graduate education that embraces holism, interprofessionalism and inclusivity.

## Values

School of Nursing values include:

- Diversity of ideas, persons and cultures
- Supportive learning environments
- Scholarly undertakings to advance education and practice
- Ethical conduct in personal and professional arenas
- Holistic nursing across the spectrum of health care
- Interprofessional education and collaboration
- Innovative learning methodologies
- Systematic assessment and evaluation
- Lifelong learning


## General Information

An education at Quinnipiac embodies the University's commitment to three core values: high-quality academic programs, a student centered environment and a strong sense of community. Learning occurs in a highly personalized, student-centered community, which promotes academic excellence. Graduate nursing education broadens the scope of practice and provides for the acquisition of expertise in an area of specialization. The master of science in nursing program offers a family nurse practitioner track and an adult-gerontology nurse practitioner track.

The graduate nursing program offers three uniquely focused tracks leading to the doctor of nursing practice as students prepare for leadership roles in advanced specialty practice, nursing leadership and organizational management.

## Master of Science in Nursing

## Program Outcomes

Graduates of the MSN program are prepared for higher level professional practice and leadership roles in a variety of health care settings, as well as advanced study at the doctoral level.

Specifically, graduates will be able to:

1. Incorporate knowledge from the sciences and humanities for improvement of health care across diverse settings.
2. Demonstrate leadership abilities encompassing ethical and critical decision-making that embraces a systems perspective.
3. Apply appropriate measurement and analysis methods related to organizational quality and safety.
4. Apply evidence-based findings to resolve practice problems, and serve as a catalyst for change.
5. Use informatics and health care technology to integrate and coordinate care.
6. Participate in policy development and advocacy strategies at the system level to influence health and health care.
7. Collaborate effectively on interprofessional
teams to improve health outcomes.
8. Integrate principles of clinical and population health into care delivery and management.
9. Deliver direct and/or indirect nursing practice interventions at the master's level of practice.

## MSN Curriculum

Students who are registered nurses and have a bachelor's degree may pursue master's degree training as an advanced practice nurse in one of two specialty areas:

1. Adult-gerontology nurse practitioner
2. Family nurse practitioner

The FNP track requires completion of 47 credits and the ANP track requires 43 credits; both tracks require 570 hours of practice. Students may complete either track in two years of fulltime study or three years of part-time study.

The MSN program incorporates the Nurse Practitioner Primary Care Competencies in Specialty Areas: adult, family, gerontological and women's health (NONPF, 2002) and the Essentials of Master's Education for Advanced Practice Nursing (AACN, 2011). The graduate nursing core consists of nursing theory, issues and roles in health care and nursing research. The advanced practice core is 10 credits and consists of advanced health assessment, pathophysiology and advanced pharmacology. The required course work for both the FNP and ANP integrates health promotion, health protection, disease prevention and treatment. FNP students care for the following patients: pediatric (newborn through adolescent), adult, women (pregnant, postpartum, well woman care) and older adults. The ANP students care for all of these populations except prepubescent pediatric patients. Students receive theoretical as well as precepted course content (clinical) about and with all of these populations, as appropriate to the track (FNP or ANP).

## Admission Requirements

An applicant to the master of science in nursing program must be a registered nurse or NCLEX eligible nurse and have a bachelor's degree in nursing or another field. An undergraduate cumulative GPA of 3.0 or better is required.

Applicants should submit the following to the Office of Graduate Admissions:

1. A completed admissions application including a
resume and a personal statement addressing the following: a) professional goals and motivations, b) a nursing experience that has influenced or shaped your practice, c) a health care problem that interests you.
2. Official transcripts from all schools previously attended.
3. Official recent results of the Test of English as a Foreign Language (TOEFL) or (IELTS) International English Language Testing System for international applicants.
4. Two letters of recommendation from persons with authority to evaluate your professional ability.
5. Proof of current licensure or eligibility for licensure as a registered nurse in the state of Connecticut.
The preferred application deadline is June 1. Applications will be considered after June 1 on a space-available basis. When all application materials are received, an interview with the graduate nursing program director and/or member of the faculty will be arranged for eligible candidates.

| Learning Pathways |  |  |
| :---: | :---: | :---: |
| MSN: Adult-Gerontology Nurse |  |  |
| Practitioner Track |  |  |
| Full-time Program |  |  |
| Fall Semester, | First Year |  |
| Course | Title | Credits |
| BMS 515 (online) | Advanced Pathophysiology I | 3 |
| NUR 500 | Biostatistics | 1 |
| NUR 502 | Quality \& Safety in Health Care | 2 |
| NUR 520 | Advanced Health Assessment I | 3 |
| NUR 520L | Advanced Health Assessment Lab | 2 |


| Spring Semester, First Year |  |  |
| :--- | :--- | ---: |
| NUR 528 | Principles of Radiography | 2 |
| NUR 530 | Advanced Pharmacology | 3 |
| NUR 532 | Primary Care I | 3 |
| NUR 533 | Primary Care Practicum I | 3 |

## Summer Semester

NUR 524 (online) Principles of Electrocardiography

Total 1

## Fall Semester, Second Year

NUR 516 Health Policy \& Organizational Systems 3
NUR 534 Primary Care II 4
NUR 541 Primary Care of Adults: Practicum II 4

## Total 11

Spring Semester, Second Year
NUR $514 \quad$ Epidemiology \& Evidence-based Practice 3
NUR 536 Primary Care III ..... 4
NUR 543 Primary Care of Adults: Practicum III ..... 4
Total 11
Total credits 45
Part-time Program
Fall Semester, First Year
NUR 500 Biostatistics ..... 1
NUR 502 Quality \& Safety in Health Care ..... 2
BMS 515 Advanced Pathophysiology I ..... Total 6
Spring Semester, First Year
NUR 528 Principles of Radiology ..... 2
NUR 530 Advanced Pharmacology ..... Total 5
Summer Semester
NUR 524 (online) Principles of Electrocardiography 1
Total 1
Fall Semester, Second Year
NUR 520 Advanced Health Assessment I ..... 3
NUR 520L Advanced Health Assessment Lab ..... 2
Total 5
Spring Semester, Second Year
NUR 532 Primary Care I ..... 3
NUR 533 Primary Care Practicum ..... 3
Total 6
Fall Semester, Third Year
NUR 516 Health Policy \& Organizational Systems
NUR 534 Primary Care II ..... 4
NUR 541 Primary Care of Adults: Practicum II ..... 4
Total 11
Spring Semester, Third Year
NUR 514 Epidemiology \& Evidence-based Practice ..... 3
NUR 536 Primary Care III ..... 4
NUR 543 Primary Care of Adults: Practicum III 4Total 11
Total credits 45
MSN: Family Nurse Practitioner Track Full-time Program Fall Semester, First Year
BMS 518 Pathophysiology ..... 3
NUR 500 Biostatistics ..... 1
NUR 502 Quality \& Safety in Health Care ..... 2
NUR 520 Advanced Health Assessment I ..... 3
NUR 520L Advanced Health Assessment Lab ..... 2
Total 11
Spring Semester, First Year
NUR 528 Principles of Radiography ..... 2
NUR 530 Advanced Pharmacology ..... 3
NUR 532 Primary Care I ..... 3
NUR 533 Primary Care Practicum I ..... 3

## Summer Semester

NUR 524 Principles of Electrocardiography (online) 1 Total 1
Fall Semester, Second Year
NUR 516 Health Policy \& Organizational Systems 3
NUR 534 Primary Care II 4
NUR 550 Primary Care Family I 2
NUR 551 Primary Care Family: Practicum II 4
Total 13

## Spring Semester, Second Year

NUR 514 Epidemiology \& Evidence-based Practice 3
NUR 536 Primary Care III
NUR 552 Primary Care Family II 2
NUR 553 Primary Care Family: Practicum III 4
Total 13
Total credits 49

## Part-time Program <br> Fall Semester, First Year

NUR 500 Biostatistics 1

NUR 502 Quality \& Safety in Health Care 2
BMS 518 Pathophysiology 3
Total 6
Spring Semester, First Year
NUR 528 Principles of Radiology
NUR 530 Advanced Pharmacology
Total 5
Summer Semester
NUR 524 Principles of Electrocardiography (online) 1
Total 1
Fall Semester, Second Year
NUR 520 Advanced Health Assessment I 3
NUR 520L Advanced Health Assessment Lab 2
Total 5
Spring Semester, Second Year
NUR 532 Primary Care I 3
NUR 533 Primary Care Practicum I
3
Total 6

## Fall Semester, Third Year

NUR 516 Health Policy \& Organizational Systems 3
NUR 534 Primary Care II 4
NUR 550 Primary Care Family I 2
NUR 551 Primary Care Family: Practicum II 4
Total 13

## Spring Semester, Third Year

NUR 514 Epidemiology \& Evidence-based Practice 3
NUR 536 Primary Care III 4
NUR 552 Primary Care Family II 2
NUR 553 Primary Care Family: Practicum III 4
Total 13
Total credits 49

## Doctor of Nursing Practice

## Program Outcomes

The objectives of the DNP program are to prepare graduates for advanced nursing practice who are capable of providing holistic health care for diverse individuals, families or populations in a variety of settings. Specifically, the program seeks to produce graduates who:

1. Demonstrate clinical reasoning through an understanding of science and evidence-based practice.
2. Design, implement and evaluate quality improvement initiatives across the systems in which health care is delivered.
3. Analyze and critique the available evidence for best practices in health care.
4. Apply technology and information fluency to conduct practice inquiry.
5. Advocate for rational health policies to improve patient care and enhance effective use of resources.
6. Demonstrate leadership through interprofessional collaboration to improve patient and population health outcomes.
7. Direct health promotion and disease prevention efforts to improve patient and population health outcomes.
8. Provide competent, culturally sensitive, and ethically based care to individuals and/or populations in a defined specialty of advanced nursing practice.

## Post-bachelor's Program

Students who are registered nurses and have a bachelor's degree may pursue doctoral training as an advanced practice nurse in one of three specialty areas as an advanced practice registered nurse:

1. adult-gerontology nurse practitioner
2. family nurse practitioner
3. nurse anesthesia

Full-time students enrolled in the adultgerontology or family nurse practitioner tracks can complete the degree requirements for a doctor of nursing practice in three years, with a two-day-perweek schedule. Students who are new to nursing or those who wish to begin their education at a more relaxed pace can choose a four-year option, which allows for part-time study during the first two years. This option allows for full-time work in the first two years of the program and part-time work in the final two years.

All students in the nurse anesthetist track are full time and complete the degree in three years. Clinical experience is graduated throughout the program, beginning with part time hours and ending with full time hours plus a call rotation.

## Post-master's Program

For students with a master's degree in nursing or a related field, the post-master's doctoral option offers an opportunity to advance career goals more rapidly in two years in one of three tracks:

1. care of populations
2. nurse anesthesia
3. nursing leadership

Students in the care of populations track focus on public health and "big picture" health care analysis, which is useful for systematic chronic disease management and health care services design. Those in the licensed certified registered nurse anesthesia track utilize their clinical work experience to advance their professional scope of practice, preparing them for an evolving health care environment as clinicians and leaders.

Students in the nursing leadership track may come with or without past experiences in management. The courses prepare students for leadership responsibilities and roles across the health care field.

## Scholarly Portfolio

Upon admission, students are assigned an adviser, who meets with them for academic and scholarly advising over the course of the program. All students in the DNP program engage in scholarly inquiry through a variety of projects that are embedded in core and specialty courses throughout the program. Students are encouraged early to identify a theme or focus of inquiry. These completed projects are collected in a capstone portfolio. In the final semester, students reflect on how these projects have helped them achieve the overall program objectives during their course of study. The student's ongoing portfolio work is evaluated by the full time faculty teaching the courses, in which the projects reside and the final synthesis will be graded as pass/fail by a faculty committee.

For more information about any of these offerings, visiting the graduate nursing program website at www.quinnipiac.edu/gradnursing.

## Adult-Gerontology Nurse Practitioner Track (68 credits)

The adult-gerontology nurse practitioner track prepares qualified professional nurses to practice at an advanced level in primary care settings. The curriculum follows the standards set by the National Organization of Nurse Practitioner Faculties, the American Nurses Association, and the American Association of Colleges of Nursing. It provides 1,000 hours of precepted practice, thereby enabling graduates to diagnose and manage most common illnesses, and to assume the responsibilities commensurate with prescriptive authority and advanced nursing practice. Working independently and collaboratively with nurse practitioners and other members of the health care team, graduates are prepared to provide high-quality, cost-effective and holistic primary care across the lifespan of adults. Graduates are eligible to take a national examination for certification as adult nurse practitioners.

## Family Nurse Practitioner Track (75 credits)

The family nurse practitioner track prepares qualified professional nurses to practice at an advanced level in primary care settings. The curriculum follows the standards set by the National Organization of Nurse Practitioner Faculties, the American Nurses Association, and the American Association of Colleges of Nursing. It provides 1,000 hours of precepted practice, thereby enabling graduates to diagnose and manage most common illnesses, and to assume the responsibilities commensurate with prescriptive authority and advanced nursing practice. Working independently and collaboratively with nurse practitioners and other members of the health care team, program graduates are prepared to provide high-quality, cost-effective and holistic primary care across the lifespan. Graduates are eligible to take a national examination for certification as family nurse practitioners.

## Post-master's Care of Populations Track (33 credits)

The post-master's care of populations track is for master's prepared nurses who want to further develop population health management skills. In addition to the DNP core classes, a select group of classes explore health care systems, organizational dynamics, and population-focused inquiry. Five
hundred hours of practice and field experience related to the student's interests enhance learning. The track is open to all master's prepared nurses.

## Nursing Leadership Track <br> (post-master's, 31-33 credits)

The post-master's nursing leadership track provides leadership development for master's prepared nurses who aspire to assume or who currently hold leadership positions. Practica of 840 hours offer real time experience with health care leaders. The track is open to all nurses with a relevant master's degree.

## Nurse Anesthesia Track (post-bachelor's, 73 credits; post-master's, 30-35 credits)

The curriculum of the nurse anesthesia track offers entry-level post-bachelor's to DNP and post-master's CRNA to DNP degree options. The curricula and policies were developed in accordance with The Essentials of Doctoral Education for Advanced Nursing Practice (AACN, 2006) and the Standards for Accreditation of Nurse Anesthesia Educational Programs (COA, 2013). Core DNP courses taught by experienced nursing faculty and members of the Department of Biomedical Sciences and Health Sciences will be shared collaboratively with the other advanced practice DNP candidates. Nurse anesthesia students receive a strong science foundation as well as course content including patient safety and human factors as outlined in the standards. A portfolio is required as a final capstone project focusing on nurse anesthesia scholarship. An oral comprehensive exam and grand rounds presentation are included as well as the portfolio for post-bachelor's candidates.

The program's goal-to develop knowledgeable, caring and compassionate nurse anesthetists who are committed to excellence in health care, preserving the dignity and rights of patients and advancing the profession-is congruent with the Quinnipiac University mission statement. The nurse anesthesia specialty is organized within the context of the DNP program in the School of Nursing. The DNP program builds on the generalist preparation of the bachelor's-prepared nurse in the entrance-level DNP and the postmaster's level for the CRNA. The DNP prepares leaders in advanced practice roles who can synthesize knowledge from nursing and relevant fields of study as a basis for practice. The graduate
curriculum provides both didactic and clinical experiences that facilitate critical thinking skills so that graduates are able to provide quality, costeffective health services to individual clients, families and communities.

## Admission Requirements

An applicant to the DNP program must be a registered nurse or NCLEX eligible nurse and have a bachelor's degree in nursing or another field. Applicants to the nurse anesthesia program must be registered nurses with two years of recent (within the past five years) critical care experience.

An undergraduate cumulative GPA of 3.0 or better is required. Additionally applicants to the post-master's tracks must have a master's degree in nursing or a related field and those applying to the care of individuals track must be certified as APRNs. Post-master's applicants are required to provide a letter from their prior master's program detailing the total number of supervised clinical hours they completed as part of that program. Applicants to the post-master's nurse anesthesia DNP must already be certified registered nurse anesthetists (CRNA). Applicants should submit the following to the Office of Graduate Admissions.

1. A completed admissions application including a resume and a personal statement addressing the following: a) professional goals and motivations; b) a nursing experience that has influenced or shaped your practice; c) a health care problem that interests you for potential doctoral study.
2. Official transcripts from all schools previously attended.
3. Official recent results of the Test of English as a Foreign Language (TOEFL) or (IELTS) International English Language Testing System for international applicants.
4. Two letters of recommendation from persons with authority to evaluate your professional ability. Nurse anesthesia candidates can see the requirements at www.quinnipiac.edu/CRNA.
5. Proof of current licensure or eligibility for licensure as a registered nurse in the state of Connecticut.
6. Letter from applicant's prior master's program detailing the number of supervised clinical hours completed as part of that program (for postmaster's DNP applicants only).

Candidates applying for full-time admission for the fall term must submit a completed application by June 1.

When all application materials are received, an interview with the graduate nursing program director and/or member of the faculty will be arranged for eligible candidates.

| Learning Pathways |  |  |
| :--- | :--- | ---: |
| DNP: Adult-Gerontology Nurse Practitioner |  |  |
| Dourse | Title | Credits |
| Corer |  |  |
| First Year, Fall Semester |  |  |
| BMS 515 | Advanced Pathophysiology I | 3 |
| NUR 500 DE | Biostatistics | 1 |
| NUR 516* | Health Policy \& Organizational Systems | 3 |
| NUR 520 | Advanced Health Assessment I | 3 |
| NUR 520L | Advanced Health Assessment Lab | 2 |
| NUR 632 | Health Promotion \& Advocacy | 3 |
|  |  | Total 15 |

## First Year, Spring Semester

BMS 516 Advanced Pathophysiology II 3
NUR 514* Epidemiology \& Evidence-based Practice 3
NUR 630 Advanced Health Assessment II 3
NUR 630L Advanced Health Assessment Lab 2
NUR 634 Reproductive Health Problems in Primary Care

Total 14

## Summer 1

NUR 524 Principles of ECG Interpretation 1
NUR 602 DE Principles of Ethical Theory in Nursing 1
NUR 631 DE Clinical (120 hours) 1
NUR 638 Laboratory Diagnosis 2
Total 5
Second Year, Fall Semester
NUR 530 DE Advanced Pharmacology 3
NUR 636 Common Problems in Primary Care 3
NUR 641 Adult Health Practicum \& Seminar I 3
Total 9
Second Year, Spring Semester
NUR 528 DE Principles of Radiography 2
NUR 642 Complex Problems in Primary Care 3
NUR 643 Adult Health Practicum \& Seminar II 3
Total 8


NUR 612 PBL DE Portfolio Synthesis Seminar II 1
NUR 645 Adult Health Practicum \& Seminar III 3
Total 7

| Third Year, Spring Semester |  |  |
| :--- | :--- | :--- |
| NUR 640 | Special Topics in Adult Pharmacology | 1 |

NUR 647 Adult Health Practicum \& Seminar IV 4
Total 5
DE=online course
*online or on-campus (space-available basis)
Program Total 68

| DNP: Family Nurse Practitioner |  |  |
| :--- | :--- | ---: |
| First Year, Fall Semester |  |  |
| BMS 515 | Advanced Pathophysiology I | 3 |
| NUR 500 DE | Biostatistics | 1 |
| NUR 516* | Health Policy \& Organizational Systems | 3 |
| NUR 520 | Advanced Health Assessment I | 3 |
| NUR 520L | Advanced Health Assessment Lab | 2 |
| NUR 632 | Health Promotion \& Advocacy | 3 |
|  |  |  |

Total 15
First Year, Spring Semester
BMS 516 Advanced Pathophysiology II 3
NUR 514* Epidemiology \& Evidence-based Practice 3
NUR 630 Advanced Health Assessment II 3
NUR 630L Advanced Health Assessment Lab 2
$\begin{array}{ll}\text { NUR } 634 & \begin{array}{l}\text { Reproductive Health Problems in } \\ \\ \text { Primary Care }\end{array}\end{array}$
Total 14
Summer 1
NUR 524 DE Principles of ECG Interpretation 1
NUR 602 DE Principles of Ethical Theory in Nursing 1
NUR 631 DE Clinical ( 120 hours) 1
NUR 638 DE Laboratory Diagnosis 2
NUR 656 DE Pediatric Assessment 1

## Total 6

Second Year, Fall Semester
NUR 530 DE $\quad$ Advanced Pharmacology
NUR 636 Common Problems in Primary Care 3
NUR 651 Family Health Practicum \& Seminar I 3
NUR 652 Primary Care of the Child \& Family I 3
Total 12

## Second Year, Spring Semester

NUR 528 DE Principles of Radiography 2
NUR 642 DE Complex Problems in Primary Care 3
NUR 653 Family Health Practicum \& Seminar II 3
NUR 654 Primary Care of the Child \& Family II 3
Total 11
Summer 2
NUR 610 DE Clinical Scholarship \& Inquiry in Nursing 3
NUR 610 PBL DEPortfolio Synthesis Seminar I 1
NUR 633 Clinical (120 hours) 1
Total 5

| Third Year, Fall Semester |  |
| :---: | :---: |
| NUR 612 DE | Leadership \& Collaboration for Change in Health Care |
| NUR 612 PBL DEPortfolio Synthesis Seminar II |  |
| NUR 655 | Family Practicum \& Seminar III |
|  | Tot |
| Third Year, Spring Semester |  |
| NUR 650 | Special Topics in Family Pharmacology |
| NUR 657 | Family Health Practicum \& Seminar IV |
|  | Total |
|  | Program Total |
| DE=online course |  |
| *online or on-campus (space-available basis) |  |
| Post-master's DNP: Care of Populations |  |
| First Year, Fall Semester |  |
| NUR 500 DE | Biostatistics |
| NUR 516* | Health Policy \& Organizational Systems |
| NUR 620 DE | Advanced Principles of Population- |
|  | Based Health Care |
|  | Total |
| First Year, Spring Semester |  |
| NUR 514* | Epidemiology \& Evidence-based Practice |
| NUR 622 DE | Special Topics in Advanced Practice |
|  | Nursing |
|  | Total |
| Summer 1 |  |
| NUR 602 DE Principles of Ethical Theory in Nursing |  |
| NUR 610 DE Clinical Scholarship \& Inquiry in Nursing |  |
| NUR 610 PBL DEPortfolio Synthesis Seminar I |  |
| NUR 623 | Population Health Fellowship |
|  | Total |
| Second Year, Fall Semester |  |
| HM 600 | Foundations of Health Care Mgmt. |
| NUR 612 DE | Leadership \& Collaboration for |
|  | Change in Health Care |
| NUR 612 PBL DEPortfolio Synthesis Seminar II |  |
|  | Total |
| Second Year, Spring Semester |  |
| NUR 700 DE | An Interprofessional Approach to Caring the Underserved |
| OL 601 | Foundations of Organizational |
|  | Leadership |
|  | Program Total 32 |
|  |  |
| DE=online course |  |
| *online or on-c | campus (space-available basis) |

Post-master's DNP: Nursing Leadership First Year, Fall Semester
HM 600 DE Foundations of Health Care Management 3 (first seven weeks)
$\begin{array}{ll}\text { NUR } 500 \text { DE } & \text { Biostatistics } \\ \text { NUR } 611 \text { DE } & \text { Nursing Leadership Seminar \& Practicum I: } 2\end{array}$ Culture of Safety ( 120 hours \& online seminar) (second seven weeks)

Total 6
First Year, Spring Semester
HM 664 DE Financial Management in Health Care ..... 3 Organizations (first seven weeks)
NUR 613 DE Nursing Leadership Seminar \& Practicum II:2 Applying Data to Practice ( 120 hours \& online seminar) (second seven weeks)Total 5
First Year, Summer Semester
NUR 610 DE Clinical Scholarship \& Inquiry in Nursing 3 (10 weeks)
NUR 610 PBL DEPortfolio Synthesis I: 80 project hours; 1online seminar (DNP Essentials)
NUR 615 DE Nursing Leadership Seminar \& Practicum 2III: Legal Contexts of Health Care (120 hourspracticum \& online seminar) ( 10 weeks)Total 6
Second Year, Fall Semester
NUR 516 DE Health Policy \& Organizational Systems ..... 3
NUR 612 DE Leadership \& Collaboration for Change in 3 Health Care
NUR 612 PBL DEPortfolio Synthesis II: 80 project hours; 1 Online seminarTotal 7
Second Year, Spring Semester
NUR 617 DE Nursing Leadership Fellowship I: ..... 2Relationship Management ( 120 hrs \& onlineseminar) (includes two-day residency
An Interprofessional Approach to Caring 3for the Underserved with Multiple ChronicConditions
Total 5
Second Year, Summer Semester
NUR 619 DE Nursing Leadership Fellowship II: Strategic 2 Leadership (120 hours \& online seminar) NUR 621 DE Nursing Leadership Additional Clinical 2 (120 hours practicum) (as needed to secure sufficient clinical hours)

Total 2-4
Program Total 31-33

## Post-bachelor's to DNP: Nurse Anesthesia

## Summer 1

NUR 602 DE
NUR 517
NUR 517L
PY 501

Principles of Ethical Theory in Nursing
1 Human Anatomy 2 Human Anatomy Lab 1
Advanced Human Physiology
Total 8
First Year, Fall Semester
NUR 500 DE Biostatistics
NUR 516* Health Policy \& Organizational Systems
NUR 520 Advanced Health Assessment I
NUR 520L Advanced Health Assessment Lab
NUR 530 DE Advanced Pharmacology I
Total 12

## First Year, Spring Semester

NUR 671 Clinical Practicum I
NUR $670 \quad$ Basic Principles of Anesthesia 3
NUR 670L Basic Principles of Anesthesia Lab 1
NUR 672 Advanced Pharmacology II 3
NUR 514* Epidemiology \& Evidence-based Practice 3
NUR $674 \quad$ Professional Aspects I 1
Total 12

## Summer 2

NUR $673 \quad$ Clinical Practicum II (3-4 days/week) 1
NUR $680 \quad$ Physics, Equipment \& Technology Advanced Chemistry Concepts for the Nurse Anesthetist

Total 5

## Second Year, Fall Semester

NUR $675 \quad$ Clinical Practicum III (3-4 days/week) 2
BMS 518 Advanced Pathophysiology 3
NUR 682 Advanced Principles of Anesthesia I 2
NUR 682L Advanced Principles of Anesthesia Lab 1
NUR $676 \quad$ Professional Aspects II 1
Total 9
Second Year, Spring Semester
NUR $677 \quad$ Clinical Practicum IV (4 days per week) 2
NUR 684 Advanced Principles of Anesthesia II 3
NUR 688 DE Human Factors \& Patient Safety 3
Total 8
Summer 3
NUR 610 DE
NUR 679
Clinical Scholarship \&
Clinical Practicum V (4 days)
1
2
NUR 686 Advanced Principles of Anesthesia III 1
Total 7
Third Year, Fall Semester
NUR 612 DE Leadership \& Collaboration for Change in Health Care
NUR 612 PBL DE Portfolio Synthesis II 1
NUR 681 Clinical Practicum VI (4 days)
Third Year, Spring Semester
NUR 678 Professional Aspects III ..... 1
NUR $683 \quad$ Clinical Practicum VIII (3-4 days) ..... 2
NUR 694 Oral Comprehensives ..... 2

Total 5
Program Total 74
$D E=$ online course
*online or on-campus (space-available basis)
Pre-req for entrance: Undergrad A\&P with labs (8 credits), Chemistry: Inorganic and Organic (8 credits) Microbiology (3-4 credits) Pharmacology (3-4 credits), statistics ( 3 credits). Oral comprehensives: Pharmacology, A\&P, Pathophysiology, Advanced principles of Anesthesia
Clinical Practicum—5 semesters—approx.. hours 1800-2000.

## Post-master's DNP: Nurse Anesthesia First Year, Fall Semester

| NUR 685 | Clinical Practicum I | 1 |
| :--- | :--- | :--- |
| NUR 516 | Health Policy \& Organizational Systems | 3 |
| NUR 520 | Advanced Health Assessment I* | 3 |
| NUR 520L | Advanced Health Assessment Lab* | 2 |
| BMS 500 DE | Biostatistics | 1 |
| *May be waived if student took in the nurse anesthesia program |  |  |
| Total 5/10 |  |  |

First Year, Spring Semester
NUR 687 DE Clinical Practicum II ..... 1
NUR 688 DE Human Factors \& Patient Safety ..... 3
NUR 514 DE Epidemiology \& Evidence-based Practice 3Total 7
Summer 1
NUR 610 DE Clinical Scholarship \& Inquiry ..... 3
NUR 610 PBL DE Portfolio Synthesis I ..... 1
NUR 689 DE Clinical Practicum for Post-master's III/ Paient Safety Seminar ..... 2
Second Year, Fall Semester
NUR 691 DE Clinical Practicum for Post-master's IV/
Patient Safety Seminar ..... 2
NUR 602 DE Principles of Ethical Theory in Nursing ..... 1
NUR 612 DE Leadership \& Collaboration for Change in Health Care* ..... 3
NUR 612 PBL DE Portfolio Synthesis Seminar II ..... 1
Total 7
Total 7
Second Year, Spring Semester
Professional Aspects of Nurse AnesthesiaPractice III (Educational Leadership) 1
NUR 692 Clinical Case Study Presentation 1NUR 693 DE Clinical Practicum for Post-master's V/Patient Safety Seminar2

## Sexual Assault Forensic Examiner (SAFE)

This online program, offered every year, teaches health care professionals how to respond to victims of interpersonal violence.

The program is accredited by the Connecticut Nurses Association and offered by Quinnipiac's School of Nursing.

This program requires two on-campus meetings. Attendance is mandatory to successfully complete this course.
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## Administrative and Program Information

Quinnipiac University OnlineVice President and COO for Online ProgramsDirector of Admissions for Online ProgramsAssociate Director of AdmissionsAssociate Director of AdmissionsAssociate Director of Financial Aid and Planning
Program Directors
School of Business and Engineering
Master of Business AdministrationMS in Business AnalyticsMS in Organizational Leadership
School of Business and School of Law
Health Care Compliance Certificate
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Michael Taylor ..... 203-582-3949
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Jennifer Van Brederode ..... 203-582-3638
Lisa Braiewa ..... 203-582-3710
School of Communications
Graduate Programs Director
Phillip Simon ..... 203-582-8274
School of Education
MS in Instructional DesignMS in Teacher LeadershipSpecial Education Certificate of Completion
School of Health Sciences
BS in Health Science StudiesOccupational Therapy Doctorate
Christine Fitzgerald ..... 203-582-8688
Ruth Schwartz ..... 203-582-8419
Gail Gilmore
Gail Gilmore ..... 203-582-6455 ..... 203-582-8868
School of NursingDoctor of Nursing Practice-Care of PopulationsDoctor of Nursing Practice-Nursing LeadershipDoctor of Nursing Practice-Nurse AnesthesiaBachelor of Science in Nursing
Francine Seruya
Laima Karosas ..... 203-582-5366
Laima Karosas ..... 203-582-5366
Judy Thompson ..... 203-582-8875
Cory Boyd ..... 203-582-8542

## Mission Statement

Quinnipiac University Online's mission is to partner with all University schools and colleges to deliver high-quality, student-centric academic programs in a virtual, collaborative classroom.

## About Online Learning

Quinnipiac University was an early adopter of online learning. Since its founding in 2001, Quinnipiac University Online has developed a high level of expertise in the design and delivery of online learning. Online programs allow students to complete their course work weekly without attending a scheduled class date and time.

In addition to traditional on-campus programs, Quinnipiac University offers online bachelor's degree completion, master's degree, doctorate degree and certificate programs through the University's School of Business and Engineering, School of Communications, School of Education, School of Nursing and School of Health Sciences.

Quinnipiac University Online also offers undergraduate courses during the summer. This popular option allows students to advance in their programs, catch up on required or prerequisite courses or expedite their time to degree completion. For information on summer program offerings, visit the website at quonline.quinnipiac.edu.

Quinnipiac University Online offers students the best of both worlds by combining convenience and flexibility with an educational community that encourages personal connections, faculty guidance and the opportunity to consult and collaborate with peers.

Quinnipiac University Online provides administrative and technical support to students and faculty for all online programs and courses at Quinnipiac. Support staff members are available seven days a week via telephone or email to assist you. Email QUOnline@quinnipiac.edu or call 203-582-5669 with any questions.

## Online Admissions

For information about online admissions, visit the website at quonline.quinnipiac.edu or call 203-582-3918. The application, along with the appropriate fee, is to be submitted with official transcripts of all college-level work completed at other institutions. Applicants must also submit a personal statement and resume and supply the names and email addresses of two professional or academic references.

Individual graduate programs have additional
application requirements. For example, GMAT or GRE scores are required for admission into the MBA program.

## International Student Admission

Applications for graduate study from international students are welcomed.

All applicants from non-English-speaking countries must, in addition to all of the regular admissions requirements, provide TOEFL (Test of English as a Foreign Language) scores (go to www.ets.org). In general, a minimum TOEFL iBT score of 90, Internet-based ( 575 paper-based, 233 computer-based) is required for admission. In lieu of TOEFL, applicants may submit IELTS (International English Language Testing System) scores (go to www.ielts.org). A minimum score of 6.5 on this exam, "B" or above on the CAE (Certificate of Advanced English), or "C" or above on the CPE (Certificate of Proficiency in English) is required. In lieu of TOEFL or IELTS, applicants may submit PTE-A (Pearson Test of English Academic) scores (available at www.pearsonPTE.com). A minimum PTE-A score of 61 is required. TOEFL, IELTS and PTE scores are valid for two years.

Candidates holding degrees from foreign institutions must provide notarized English translations and an official evaluation of their postsecondary records from an academic credential evaluation service.

## Admission Standards

Quinnipiac offers a variety of programs online. For program specific admission standards, refer to each individual program starting on p. 143 (undergraduate programs) and p. 183 (graduate programs).

## Note: Meeting minimum admission standards does not guarantee admission.

If admitted, the successful candidate should plan to consult with his or her academic adviser to review the program requirements for graduation.

## Transfer of Credit and Challenge Policy

Graduate course credit completed with a grade of $B$ or better at other regionally accredited institutions may be transferred into a graduate program at Quinnipiac. Requests for transfer
of credit must be submitted to the appropriate graduate program director along with official transcripts from the institution(s) where the credits were earned. Ordinarily, transfer of credit is granted for courses demonstrated to be similar in content, level of instruction and objectives to courses within a student's graduate curriculum at Quinnipiac.

The MBA program accepts up to 9 credits. The MS in business analytics program accepts up to 3 credits. The MS in organizational leadership program accepts up to 3 credits.

Graduate level courses taken to complete a degree program at Quinnipiac may be applied to a second graduate degree. These courses must be part of the approved curriculum of the second degree. Further, a minimum of 15 credits of additional course work must be completed before the conferral of a second degree.

## Financial Aid

Our goal at Quinnipiac University Online Financial Aid is to provide students with the adequate financial aid resources needed to pursue their educational goals without financial disruption. Our office provides students with courteous and efficient service while complying with all federal, state and University policies.

Students seeking financial aid assistance must complete the following forms to apply for financial aid:

1. Free Application for Federal Student Aid (FAFSA) at: www.fafsa.ed.gov
2. Quinnipiac University Online Financial Aid Application at: quonline.quinnipiac.edu Students are encouraged to complete their financial aid paperwork as early as possible to assure timely processing of aid prior to the beginning of their start term. Bills are due approximately one month prior to the start of classes so it is important to allow adequate processing time to remain in good standing with the University.

To be eligible for financial aid students must:

1. be a U.S. citizen, permanent resident or eligible non-citizen
2. satisfy any outstanding requirements that arise from the processing of the FAFSA
3. register with the Selective Service System at www.sss.gov (male students)
4. be accepted by Quinnipiac into a degree program
5. meet the University's minimum satisfactory academic progress standards for continuation of aid
6. register at least half-time ( 5 credits for graduate students; 6 credits for undergraduate students) Upon successful completion of the financial aid application process, students will receive an award letter via their Quinnipiac University email account that will outline all of the aid for which they qualify. Students can accept or decline the award and apply for additional resources to cover their balance, if needed. Students also have the option of applying for private loans, outside scholarships, payment plans or veterans' benefits (if applicable).

For complete details on financial aid programs, visit quonline.quinnipiac.edu, email us at onlinefinaid@quinnipiac.edu or call us at 203-582-8430. We also would like to stress that our main mode of communication with our online students is through their Quinnipiac email account, so please remember to check it often!


## Requirements for Graduation

Please refer to pp. 187-188 to review the requirements for graduation for the following programs:

Master of Business Administration
Master of Science in Business Analytics
Master of Science in Instructional Design
Master of Science in Interactive Media
Master of Science in Journalism/Writing Track
Master of Science in Organizational Leadership
Master of Science in Sports Journalism/Writing Track
Master of Science in Teacher Leadership
Occupational Therapy Doctorate
Post-master's Doctor of Nursing Practice
Bachelor of Science in Health Science Studies (see pp. 143-144)
Bachelor of Science in Nursing (see pp. 171-173)
Special Education Certificate of Completion (see p. 216)
Health Care Compliance Certificate (see p. 200)
Advanced Graduate Certificate in Social Media (see p. 203)

## Graduate Academic Policies

Refer to p. 189 for graduate academic policies.

## School of Business and Engineering

## Master of Business Administration

See pp. 192-194 for School of Business and Engineering master of business administration program information.

## Master of Science in Business Analytics

See p. 198 for School of Business and Engineering master of science in business analytics program information.

## Master of Science in Organizational Leadership

See pp. 199-200 for School of Business and Engineering master of science in organizational leadership program information.

## School of Business and School of Law

## Health Care Compliance Certificate

See p. 200 for School of Business and School of Law health care compliance certificate program information.

## School of Communications

## Master of Science in Interactive Media

See p. 201 for School of Communications master of science in interactive media program information.

## Master of Science in JournalismWriting Track

See p. 205 for School of Communications master of science in journalism-writing track program information.

## Master of Science in Sports JournalismWriting Track

See p. 208 for School of Communications master of science in sports journalism-writing track program information.

## Advanced Graduate Certificate in Social Media

See p. 203 for School of Communications advanced graduate certificate in social media program information.

## School of Education

## Master of Science in Instructional Design

See p. 216 for School of Education master of science in instructional design program information.

## Master of Science in Teacher Leadership

See p. 218 for School of Education master of science in teacher leadership program information.

# Special Education Certificate of Completion 

See p. 216 for School of Education special education certificate of completion program information.

## School of Health Sciences

## Bachelor of Science in <br> Health Science Studies

See p. 143 for School of Health Sciences bachelor of science in health science studies program information.

## Occupational Therapy Doctorate

See p. 231 for School of Health Sciences occupational therapy doctorate program information.

## School of Nursing

## Bachelor of Science in Nursing/ <br> RN to BSN Completion Track

See p. 171 for School of Nursing bachelor of science in nursing program information.

## Doctor of Nursing Practice/ <br> Care of Populations

See p. 242 for School of Nursing doctor of nursing practice/care of populations program information.

## Doctor of Nursing Practice/ Nurse Anesthesia

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## Doctor of Nursing Practice/ Nursing Leadership

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## Undergraduate Courses

## Accounting (AC)

AC 211 Financial Accounting (3 cr.) This course introduces students to the purposes of financial statements and the recognition, measurement and disclosure concepts and methods underlying financial statements. Students begin to use and interpret financial statements and the related impact of elementary transactions and events on those statements. Minimum grade for accounting majors B-. Prerequisite: MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141; Every Year, All

AC 212 Managerial Accounting (3 cr.) This course provides an introduction to the uses of accounting information by managers for internal reporting and decision making. Students begin to focus on classifying, measuring and analyzing product and service costs for decision making, budget preparation and performance evaluation. Minimum grade for accounting majors B-. Accounting majors must have B- or better in the prerequisite course. Prerequisite: AC 101 or AC 211; Every Year, All

AC 305 Intermediate Accounting I ( 3 cr.) This course is the first of three intermediate level courses. Students study the conceptual framework, standards, roles of standard-setting bodies and presentation of financial statements. Additional topics include the recognition, measurement and reporting of cash, receivables, and inventories. In addition to U.S. Generally Accepted Accounting Principles (GAAP) students also are exposed to International Financial Reporting Standards (IFRS). Minimum grade for accounting majors B-. Accounting majors must have B - or better in the prerequisite course. Prerequisite: AC 101 or AC 211; Every Year, Fall and Spring

AC 306 Intermediate Accounting II (3 cr.) This continuation of Intermediate Accounting covers such topics as property, plant and equipment, intangible assets, current liabilities and contingencies, income taxes, accounting changes and correction of errors, and structure and usefulness of the statement of cash flows. In addition to U.S. Generally Accepted Accounting Principles (GAAP), students also are exposed to International Financial Reporting Standards (IFRS). AC 306 may be taken concurrently with AC 307. Minimum grade for accounting majors B-. Accounting majors must have B - or better in the prerequisite course. Prerequisite: AC 305; Every Year, Fall and Spring

AC 307 Intermediate Accounting III (3 cr.) This continuation of Intermediate Accounting covers such
topics as long-term liabilities, investments, stockholders' equity, earnings per share, revenue recognition, pensions and leases. In addition to U.S. Generally Accepted Accounting Principles (GAAP), students also are exposed to International Financial Reporting Standards (IFRS). AC 307 may be taken concurrently with AC 306. Minimum grade for accounting majors B-. Accounting majors must have B- or better in the prerequisite course. Prerequisite: AC 305; Every Year, Spring

AC 323 Cost Accounting ( 3 cr.) This class includes an in-depth treatment of accounting theories and practices used to control and manage costs. Topics include job-order, process, activity-based costing systems, cost variance analysis, budgeting, cost-volume-profit analysis and product mix decisions. Minimum grade for accounting majors C -. Accounting majors must have a B- or better in the prerequisite course. Prerequisite: AC 102 or AC 212; Every Year, Spring

AC 335 Accounting Systems (3 cr.) This class introduces the use of information technology in accounting systems. Topics include design, development, implementation, control and audit of information systems used to generate and manage accounting information. Minimum grade for accounting majors C-. Accounting majors must have a B- or better in the prerequisite course. Prerequisites: AC 102 or AC 212; Every Year, Spring

## AC 350 Advanced Excel Programming (CIS 350)

( 3 cr.) This course utilizes advanced topics in Excel to solve a range of complex business problems. Topics include: spreadsheet design, the use of complex formulas, functions, list and data management, macros and Visual Basic for Applications. Prerequisite: CIS 101; Every Year, Spring

AC 402 Accounting Internship (3 cr.) This internship is open to accounting majors. Students must complete the internship application form to receive credit. This course is graded on a pass/fail basis. A minimum of 150 hours is required. Every Year, All

AC 405 Advanced Accounting (3 cr.) This course provides an in-depth study of accounting principles and analysis of problems for business combinations (mergers and acquisitions), international operations and governmental and not-for-profit accounting. Students learn standard-related research skills and complete several research cases using the FASB codification database. Minimum grade for accounting majors CAccounting majors must have B- or better in the prerequisite course. Prerequisite: AC 306; Every Year, Fall and Spring

AC 411 Auditing Theory and Practice (3 cr.) This course focuses on auditing standards and audit practice. It includes an examination of auditor independence and ethical responsibilities, audit risk, audit evidence, internal controls, development of an overall audit plan and detailed audit programs. Minimum grade for accounting majors C-. Accounting majors must have Bor better in the prerequisite course. Prerequisite:
AC 305; Every Year, Fall
AC 412 Advanced Auditing (3 cr.) This continuation of AC 411 includes discussion of the steps necessary to complete an audit engagement, research using authoritative audit pronouncements and how to use audit software. The course introduces students to fraud auditing, legal liability issues faced by auditors and types of assurance services other than audits. Minimum grade for accounting majors C-. Prerequisite: AC 411; Every Year, Spring

## AC 431 Federal Income Taxation of Individuals

( 3 cr .) This course introduces students to the research, analysis and planning of individual federal income tax with emphasis on the identification of the proper taxpayer, the concepts of income, characterization of income, timing of income (realization and recognition), deductions, deferral and non-recognition of income. Minimum grade for accounting majors C-. Accounting majors must have B - or better in the prerequisite course. Prerequisite: AC 102 or AC 212; Every Year, Fall

AC 432 Federal Income Taxation of Business Entities ( 3 cr .) This course considers the tax effects of formation, operation and liquidation of business entities. Students identify and analyze data relevant to the taxation of different business entities. Emphasis is placed on issues and data identification, research and analysis of relevant tax information that affects entities' elections and alternative tax treatments. Minimum grade for accounting majors C-. Prerequisite: AC 431; Every Year, Spring

## Advertising and Integrated Communications (STC)

## STC 101 Principles of Advertising and Public

Relations (3 cr.) This course introduces students to the field of strategic communication by examining contemporary issues and trends, and analyzing ethical considerations involved in the practice of public relations, advertising and integrated communications. The role of strategic communication in society and business is examined through the lens of basic advertising and public relations theories as well as industry best practices. Students are introduced to critical thinking and reasoning concepts as well as the various professional roles available. Every Year, Fall and Spring

STC 201 Writing for Strategic Communications
( 3 cr .) Students learn writing techniques for advertising, public relations and various interactive media. Topics include AP style guidelines, search engine optimization, writing formats and writing style. Projects include the creation of blogs, advertising copy, website copy, social media messages, media releases, media pitches and fact sheets. Prerequisites: STC 101, JRN 160; Every Year, Fall and Spring

## STC 215 Web, Mobile, and Interactive Design (3 cr.)

 Students learn how to create desktop and mobile multimedia elements using web development software, HTML5, CSS3 and simple scripting. Students design projects that include functional websites, animated content and interactive experiences. Prerequisites: IDD 160, JRN 106; Every Year, SpringSTC 320 Strategies for Social Media (3 cr.) This course addresses the impact of social and mobile media in an integrated profession. It focuses on strategically using social media to conduct research and monitor issues, to develop, implement and evaluate the success of public relations, advertising and integrated communication efforts. The course emphasizes strategic usage of such social media tools as social networks, social bookmarking sites, blogs, podcasts/vodcasts, discussion boards and conferences, wikis, mobile media and geolocation apps. Prerequisite: STC 201; Every Year, Fall

STC 332 Communication Research and Analysis ( 3 cr .) This course provides an exploration of the qualitative and quantitative research methods used to collect and analyze data. Students are introduced to secondary and primary research, as well as basic methods of measurement and analysis. Students learn how to analyze content and audience behaviors on traditional, social and mobile media platforms, and how to interpret their findings to create meaningful communication strategies. Prerequisite: STC 101; Every Year, Fall and Spring

STC 335 Media Systems and Planning (3 cr.) In this course, students learn about traditional as well as new and emerging technologies, with particular emphasis on their strengths and weaknesses as message carriers. Discussions include an overview of commonly used metrics and sources of data in the advertising and communications industries. Students then use this knowledge to plan and budget for integrated communication plans that capitalize on paid, earned and owned outlets. Prerequisite: STC 332; Every Year, Spring

STC 410 Branding Strategies (3 cr.) In this course, students consider how brands work and examine them as the guiding forces for integrated communication campaigns. Students identify the common characteris-
tics of successful brands and explore the tools and techniques that are used to build brand equity. Prerequisite: STC 332; Every Year, Fall

## STC 485 Advertising and Integrated

 Communications Campaigns ( 3 cr .) In this capstone experience, students develop a full-scale integrated communications campaign, including conducting secondary and primary research, strategic planning and the production of associated creative deliverables. Students also gain experience in pitching to clients and evaluating the success and impact of the campaign. Prerequisites: STC 201, STC 332; Every Year, Spring
## Anthropology (AN)

## AN 101 (UC) Local Cultures, Global Issues: Introduction to Cultural Anthropology (3 cr.)

This introductory course provides a broad overview of cultural anthropology, giving students the tools to understand, speak and write about human diversities and similarities cross-culturally. Course materials emphasize issues of race, ethnicity, class and gender, making visible for students the inequalities and power dimensions embedded in societies throughout the globe. Every Year, All

## AN 102 (UC) Bones, Genes and Everything In

 Between: Introduction to Biological Anthropology ( 3 cr .) In this course, students explore human origins and modern human diversity from a holistic, biocultural evolutionary perspective. Participants begin with the processes of evolution and natural selection, along with the mechanisms of genetic inheritance at the molecular level and its role in modern human diversity. Next they focus on our closest living relatives, the non-human primates, and then discuss the evidence for primate and human evolution found in the fossil record. The course concludes by exploring the origins of modern humans and their dispersal across the globe. Every Year, AllAN 103 (UC) Dirt, Artifacts and Ideas: Introduction to Archaeology ( 3 cr .) This course introduces students to the social science of archaeology, one of the four subdisciplines within anthropology. Students explore the history and methodology of archaeology, human evolution and adaptation. They learn to interpret archaeological data and study the relationship between humans and the natural environment. The ethics of doing archaeological fieldwork and the contemporary debates within the discipline also are discussed. Every Year, All

AN 250 Forensic Anthropology (3 cr.) This course provides a general introduction to forensic anthropology, an applied subfield of biological anthropology, wherein human remains of medicolegal significance are analyzed. Students review the
history of the field, basic skeletal anatomy and human biological variation, recovery of human remains and how time since death can be established. The course also covers the identification of trauma and disease in both modern and prehistoric skeletons, as well as markers of individualization that may lead to positive identification. Every Other Year

AN 310 Cross-Cultural Perspectives on Gender, Sex and Sexuality (WS 310) (3 cr.) This course introduces students to the social and cultural constructions of gender, sex and sexuality around the world. Students discover the way anthropologists approach these topics. They explore the constructions as they relate to notions of biology, family, households, work, migration, inequality/inequity, economics and class status, violence and race and ethnicity. Discussions focus on what gender, sex and sexuality are, what they mean and how they theoretically and practically matter as categories. Every Other Year

AN 333 Ancient Food For Thought (3 cr.) In this course, students explore the origins (and consequences) of food production and consumption from an anthropological perspective. Participants examine evidence for ancient diets in a variety of different societies (hunter-gatherer, pastoral and agricultural). They analyze the relationship between our diet and other aspects of culture and explore how these types of societies have changed over the past several thousand years. Students then review contemporary environmental and health problems related to food production and consumption and draw from the past to understand and potentially address these issues. Prerequisite: AN 101, AN 102 or AN 103; Every Year, Fall

## AN 337 Anthropology of Health and Medicine

( 3 cr .) This course takes a comparative study approach by looking at the diverse ways in which societies throughout the world both define and respond to disease and illness. Special attention is paid to how differently people understand the body and its relation to illness, and the importance of cross-cultural understanding for treating and curing illness in pluralistic societies. Every Other Year

AN 350 Tales from the Crypt: Research Methods in Bioarchaeology ( 3 cr.) Students discover how skeletal studies can provide information about past lives. They learn human osteology (the study of bones) and how to use cutting-edge digital technology to obtain data from the skeleton. They formulate a research design for data collection with skeletons housed on campus, and then conduct original research on an anthropological question related to the bones. Participants discuss and debate major topics in bioarchaeology. Every Other Year

AN 350L Research Methods in Bioarchaelogy Lab ( 0 cr.) This lab accompanies AN 350 (Tales from the Crypt: Research Methods in Bioarchaeology). Every Other Year

## Courses offered as needed <br> AN 101H (UC) Honors Introduction to Cultural Anthropology (3 cr.) <br> AN 200 Special Topics (3 cr.)

AN 222 (UC) Indigenous Peoples of North America ( 3 cr .)
AN 223 Latin American Societies and Cultures (LAS 223) (3 cr.)
AN 230 Anthropology of Film and Culture ( 3 cr .)
AN 240 Ethnographic Theory and Practice ( 3 cr .) Prerequisite: EN 101 or FYS 101
AN 320 World Heritage Sites ( 3 cr .)
AN 323 Practicing Archaeology (3 cr.)
AN 330 The Anthropology of Gender-based Violence ( 3 cr .)
AN 340 Anthropology of Development (3 cr.)
AN 352 The Science of Human Diversity ( 3 cr.)

## Arabic (ARB)

ARB 101 Elementary Arabic I (3 cr.) This course introduces students to the Modern Standard Arabic (MSA) language and to cultures of the Arabic-speaking world. Students develop accuracy and fluency in pronunciation and writing of Arabic letters, comprehend basic vocabulary and language structures, learn to use culturally appropriate social greetings and other expressions, learn the basics of grammar, and acquire insight into the culture and diversity of the Arabicspeaking world. Every Year, Fall and Spring

ARB 102 Elementary Arabic II ( 3 cr .) This course is a continuation of Arabic 101. Prerequisite: ARB 101; Every Year, Fall and Spring

Courses offered as needed
ARB 103 Continuing Elementary Arabic III (3 cr.)
Prerequisite: ARB 102

## Art (AR)

AR 101 (UC) Introduction to Art (3 cr.) This course is a study of major art forms and a probe into the nature of the creative process and public response. The course combines art history with hands-on activities. It is intended for students who plan to take only one art course. Every Year, All

## AR 102 (UC) Art History: Ancient Through

 Medieval (3 cr.) This introductory course considers art as seen in its cultural and historical context fromprehistory through the medieval period. Students explore the stylistic elements that make great works typical of their era. Every Year, All


#### Abstract

AR 103 (UC) Art History: Renaissance Through Contemporary ( 3 cr .) This introductory course considers art as seen in its cultural and historical context from the Renaissance through the contemporary era. Students explore the stylistic elements that make great works typical of their era. Every Year, All


## AR 104 (UC) Survey of Non-Western Art (3 cr.)

 Participants study the major themes and forms of nonWestern arts from East Asia, South Asia, Africa, the Pre-Columbian Americas and Oceania, with emphasis on their cultural, philosophical and religious contexts. Students define works of art both formally and within the framework of their method of manufacture, audience and cultural value. They also explore aspects of various non-Western religions, cultural considerations and influences in relation to the works. Students with little experience of or no prior courses in art history learn the basic terminology and methodology of the field. Every Year, AllAR 105 (UC) American Art (3 cr.) This introduction to painting of the United States from the earliest days to the present includes a careful analysis of representative works reinforced by visits to area art galleries. Every Year, All

AR 140 (UC) Basic Visual Design (3 cr.) This course exposes students to the basics of two-dimensional design. Topics include the elements of design, the principles of order and how these basics combine to create good composition. Every Year, All

AR 158 (UC) Photography I (3 cr.) This beginning course in still photography is designed to teach basic photographic techniques. Additional topics include lighting, advertising, fashion and portrait photography. Students must provide an adjustable still camera, film and processing. Every Year, All

AR 175 (UC) Special Topics in Art (3 cr.) This group of courses introduces art history by way of particular themes. Each covers at least three eras or movements in art history, exploring imagery, sculpture, architecture and decorative arts. Topics include: The Art and Architecture of Health and Medicine; Art and Propaganda; The Art and Imagery of Weaponry and War; Art and Love; Art and Death; and The Image of the Divine. Every Year, All

AR 210 (UC) The Creative Process (3 cr.) This course introduces students to the creative process in the visual arts. Students learn to evaluate and critique
their personal artwork as well as the work of others to develop a working process that enables them to go from initial thought to final product. Topics include: how to expand on initial ideas, the proper use of a sketchbook, looking at and evaluating famous works of art, and how to know when a work of art is finished. Every Other Year, Spring

AR 240 (UC) Graphic Design (3 cr.) Students gain practical experience in the creation of pictorial devices used to disseminate product information, including drawing, painting, illustration and typography. Prerequisite: AR 140; Every Other Year, Spring

AR 241 (UC) Color Theory (3 cr.) This course introduces students to the basics of color theory in design. Participants explore different topics through a series of short in-class projects and longer out of class assignments. Topics include the use of the grey scale, color mixing, color harmonies and discord, among others. Every Other Year, Spring

AR 242 (UC) Cartooning (3 cr.) This course provides an overview of the history of the comic and cartoon arts, and explores a variety of cartooning techniques. While studying the techniques of the masters, students plan, and eventually execute their own original cartoons. This class is open to absolute beginners as well as students with previous drawing, painting and cartooning experience. Every Other Year, Spring

AR 251 (UC) Studio Art: Drawing (3 cr.) This studio course serves as an introduction to basic drawing skills. Subjects may include still life, landscape and portraits. Work is done in pencil, ink and other media. Every Year, All

AR 252 (UC) Studio Art: Painting (3 cr.) This studio course serves as an introduction to basic painting skills. Course work includes specialized painting techniques, color theory and assignments based on both traditional and contemporary styles. All work is completed in either oil or acrylic painting media with some mixed media components. Every Year, All

AR 253 (UC) Studio Art: Sculpture (3 cr.) This studio course introduces students to sculpture and three-dimensional design using a variety of materials. Students gain an understanding and appreciation of basic techniques and processes involved in creating sculpture and learn how a three-dimensional object impacts its environment. Every Year, All

AR 258 (UC)Photography II (3 cr.) This course is a continuation of Photography I (AR 158). From daguerreotypes to digital, photography's history and future are discussed through slide lectures and hands-
on activities. Each student must provide an adjustable digital or film 35 mm . camera, and photo processing. Prerequisite: AR 158; Every Year, All

AR 262 (UC) Studio Art: Watercolor (3 cr.) This course introduces students to the basics of watercolor. Participants explore different topics through a series of short in-class projects and longer out-of-class assignments. Topics include specialized watercolor painting techniques, color theory and assignments based on both traditional and contemporary styles. All work is completed in watercolor with some mixed media components. Every Other Year, Fall

AR 263 (UC) Studio Art: Collage (3 cr.) This handson studio course enables students to explore materials and techniques involved in the art of making collage. This course looks at various ways to incorporate premade materials into more elaborate finished projects. Participants use a variety of materials including both manmade and natural objects as well as various painting, drawing and sculpture media. Every Year, Spring

AR 303 (UC) Studio Art: Advanced Drawing (3 cr.) This advanced drawing class expands on knowledge gained in an introductory level drawing course. Topics include both traditional and contemporary techniques and advanced composition. Work is completed in various drawing materials, including charcoal, pencil, conte and ink. Prerequisite: AR 251; Every Year, All

## AR 304 (UC) Studio Art: Advanced Painting (3 cr.)

This advanced painting class enhances knowledge gained in an introductory level painting course. Specialized painting techniques include expanded color theory as well as an introduction to contemporary techniques. All work is completed in acrylic paint with some mixed media components. Prerequisite: AR 252; Every Year, All

AR 342 (UC) Illustration ( 3 cr .) This course introduces students to the art of illustration. Through hands-on assignments and demonstrations, students learn the methodology of an illustrator, including generating ideas, visualization, research, preliminary studies or roughs, comprehensives and the finished picture. A variety of relevant media, materials and techniques are explored. Course work is supplemented by lectures on historic and contemporary techniques, projects and illustrators. Prerequisite: AR 140 or AR 251; Every Other Year, Spring

Courses offered as needed
AR 102H (UC)Honors Art History I (3 cr.) AR 250 (UC)Studio Art: Special Topic (3 cr.) AR 254 (UC)Studio Art: Printmaking (3 cr.)

AR 255 (UC)Studio Art: Introduction to Darkroom Photography (3 cr.)<br>AR 257 (UC)AP Studio Art Introduction to Studio Methods (3 cr.)<br>AR 280 (UC)History of Modern Design (3 cr.)<br>AR 300 (UC)Special Topics Course (3 cr.)<br>Prerequisite: AR 102, AR 103, AR 104 or AR 105<br>AR 305 (UC)Special Topics in Studio Art (3 cr.)<br>AR 317 (UC)Art of the Italian Renaissance (3 cr.)<br>Prerequisite: AR 102, AR 103, AR 104 or AR 105<br>AR 325 (UC) Women Artists (WS 315) (3 cr.)<br>Prerequisite: AR 102, AR 103, AR 104 or AR 105<br>AR 335 (UC)Digital Photography (3 cr.) Prerequisite:<br>AR 140, AR 158 or AR 255<br>AR 360 (UC)Innovation in the Arts and Sciences (PL 360) (3 cr.)<br>AR 380 (UC)Interactive Art (PL 380) (3 cr.)

## Athletic Training (AT)

AT 114 Introduction to Athletic Training/Sports Medicine ( 2 cr .) This course is designed to familiarize the student with the role of an athletic trainer in sports and health care. AT major only or permission of instructor; Every Year, Spring

AT 114L Introduction to the Clinical Environment ( 0 cr.) Lab to accompany AT 114. This eight-week session is required for AT majors or those considering transferring into the major. AT major only or permission of instructor. (3 lab hrs.); Every Year, Spring

AT 115 Introduction to Kinesiology (3 cr.) This introductory course explores the way the musculoskeletal system produces movement patterns in humans. Musculoskeletal anatomy, joint arthrology, muscular mechanics and biomechanical principals are used to perform muscular analyses of both the upper and lower extremities and the trunk. AT major only or permission of instructor. Prerequisite: BIO 101; Every Year, Spring

## AT 116 Introduction to Fitness and Conditioning

( 2 cr .) This introductory lab and lecture course teaches the fundamentals of basic fitness and exercise. Students engage in fitness assessments and design of personal conditioning programs for healthy subjects. For AT major only or permission of instructor. Every Year, Fall

## AT 201 Medical Aspects of Sports and Activity

 (SPS 201) (3 cr.) This course is aimed at individuals who are interested in working in a sports-related field (e.g., coaches, journalists or managers). It provides an overview of a variety of sports medicine-related topics, including common sports injuries, an introduction to sports psychology and current events in the sports medicine. Students who take AT 201 cannot alsoreceive credit for AT 214. Prerequisites: one 4-credit science course; Every Year, Fall and Spring

## AT 210 Introduction to Evidence-Based Practice

 ( 2 cr .) Evidence-based practice in health care is the integration of the best available research with clinical expertise in the context of patient characteristics, culture and preferences. This is an introductory course in the processes associated with collecting and utilizing evidence to make clinical decisions. Prerequisites: AT 216, MA 275; Every Year, SpringAT 214 Care and Prevention of Athletic Injuries (HSC 214) (3 cr.) This course is designed to provide an overview of the athletic training profession with an emphasis on the basic fundamentals utilized by the athletic trainer in prevention, recognition, care, treatment and rehabilitation of athletic injuries. Students who take AT 201 cannot also receive credit for AT 214. Prerequisite: BIO 102, BIO 102L or BIO 151; Every Year, Fall

AT 214L CPR, AED and First Aid (1 cr.) Students learn principles of first aid and complete health provider certification in cardiopulmonary resuscitation and automated external defibrillator. For PT majors only. (2 lab hrs.) Prerequisites: BIO 102, BIO 102L; Every Year, Fall

AT 215 Therapeutic Modalities ( 3 cr .) Therapeutic Modalities is an introductory course designed to provide students with knowledge of theory and operation of the most commonly used therapeutic devices. Prerequisites: AT 214, AT 216; Every Year, Spring

AT 215L Therapeutic Modalities Lab (1 cr.) This lab includes the practical application of therapeutic modalities and must be taken in conjunction with AT 215. (2 lab hrs.) Prerequisites: AT 214, AT 216; Every Year, Spring

AT 216 Emergency Management of Athletic Trauma ( 2 cr .) This laboratory and lecture course teaches the basic skills and decision-making processes necessary to manage emergency medical situations common to athletic activity. Students also perform general first aid. All students are required to pass American Heart Association's CPR for the professional rescuer (or equivalent). Prerequisites: BIO 102, AT 115; AT 214; Every Year, Fall

## AT 216L Emergency Management of Athletic

Trauma Lab (1 cr.) This lab includes the practical application of basic skills and decision-making processes necessary to manage emergency medical situations. Must be taken in conjunction with AT 216. Prerequisite: AT 115, AT 116; AT 216; Every Year, Fall

AT 240 Strength Training and Conditioning (AT 481) ( 3 cr .) This course addresses the scientific and theoretical basis of strength training and conditioning for sports performance. This includes understanding biomechanics, exercise physiology, adaptations to training, exercise technique, prescription and the basic structure of the variables used in the design of strength and conditioning programs. The scientific and theoretical components of this class are reinforced with hands-on laboratory experiences. Prerequisites: BIO 211, BIO 211L, BIO 212, BIO 212L; Every Year, Fall

AT 250 Introduction to Evaluation and Treatment of Musculoskeletal Injuries (3 cr.) This lecture and laboratory course provides the student with a basic systematic approach to the process of physical evaluation and exercise program development. It includes processes of history taking and physical exam techniques, indications and contraindications of exercise, and exercise progression as related to athletic injury, prevention, reconditioning and return-to-play guidelines. Prerequisites: AT 114; AT 115, AT 116; Every Year, Fall

AT 250L Introduction to Evaluation and Treatment of Musculoskeletal Injuries ( $\mathbf{1} \mathrm{cr}$.) This lab includes the practical application of recognizing, evaluating and treating common musculoskeletal injuries. Must be taken in conjunction with AT 250. Prerequisites: AT 115, AT 116; Every Year, Fall

AT 251 Evaluation and Treatment of Lower Extremity Musculoskeletal Injuries (3 cr.) This lecture and laboratory course provides the student with a basic evaluation process and techniques involved in assessing musculoskeletal injuries of the lower extremity. The assessment information is then used to design and implement treatment and rehabilitative protocols. Emphasis is placed on integrating kinesiological principals with injury/illness recognition skills and rehabilitative concepts. Prerequisites:
AT 214, AT 216; Every Year, Spring
AT 251L Evaluation and Treatment of Lower Extremity Musculoskeletal Injuries Lab (1 cr.) This lab includes the practical application of recognizing, evaluating and treating common musculoskeletal injuries. Must be taken in conjunction with AT 251. Prerequisites: AT 115, AT 116; Every Year, Spring

AT 290 Clinical Practicum I, Risk Management And Injury Prevention (2 cr.) This practicum introduces students to the general policies and procedures of the Quinnipiac University athletic training room. Students are instructed in taping techniques, proper medical documentation skills, ambulatory aids, the preparticipation examination, and the Quinnipiac University Emergency Action Plan. Hands-on practical experience is emphasized in class sessions. Prerequisites: AT 214, AT 216, AT 250; Every Year, Spring

AT 290C Clinical Practicum I (1 cr.) During the semester, students gain 100 hours of supervised clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisites: AT 214, AT 216, AT 250; Every Year, Spring

AT 330 Nutrition for Sport and Fitness (3 cr.) In this foundational course, students learn nutritional concepts related to wellness, injury prevention and maximizing human performance. Students also explore eating disorder habits and interventions and supplement use. Prerequisites: AT 290; SCI 161 or SCI 105; HSC 262 or NUR 362; Every Year, Fall and Spring

## AT 350 Evaluation and Treatment of Upper

 Extremity Musculoskeletal Injuries (3 cr.) Students learn the evaluation process and techniques involved in assessing musculoskeletal injuries of the upper extremity. The assessment information is then used to design and implement treatment and rehabilitative protocols. Emphasis is placed on integrating kinesiological principals with injury/illness recognition skills and rehabilitative concepts. Prerequisites: AT 251, AT 290, AT 290C, BIO 211, BIO 212; Every Year, Fall
## AT 350L Evaluation and Treatment of

 Musculoskeletal Injuries Lab (1 cr.) This lab includes the practical application of athletic injury evaluation and rehabilitation. Must be taken in conjunction with AT 350. Prerequisites: AT 251, AT 290, AT 290C, BIO 211, BIO 212; Every Year, FallAT 351 General Medical Conditions and Treatment (HSC 351) (3 cr.) This course enables the athletic training student to recognize, evaluate and differentiate common systemic diseases, understand appropriate pharmacological interventions, understand the principles of pharmacology and common issues that arise when specific pharmacological agents are employed. Prerequisite: AT 350; Every Year, Spring

## AT 351L General Medical Conditions and

Treatments Lab (1 cr.) This lab includes the practical application of recognizing, evaluating, differentiating and treating common medical conditions. Must be taken in conjunction with AT 351. Prerequisites:
AT 350; Every Year, Spring
AT 352 Evaluation and Treatment of Spinal Injuries ( $\mathbf{3} \mathbf{c r}$.) Students learn the evaluation process and techniques involved in assessing common spinal pathologies in the athletic setting. The assessment information is then used to design and implement treatment and rehabilitative protocols. Emphasis is on the evaluation process, critical thinking, choosing appropriate treatment techniques, as well as indications and contraindications of specific spinal disorders and exercise progression as
related to spinal dysfunction/disorders. Manual therapy as a treatment technique and current trends for treating spinal disorders is also covered. Prerequisites: AT 350, AT 350L; Every Year, Spring

AT 352L Evaluation and Treatment of the Spinal Injuries Lab (1 cr.) This lab includes the practical application of the evaluation process of the spine and demonstration of various treatment techniques and must be taken in conjunction with AT 352. Prerequisites: AT 350, AT 350L; Every Year, Spring

## AT 390 Clinical Practicum II, Athletic Protective

 Equipment (2 cr.) Students are introduced to proper fitting of athletic equipment, as well as sporting rules relevant to safety and the role of the medical professional. The course includes instruction in fabricating and applying protective equipment, such as pads, splints and supports, and advanced taping and wrapping techniques used in athletic training; handson practical experience is emphasized in class sessions. Prerequisite: AT 290; Every Year, FallAT 390C Clinical Practicum II, Clinical (1 cr.) During the semester, students gain a minimum 200 hours of supervised clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisite: AT 290C; Every Year, Fall

AT 391C Clinical Practicum III (1 cr.) During the semester, students gain 200 hours of supervised clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisites: AT 290C, AT 390C; Every Year, Spring

AT 440 Biomechanics ( 3 cr .) This course focuses on the advanced study of human movement, concentrating on the principles of mechanics they relate to the human body. Areas of athletic injury, pathology, sport performance, occupational risks, injury prevention, and rehabilitation are addressed. Projects are designed not only to achieve scientific insights into biomechanical problems but also to train students in state-of-the-art interdisciplinary research procedures. Kinematic and kinetic analyses are conducted. Prerequisites: BIO 211, BIO 212; Every Year, Fall and Spring

AT 450 Administration and Management in Athletic Training ( $\mathbf{3}$ cr.) Organizational and administrative procedures and considerations, as well as the legal aspects of athletic training and sports medicine are included in this course. Prerequisite: AT 391C; Every Year, Fall

AT 460 Advanced Nutrition (HSC 460) (3 cr.) This advanced level food and nutrition course examines the composition and physiological role of nutrients and their relationships to health and the body. Macronutrient
metabolism as well as a detailed examination of the role of vitamin and mineral metabolism are explored. Current nutrition issues of supplement use, weight management, sports nutrition, nutritional ecology and the application of nutrition directly to food and its preparation also are addressed. Prerequisites: AT 230 or AT 330; NU 351; SCI 105, SCI 161 or HSC 262; Every Year, Spring

## AT 481 Strength Training and Conditioning for

 the Athletic Trainer (AT 240) (2 cr.) The purpose of the course is to expand the students' knowledge of rehabilitation beyond general concepts. Students learn theory pertaining to a variety of conditioning methods including: periodization, plyometrics and functional training. Lifting techniques and injury prevention related to conditioning are discussed and applied to both the individual athlete and team training concepts. The course is taught as a combination of classroom and laboratory experiences to ensure that students are capable of translating theory into practice. Prerequisite: AT 352 or AT 410; Every Year, SpringAT 482 Advanced Rehabilitation Options in Sports Medicine ( 2 cr.) This course examines in-depth rehabilitative techniques and advanced manual therapy skills for the sports medicine setting. Practical application of current concepts and research-driven rehabilitative protocols are emphasized. The course also addresses trends in sports medicine surgical procedures, research behind new rehabilitative techniques, and effective mechanisms for evaluating clinical relevance of new products. Prerequisites: AT 352, AT 410; Every Year, Fall

AT 490C Clinical Practicum IV (1 cr.) During the semester, students gain 200 hours of clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisites: AT 390C, AT 391C; Every Year, Fall

## AT 491 Clinical Practicum V, Professional and Career

 Preparation (2 cr.) This course provides students with a means to integrate and augment all concepts, skills and knowledge covered in the athletic training curriculum. Much of the course is discussion based and requires the students to be fully participative. Prerequisite: AT 490; Every Year, SpringAT 491C Clinical Practicum V, Clinical (1 cr.) During the semester, students gain a minimum of 200 hours of supervised clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisite: AT 490C; Every Year, Fall and Spring

Courses offered as needed
AT 440L Biomechanics Lab (1 cr.) Prerequisite: AT 250

## Biology (BIO)

BIO 101 (UC) General Biology I (3 cr.) This course considers the basic concepts of life science with emphasis on the methods of science and the role of science in society, the chemistry of life, and molecular and cellular evolution. Selected topics include cellular biochemistry, the central dogma of biology, regulation of gene expression, cell structure and function, respiration and photosynthesis, and cell cycles. Primarily for students in bachelor's degree health science programs. First semester of a full-year course; must be taken in sequence; Every Year, Fall and Summer

BIO 101L (UC) General Biology I Lab (1 cr.) Lab to accompany BIO 101. Selected projects develop skills in experimental design, data analysis and scientific writing. Primarily for students in bachelor's degree health science programs. First semester of a full-year course; must be taken in sequence. (2 lab hrs.); Every Year, Fall and Summer

BIO 102 (UC) General Biology II (3 cr.) This course covers the basic concepts of life science with an emphasis on animal anatomy and physiology, animal reproduction and development, the nervous system, evolutionary mechanisms and ecological principles. Selected topics include animal behavior, microevolution, speciation, macroevolution and application of comparative anatomy and physiology to illuminate evolutionary relationships and their ecological context. This course is primarily for students in health science programs. Second semester of a full-year course; must be taken in sequence. Prerequisites: BIO 101, BIO 101L; Every Year, Spring and Summer

BIO 102L (UC) General Biology Lab II (1 cr.) Lab to accompany BIO 102. Selected projects develop skills in experimental design, data analysis and scientific writing. Primarily for students in bachelor's degree health science programs. Second semester of a full-year course; must be taken in sequence. (2 lab hrs.) Prerequisites: BIO 101, BIO 101L; Minimum grade C-; Every Year, Spring and Summer

## BIO 105 (UC) Introduction to the Biological

Sciences I (3 cr.) This course introduces natural science to the nonscientist with an emphasis on problems confronting society. Relationships between humans and the environment are included. This course is designed for nonscience majors; Every Year, Fall and Summer

BIO 105L (UC) Introduction to Biological Science Lab (1 cr.) Lab to accompany BIO 105. (2 lab hrs.); Every Year, Fall

BIO 106 (UC) Science and Society: Concepts and Current Issues (3 cr.) This course introduces natural science to the nonscientist with an emphasis on problems confronting society. Current health and scientific issues in the news are emphasized to help students recognize the importance of science in their daily lives. This course is designed for nonscience majors. May not be taken for credit concurrently or after completion of BIO 161; Every Year, Spring

BIO 106L (UC) Science and Society: Concepts and Current Issues Lab (1 cr.) Lab to accompany BIO 106. (2 lab hrs.) May not be taken for credit concurrently or after completion of BIO 161; Every Year, Spring and Summer

BIO 120 (UC) The Biology of Beer (3 cr.) This lecture course uses the biological processes of beer production and consumption as a framework for examining basic principles of molecular, cellular and organismal biology. Participants begin by studying the life cycle of the brewer's yeast and the process of fermentation. Students then consider how the human body responds to beer, and finally, examine the biological basis of alcoholism and fetal alcohol syndrome. This course is designed for nonscience majors.Every Year, Spring

BIO 150 General Biology for Majors (4 cr.) Students develop sound learning strategies and introductory knowledge within five core concepts in biology: evolution; structure and function relationships; the flow, exchange and storage of information; major pathways and transformations of energy and matter, as well as living systems as interactive and interconnected. This is the first course of a three-course sequence for biology and related majors; Every Year, Fall

## BIO 150L General Biology for Majors Laboratory ( 0 cr.) Lab to accompany BIO 150. Students take an investigative/inquiry-based approach and become competent within the process of science including experimental design and analysis, as well as scientific communication and collaboration. Every Year, Fall

BIO 151 Molecular and Cell Biology and Genetics ( 4 cr.) Students investigate key concepts in molecular and cell biology and genetics. Topics include the chemistry of life, central dogma, molecular genetics, regulation of gene expression, cell structure and physiology at the molecular and microscopic level, cell communication and cell cycle. Prerequisites: BIO 150; Minimum grade C-; Every Year, Spring
BIO 151L Molecular and Cell Biology and Genetics Lab ( 0 cr.) Lab to accompany BIO 151. Selected projects enable students to develop skills in experimental design through an investigative/inquiry-based approach,
data analysis and scientific writing. Prerequisites: BIO 150; Minimum grade C-; Every Year, Spring

BIO 152 Ecological and Biological Diversity (4 cr.) Students develop a deeper understanding of central concepts and issues in ecology and biodiversity by building on information and skills acquired in BIO 150 and BIO 151. Specific areas of interest include populations and forces that regulate them, species concepts, and the ecological roles and evolutionary significance of key organisms. Prerequisites: one group: BIO 150/151; BIO 101/101L, BIO 102/102L; Minimum grade C-; Every Year, Fall

## BIO 152L Ecological and Biological Diversity

Laboratory ( 0 cr.) Lab to accompany BIO 152 . Selected activities, field experiences and exercises develop skills in observation, documentation, experimental design, data analysis and scientific written and oral communication. Prerequisites: one group; BIO 150/151; BIO 101/101L, BIO 102/102L; Minimum grade C-; Every Year, Fall

BIO 161 (UC) Introduction to the Biological Aspects of Science and Society ( 3 cr.) This course introduces natural science to the nonscientist with an emphasis on current problems confronting society. Current health and scientific issues in the news are emphasized to help students recognize the importance of science in their daily lives. This course is designed for nonscience majors. May not be taken for credit concurrently or after completion of BIO 106. Every Year, Fall and Spring

## BIO 208 (UC) Introduction to Forensic Science

( 3 cr .) This course begins with a historical overview of the discipline as a method of understanding the contemporary field of forensics. Scientific principles and practices are applied to specific examples within crime scene and evidence analysis including, but not limited to physical evidence, glass and soil, organic and inorganic substances, hair and fibers, toxicology, serology and fingerprinting. Additionally, students utilize FBI cases, popular press and television to evaluate the use of science and distinguish among science, law and entertainment; Every Year, Spring

## BIO 208L (UC) Introduction to Forensic Science

Laboratory (1 cr.) Students develop skills in observation, measurement, microscopy, glass fracture patterns, soil and footprint analysis, chromatography, spectrophotometry, hair and fiber analysis, fingerprinting and DNA analysis. The culmination of the laboratory experience involves synthesis of lecture and laboratory activities into a single class project that begins with control of a simulated crime scene and evidence search patterns, and continues through processing evidence, evidence analysis and presentation of results. (2 lab hrs.); Every Year, Spring

BIO 211 Anatomy and Physiology I (3 cr.) This advanced course provides a comprehensive analysis of human anatomy and physiology, including a detailed examination of molecular and cellular aspects of cell and organ function incorporated with system physiology in the human body. Macromolecules, receptors, membrane transport, metabolism, neural and endocrine control systems and the muscular system are discussed. Emphasis is on function and homeostasis. Relevant diseases also are presented. Primarily for students in bachelor's degree health science programs. Fullyear course; must be taken in sequence. Prerequisite: Successful completion of BIO 101/102 or BIO 150/151 (lecture and lab) with a grade of C- or better; Every Year, Fall and Summer

BIO 211L Anatomy and Physiology Lab I (1 cr.) Lab to accompany BIO 211. A detailed study of human anatomy utilizing both cat and cadaveric dissection. (3 lab hrs.) Prerequisite: Successful completion of BIO 101/102 or BIO 150/151 (lecture and lab) with a grade of C- or better; Every Year, Fall and Summer

BIO 212 Anatomy and Physiology II (3 cr.) This course is a continuation of BIO 211 with an emphasis on the anatomy and physiology of the major body systems. Systems studied in this course include cardiovascular, lymphatic, immune, respiratory, urinary, digestive and reproductive. Emphasis is on structure, function, interdependence and the maintenance of homeostasis. Relevant diseases also are presented. Primarily for students in bachelor's degree health science programs. Full-year course; must be taken in sequence. Prerequisite: Successful completion of both BIO 211 and BIO 211L with a grade of C- or better; Every Year, Spring and Summer

BIO 212L Anatomy and Physiology II Lab (1 cr.) Lab to accompany BIO 212. A detailed study of the major body systems utilizing anatomical models and physiological experiments. Prerequisite: Successful completion of both BIO 211 and BIO 211L with a grade of C- or better. (3 lab hrs.); Every Year, Spring and Summer

BIO 240 Cellular Communication ( 3 cr.) This class focuses on the molecular mechanisms by which cells communicate with each other. Using examples from both prokaryotes and eukaryotes, students examine how cells release signaling molecules, and then consider how target cells recognize and respond to the signals. Participants discuss how the basic processes are altered in diseases of signal processing such as cancer, diabetes and depression. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Year, Fall

BIO 282 (UC) Genetics ( $\mathbf{3} \mathbf{~ c r}$.) This course considers the basic principles of inheritance, including data
analysis and problem-solving skills. Students gain laboratory experience with a variety of techniques and organisms of current research importance, as well as with solving problems and analyzing data. Emphasis is on sound logic, creative thought and experimental design. (3 lecture hrs.; 3 lab hrs.) Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151, BIO 151L; BIO 282L; Every Year, Fall

BIO 282L (UC) Genetics Lab (1 cr.) Lab to accompany BIO 282. (3 lab hrs.) Prerequisite: BIO 282; Every Year, Fall

BIO 298 Research Methods in Biology (3 cr.) This introduction to biological research includes discussion and demonstrated skills in library use, literature citation, academic integrity, experimental design and statistical and graphical treatment of data. It culminates in the collaborative design, preparation and presentation of a scientific research project. This course also includes exploration of the skills and values important to careers in science. Primary emphasis is given to the development of scientific literacy, critical thinking and reasoning, and written and oral communication. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Year, Fall

BIO 317 Developmental Biology (2 cr.) This course is an introduction to the basic developmental processes that enable a single cell to differentiate and create entire organ systems. Various animal models are explored, compared and integrated to illustrate key molecular and cellular events that lead to the formation of an entire organism. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Year, Spring

BIO 317L Developmental Biology Lab (2 cr.) Lab to accompany BIO 317. This project-based laboratory uses a variety of different model systems to examine development. Students complete small projects that lead to the development of a major research project at the end of the course; Every Year, Spring

BIO 323 Invertebrate Zoology (3 cr.) This course introduces the basic adaptive features of the major invertebrate groups with emphasis on structure, classification, ecology and evolution, utilizing both lab and field studies. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Year, Spring

BIO 323L Invertebrate Zoology Lab (0 cr.) Lab to accompany BIO 323. (3 lab hrs.) Every Year Spring

BIO 328 Human Clinical Parasitology ( 3 cr.) This course considers the biology of protozoan and helminth parasites of humans and includes an introduction to tropical medicine. Lectures focus on the life cycles of
selected parasites and epidemiology and pathology of selected parasitic diseases. Laboratory work focuses on clinical diagnosis, diagnostic techniques (including immunodiagnostic techniques), recognition of vectors, and experimental life cycle studies using both living and preserved materials. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Other Year, Fall

BIO 328L Human Clinical Parasitology Lab (1 cr.) Lab to accompany BIO 328. (3 lab hrs.); Every Other Year, Fall

BIO 329 Neurobiology ( 3 cr .) This course is an introduction to molecular, cellular and organismal neuroscience. After exploring basic topics including electrical excitability, neurotransmitters and receptors, the course considers higher-level integrated systems such as the sensory systems. Human disorders, including Parkinson's disease, multiple sclerosis and color-blindness are discussed to highlight the importance of proper functioning of the various components of the nervous system. Prerequisites: one group: BIO 101/101L, BIO 102/102L, CHE 110/110L, CHE 111/111L; BIO 150, BIO 151; Minimum grade C-; Every Year, Spring

BIO 346 Cell Physiology (3 cr.) This course examines the physiology of the cell with emphasis on the structure and function of the eukaryotic cell. Topics include metabolism, intracellular transport, cytoskeleton, movement, communication and control of cellular reproduction. The lab involves current techniques for studying proteins, cellular components and living organisms. ( 3 lab hrs.) Prerequisites: one group: BIO 101/101L, BIO 102/102L, CHE 210/210L; BIO 150, BIO 151; Every Year, Spring

BIO 346L Cell Physiology Lab (1 cr.) Lab to accompany BIO 346. This project-based laboratory uses current techniques for separating and studying cellular proteins and components and observing living organisms. The lab culminates with a major project investigating eukaryotic motility and cell structure. (3 lab hrs.); Every Year, Spring

BIO 350 Cardiovascular Physiology (3 cr.) The physiology of the mammalian heart is studied in detail. The course examines electrophysiology of the heart, structure and function, cardiac cycle, hemodynamics, capillary dynamics, cardiovascular reflexes, cardiac output and venous return. Atherosclerosis, hypertension and circulatory shock also are discussed. Prerequisite: BIO 212; Every Other Year, Spring

BIO 365 Cancer Biology ( $\mathbf{3}$ cr.) This course provides an overview of cancer biology. With a focus on the
molecular genetics of cancer, the course explores the identification of the genes and biochemical pathways which when disrupted lead to a deregulation of cell growth and differentiation. A discussion of disease pathology includes tumor classification, prognosis and current treatment options. Prerequisites: one group: BIO 150, BIO 151; BIO 101/101L, BIO 102/102L; Every Year, Spirng

BIO 375 Physiological Models for Human Disease ( 3 cr.) This course investigates cellular and molecular mechanisms of animal physiology using a variety of animal model systems including Drosophila melanogaster (fruit fly), Caenorhabditis elegans (roundworm), Dugesia tigrina (planaria), Danio rerio (zebrafish) and Gallus gallus domesticus (chicken). Students are introduced to current applications of several experimental models for biomedical research on human health and diseases. Prerequisites: one group: BIO 150, BIO 151; BIO 101/101L, BIO 102/102L; Every Year, Fall

BIO 375L Physiological Models for Human Disease Lab (1 cr.) Lab to accompany BIO 375. Students work in groups to design and carry out experiments using one of four model systems listed Drosophila melanogaster (Fruit Fly), Caenorhabditis elegans (Roundworm), Dugesia tigrina (Planaria) and Danio rerio (Zebrafish). Students analyze experimental data and present findings via oral presentations. Every Year, Fall

BIO 382 Human Genetics (4cr.) (3 hours lecture, 3 hours laboratory) This course examines the genetic mechanism in humans, including data analysis and problem solving skills. The course includes an exposure to techniques for analysis of genetic variation in humans, the structure of the human genome, the implication of human genetic variation, somatic cell genetics, an introduction to medical genetics, DNA analysis, and the implications of genetic knowledge in the context of modern society and culture. Prerequisites: one group; BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Other Year, Fall

BIO 382L Human Genetics Lab ( 0 cr.) Lab to accompany BIO 382. (2 lab hrs.) Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Other Year, Fall

BIO 383 Evolution ( 3 cr .) This course examines the mechanisms of evolutionary change and surveys the evolutionary and phylogenetic history of life on earth. Because evolution is often a focus of social debate about ways of knowing and about the nature of humanity, students also explore the history of this debate and its influence on society. Students enrolling in the graduate level of this course are expected to complete course goals beyond those students enrolled in BI 383. Prerequisites:
one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; Every Year, Spring

BIO 385 Experiential Inquiry in Biology (1 cr.) All students majoring in biological science are required to take one experiential learning course. In this course, guided individual and group assignments in Blackboard focus on synthesis of foundational knowledge in biology, development of scientific literacy, critical and creative thinking and communication skills and preparation for careers in science as responsible citizens. This course must be completed during the ongoing experiential learning project/experience, which must relate to the biological sciences and occur outside the classroom. The experiential learning project and course credit must be approved by the academic coordinator prior to enrollment. Prerequisites: one group; BIO 150, BIO 151, BIO 298; BIO 101/101L, BIO 102/102L, BIO 298; Minimum grade C-; Every Year, All

## BIO 399H Honors Research in Biological Sciences

( 3 cr .) This course targets students who are majoring in the biological sciences and are seeking University honors and/or departmental honors. In this capstone seminar, students participate in in-depth examination of primary research papers. The material relates to a central theme chosen by the professor. Prerequisites: one group: BIO 101/101L, BIO 102/102L, BIO 298; BIO 150, BIO 151, BIO 298; Every Year, Fall

BIO 471 Molecular Genetics ( 3 cr .) This course introduces students to the theory and practice of DNA manipulation that is involved in modern molecular biology, including cancer research, cellular development, regulation of differentiation and construction of designer genes in plants, animals, humans, microorganisms and virus. These methods are common in health research, industrial discovery and environmental remediation. The lecture and the laboratory, which involves DNA manipulation and gene cloning, are designed for students interested in careers in medicine, biotechnology, microbiology and graduate programs. Prerequisites: BIO 101/102, CHE 110, CHE 111; Every Year, Spring

BIO 471L Molecular Genetics Lab (1 cr.) Lab to accompany BIO 471. (3 lab hrs.); Every Year, Spring

[^0]BIO 227L Comparative Anatomy and Physiology Lab ( 0 cr .)
BIO 228 Comparative Anatomy and Physiology (4 cr.) Prerequisites: BIO 227, BIO 227L
BIO 228L Comparative Anatomy and Physiology Lab ( 0 cr .)
BIO 300 Special Topics (3 cr.)
BIO 352 Botany (2 cr.) Prerequisites: BIO 101, BIO 102
BIO 352L Botany Lab (2 cr.)
BIO 353 General Ecology (2 cr.) Prerequisites: BIO 101, BIO 102
BIO 353L General Ecology Lab (2 cr.)
BIO 354 Marine Ecology (4 cr.) Prerequisites: BIO 101, BIO 102
BIO 356 Freshwater Ecology ( 2 cr.) Prerequisites: BIO 101, BIO 102
BIO 356L Freshwater Ecology Lab (2 cr.)
BIO 358 Life on a Changing Planet ( 2 cr .)
BIO 358L Life on a Changing Planet Lab (2 cr.)

## Biomedical Sciences (BMS)

BMS 110 (UC) The World of Microbes (3 cr.) In this course, which is designed for non-science majors, students are introduced to the relevance of microorganisms in everyday life. Topics include: microbes in the environment, infectious disease, biotechnology, food microbiology, antibiotics and host defense mechanisms (e.g., the immune system). This course must be taken in association with BMS 110L; Every Year, Fall and Spring

BMS 110L (UG) The World of Microbes Lab (1 cr.) Students in this laboratory explore by experimentation the nature of microorganisms, in particular, bacteria. This includes growing bacteria in culture, staining them and viewing them under the microscope and testing their ability to survive under various conditions. This course must be taken in association with BMS 110; Every Year, Fall and Spring

BMS 117 (UC) The Human Organism (3 cr.) This course emphasizes the human organism from a basic biological and developmental perspective. These concepts are explored by examining the development of the total human organism beginning with conception and onward into old age and eventual death. This course must be taken in association with BMS 117L, the laboratory component of this course; Every Year, Fall and Spring

## BMS 117L (UC) The Human Organism Lab (1 cr.)

 This lab, which accompanies BMS 117 The Human Organism, includes exercises/experiments designed to reinforce basic biological principles, which form the basis for understanding the biology of all organisms, including the human organism. This course must be taken in association with BMS 117 lecture; Every Year, Fall and SpringBMS 162 (UC) Human Health (3 cr.) This course, which is designed for non-science majors, describes human disease from a biological viewpoint, and presents human health concerns and issues for discussion. Historical and sociological perspectives on human disease as well as the scientific investigation of disease processes are included. The role of molecular biology and biotechnology in approaching human disease also is discussed. Students may not earn UC credit for both BMS 118 and BMS 162. Every Year, Fall and Spring

BMS 200 (UC) Biology of Aging (3 cr.) Current advances in the understanding of the neural, endocrine and other body systems suggest that the process of aging may be triggered by signals originating in these systems. This hypothesis provides a framework upon which to study the effects of neuroendocrine changes upon the maturing body. Age related changes in nervous and hormonal activity regulate the timetable of important physiological events such as birth, adolescence, menopause and old age. The aim of the course is to study the specific and primary changes in physiological mechanisms that result in the process of aging. The profound physiological changes and restrictions that result make the study of the relevant biological processes fundamental to gerontology. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 151; BMS 117, BMS 162; Every Year, Fall and Spring

BMS 203 Introductory Medical Terminology (2 cr.) This study of the principles of word analysis, word construction and word meanings as applied to medical and surgical terms includes a review of anatomy to indicate the relevancy of the terms being studied. The course is designed for health science students. Every Year, Spring

BMS 213 Microbiology and Pathology ( 3 cr .) This introductory overview of microorganisms presents a detailed study of the interactions of pathogenic microbes and humans, particularly as they apply to a clinical setting; this course is designed primarily for the health practitioner. This course must be taken in association with BMS 213L. Students may receive credit for BMS 213 or BMS 370, but not both. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BIO 150, BIO 150L, BIO 151, BIO 151L; Every Year, Fall and Spring

BMS 213L Microbiology and Pathology Lab (1 cr.) This lab, which accompanies BMS 213 Microbiology and Pathology, includes exercises/experiments designed to cultivate basic microbiological techniques and reinforce important principles of general and clinical microbiology. This course must be taken in association with BMS 213; Every Year, Fall and Spring

BMS 276 Drug Development (3 cr.) Students study the processes required to develop new drugs and the regula-
tions associated with drug development. Topics include drug discovery, preclinical and clinical testing of drugs, pharmacoeconomics and legislation associated with drug regulation. Specific drug examples are discussed throughout the course. Prerequisites: one group: BIO 101/101L, BIO 102/102L; BMS 117, BMS 162; BIO 105, BIO 106; BIO 150, BIO 151; Every Year, Spring

BMS 278 Research and Technology ( 3 cr .) This course provides a broad, discussion-based investigation of current scientific techniques including scientific writing, presentations, literature searches, as well as bioinformatics, protein and nucleic acid methodologies. Students learn the skills necessary to identify and understand the proper techniques for designing, implementing and evaluating scientific research. This interactive course helps prepare students for independent research projects at Quinnipiac University, graduate/professional programs and careers in the biological, biomedical or health sciences. Prerequisite: BIO 150; Every Year, Spring

## BMS 300 The Physiology of Human Performance

 I ( 3 cr.) This course presents a detailed examination of muscle and nerve physiology, and central nervous system control of posture and locomotion. Bioenergetics and exercise metabolism are considered. Anatomical and physiological factors limiting various types of physical performance are discussed. Full-year course; must be taken in sequence. This course must be taken in association with BMS 300L. Prerequisites: BIO 211, BIO 212; CHE 102 or CHE 111; PHY 101 or PHY 110; Every Year, FallBMS 300L The Physiology of Human Performance I Lab (1 cr.) (3 lab hrs.) Laboratory exercises/experiments are designed to reinforce basic principles of physiology examined in lecture. This course must be taken in association with BMS 300 lecture; Every Year, Fall

## BMS 301 Physiology of Human Performance II

Lab ( 3 cr .) This course presents a detailed examination of cardiorespiratory and thermoregulatory responses to exercise. Body composition and diet/nutrition are considered. Anatomical and physiological factors limiting various types of physical performance are discussed. Fullyear course; must be taken in sequence. This course must be taken in association with BMS 301L. Prerequisites: BMS 300; Every Year, Spring

BMS 301L The Physiology of Human Performance II Lab (1 cr.) Lab to accompany BMS 301 (3 lab hrs.) Laboratory exercises/experiments are designed to reinforce basic principles of physiology examined in lecture, This course must be taken in association with BMS 301; Every Year, Spring

BMS 304 Biological Chemistry ( $\mathbf{3} \mathrm{cr}$.) This course, which is for ELMPA majors only, is a comprehensive study of contemporary biochemistry for pre-physician assistant students. The fundamental chemical and physical principles that underlie living processes are examined with an emphasis on the chemical structure and biological function. Medical and clinical perspectives relate the chemistry to health concerns and/or diagnostic applications. Students who have completed CHE 315 are not eligible to take this course. Prerequisites: one group: BIO 101/101L, BIO 102/102L, BIO 211, BIO 212, CHE 111, CHE 210, CHE 211; BIO 150, BIO 151, BIO 211, BIO 212, CHE 111, CHE 210, CHE 211; Every Year, Spring

BMS 310 Neuroanatomy I ( $\mathbf{3} \mathbf{~ c r}$.) This course offers the pre-physician assistant student a detailed study of the gross anatomy and development of the central nervous system. Major structures and landmarks within each major brain vesicle and spinal cord are covered. Every Year, Fall

BMS 318 Pathophysiology (3 cr.) This course takes a mechanistic approach to the regulation of function of organ systems to provide students with the underlying physiological concepts in the homeostasis of each system and its interrelationship to other systems, the pertinent diseases that best exemplify the disarray of the controlling mechanism. Students learn a way of thinking that enables them to conceptualize clinical problems in relation to system functions. Prerequisites: one group: BIO 211, BIO 212; BIO 227, BIO 228; Every Year, Fall and Spring

BMS 320 Pharmacology ( $\mathbf{3} \mathbf{c r}$.) This course takes a physiological systems approach to the study of the major classes of drugs used in therapeutics. Each class of drugs is studied according to dose-response characteristics, mechanism of action, major physiological effects, toxicity and possible drug interaction. Prerequisites: one group: BIO 211, BIO 212; BIO 227, BIO 228; Every Year, Fall and Spring

BMS 325 Toxicology (3 cr.) Toxicology is the branch of science that investigates the complex interactions between exogenous chemicals and physical processes (e.g. radiation) with living organisms. This course entails an examination of the absorption, distribution, toxicokinetics, metabolism and elimination of exogenous substances from the body. Particular emphasis is placed on the effects of toxic agents on the following systems in humans: hepatobiliary, pulmonary, renal, nervous and reproductive. The role of toxic chemicals/physical agents in teratogenesis, mutagenesis and carcinogenesis also is studied. Prerequisite: BIO 101, BIO 102, CHE 201 or CHE 210; Every Year, Spring

BMS 330 Endocrinology ( 3 cr.) This course introduces students to 1 ) an intensive understanding of the mechanism of hormone action; 2) the importance of the interrelationship among all hormones; 3 ) a detailed clinical situation dealing with hormonal aberrations; and 4) a theoretical and practical method for hormone assays. Prerequisites: one group: BIO 101, BIO 101L, BIO 102, BIO 102L; BIO 150, BIO 151; Every Year, Fall

BMS 332 Histology (4 cr.) This course entails the microscopic and ultra-microscopic study of the structure of cells, tissues and organs, and emphasizes their functional mechanisms. Students learn how to prepare and stain normal tissue slides for histological and histochemical study, and how to examine these prepared slides. Prerequisites: BIO 211, BIO 212, CHE 210, CHE 211; Every Year, Spring

BMS 370 General Microbiology (3 cr.) This study of the biology of bacteria and other microorganisms includes the structural features, genetics, biochemistry, ecology and symbiotic relationships of microbes, with particular emphasis on the differences between unicellular microbes and multicellular organisms. Students may receive credit for BMS 370 or BMS 213, but not both. This course must be taken in association with BMS 370L. Prerequisites: one group: BIO 101/101L, BIO 102/102L, CHE 110, CHE 111; BIO 150/151L, BIO 151/151L, CHE 110, CHE 111; Every Year, Fall and Spring

BMS 370L General Microbiology Lab (1 cr.) In the laboratory component of General Microbiology, students master foundational microbiological techniques such as microscopy, staining and culture of microbes, and utilize these techniques to explore various properties of microbes relevant to clinical, industrial, environmental and household settings. Students also identify unknown bacteria using both biochemical assays and molecular techniques. Critical thinking is emphasized through a project-based inquiry approach. This course must be taken in association with BMS 370; Every Year, Fall and Spring

BMS 372 Pathogenic Microbiology ( 2 cr.) This course involves the study of medically important microbes. Topics include the principles of microbial pathogenesis, host-microbe interactions and etiology of infectious disease. This course must be taken in association with BMS 372L. Prerequisites: BMS 370, BMS 370L; Every Year, Spring

BMS 372L Pathogenic Microbiology Lab (2 cr.) The laboratory component of Pathogenic Microbiology includes laboratory exercises/experiments designed to reinforce the biochemical, serological and pathogenic characteristics of disease-producing microorganisms.

Special emphasis is placed on techniques used to identify disease-causing microorganisms and differentiating them from closely related members of human indigenous microflora. This course must be taken in association with BMS 372; Every Year, Spring

BMS 373 Mycology ( 3 cr.) The morphology, taxonomy and phylogeny of fungi are studied in this course. The laboratory companion to this course (BMS 373L) provides opportunities for culturing and performing biochemical analyses of selected fungi, including human pathogens. This course must be taken in association with BMS 373L; Every Other Year, Fall

BMS 373L Mycology Lab (1 cr.) This lab accompanies BMS 373 Mycology and allows many opportunities for culturing and performing biochemical analyses of selected fungi, including human pathogens. This course must be taken in association with BMS 373; Every Other Year, Fall

BMS 375 Immunology ( 3 cr.) This course entails a study of the basic principles and regulatory mechanisms of the human immune response. Innate defenses along with cellular and humoral immune defense mechanisms are studied in detail. Abnormal immune system functions are explored via study of acquired and primary immunodeficiencies and autoimmune diseases. Vaccines and transplantation also are discussed. Students may receive credit for BMS 375 or HSC 375, but not both. Students withdrawing from either lecture or lab must withdraw from both. Prerequisite: BMS 370 (or BMS 213 with permission of the instructor); BMS majors must take BMS 375 and BMS 375L together. Prerequisite: BMS 370; Every Year, Spring

BMS 375L Immunology Lab (1 cr.) The laboratory component of Immunology involves laboratory exercises/experiments designed to reinforce immunological concepts. Topics fundamental to both immunological research and clinical diagnostics are covered. Cellular-based and clinically relevant concepts are reinforced via hands-on immunological techniques, class discussions, presentations and case studies. Students withdrawing from either lecture or lab must withdraw from both. BMS majors must take BMS 375 and BMS 375L together. Every Year, Spring

## BMS 378 Vaccines and Vaccine Preventable Diseases

( 4 cr .) This immunology course focuses on vaccines and vaccine preventable diseases (VPDs). The purpose of this course is to examine and discuss the current understanding of vaccinations, as well as the historical and current implication of VPDs. At the end of this course, the student should understand how vaccines work, how they are made, who recommends them and when (or whether) they should be given. Prerequisites: BMS 213
or BMS 370, or BIO 102 with adviser and permission of instructor. Students may take only one of the following for credit: BMS 378, HSC 378 or BMS 525; Every Year, Spring

BMS 388 EMT I Training ( 2 cr .) This course is for non-ELMPA students. This course includes both lecture and clinical experience, and provides students with an opportunity to develop the knowledge and skills required for Emergency Medical Technician National Certification. Successful completion of the BMS 388-389 two-semester sequence, and fulfillment of the state-mandated hours of instruction, are required to be eligible for certification. This course must be taken in association with BMS 388L; Every Year, Fall

BMS 388L EMT I Training Lab (1 cr.) This is the laboratory component of BMS 388, which includes learning the techniques necessary to develop the knowledge and skills required for Emergency Medical Technician National Certification. This course must be taken in association with BMS 388; Every Year, Fall

BMS 389 EMT Training II ( 2 cr .) This course is for non-ELMPA students. This course includes both lecture and clinical experience, and provides students with an opportunity to develop the knowledge and skills required for Emergency Medical Technician National Certification. Successful completion of the BMS 388-389 two-semester sequence, and fulfillment of the state-mandated hours of instruction, are required to be eligible for certification. This course must be taken in association with BMS 389L. Prerequisites: BMS 388, BMS 388L; Every Year, Spring

BMS 389L EMT Training II Lab (1 cr.) This is the laboratory component of BMS 389, which includes learning the techniques necessary to develop the knowledge and skills required for Emergency Medical Technician National Certification. This course must be taken in association with BMS 389. Prerequisites: BMS 388; Every Year, Spring

BMS 470 Virology ( $\mathbf{4} \mathbf{c r}$.) This course covers the strategies employed by different virus families to infect host cells and replicate within them. This includes animal, plant and bacterial viruses. Topics include: viral structure, genetics, molecular mechanism of replication and host response to infection. Students also are exposed to standard research methodologies and cutting-edge research used in the field through reviews of current research articles. Prerequisites: BMS 370, BMS 370L; Every Year, Fall

BMS 472 Biotechnology ( $\mathbf{4} \mathbf{c r}$.) This course addresses the isolation, growth, genetic manipulation and use of organisms (commonly genetically modified) or their
products in fermented food production, agriculture, pharmaceutical discovery and production, molecular diagnostics, vaccine production, transgenic animal formation and human gene therapy. Purification, identification, optimization, testing, government regulations and patents are addressed. This hands-on course is designed for students interested in careers in the expanding modern world of applied biology and microbiology in research and industry (4 lab hrs.). Prerequisite: BMS 370; Every Year, Fall and Spring

BMS 473 Infections of Leisure ( $\mathbf{3} \mathbf{~ c r}$.) This course looks at infectious hazards associated with a wide range of human leisure activities, from lazing on a beach to relaxing in a spa, dining out, or simply staying home and gardening. Participants discuss infections linked to salt and freshwater activities, camping and the outdoors, gardening, contact with animals, eating, foreign travel, sports, sexually transmitted diseases, body piercing, tattooing and trekking to high altitudes. Topics such as epidemiology, antibiotic resistance, pathogenicity, plagues and vaccines also are addressed. This course has social organization of the science of infectious diseases. Prerequisite: BMS 370 or BMS 213; Every Year, Fall

BMS 474 Power of Plagues ( $\mathbf{3} \mathbf{c r}$.) This course examines the impact of infectious diseases on humans-in the past, in the present and in the future. From the 14th-century plague to the current HIV/AIDS, diseases have fundamentally altered the shape of society, politics and culture. This class examines some important diseases, including their impact, pathogenicity, infectivity, epidemiology, consequences, costs and lessons learned. Diseases such as smallpox, polio, rabies, tuberculosis, cholera, bubonic plague, influenza, malaria, yellow fever, syphilis and AIDS are investigated. The impact of antibiotics, antibiotic resistance and nosocomial infections also is discussed. Prerequisite: BMS 213 or BMS 370; Every Other Year, Fall

BMS 475 Special Topics in Microbiology (1 cr.) The latest developments and concepts in the field of clinical and public health microbiology are introduced. Topics may include the oral microbiology, epidemiology of Streptococcal and Staphylococcal infections, antibiotic resistance, drug susceptibility testing, the bacteriology of the hospital environment, vaccine-preventable diseases or quality control in the clinical microbiology laboratory. Recommendation of BMS 213/370 lab instructor and permission of instructor needed. One lecture hour, one research meeting hour, one discussion hour and 4-10 lab hours. Prerequisite: BMS 213 or BMS 370; Every Year, All

BMS 476 Environmental Microbiology (3 cr.) In this course, students examine the role of the many interesting and unique microorganisms found in the
natural environment, especially those from extreme environments (the extremophiles) such as deep sea vents, hot springs, high salinity areas, extremes of pH , etc. Also included in this course are environmental microbes that may be of interest in the industrial setting. This hands-on course examines air, soil and water microorganisms along with their ecological relationships and significance to the environment. This course must be taken in association with BMS 476L; Every Other Year, Spring

BMS 476L Environmental Microbiology Lab (1 cr.) This hands-on laboratory experience allows the student an opportunity to culture and study the air, soil and water microorganisms, along with the irecological relationships and their effect on the environment. This course must be taken in association with BMS 476; Every Other Year, Spring

BMS 479 Microbiology Research (2 cr.) Independent projects in selected areas of microbiology and biotechnology are completed under the direction of a faculty member. For microbiology majors. Every Year, Fall and Spring

BMS 481 Research Methods in Biomedical Sciences I (1 cr.) Students learn the basic principles of research methodology. Register by paper with your mentor. Every Year, Fall and Spring

Courses offered as needed
BMS 114 (UC) Microbes in Action (3 cr.)
BMS 114L (UC) Microbes in Action Lab (1 cr.)

## Business (SB)

SB 101 The Business Environment (3 cr.) The course introduces students to the major fields of business in an integrated framework built around a competitive business simulation. Topics include accounting, marketing, management and finance. Every Year, Fall and Spring

SB 111 Personal Effectiveness (1 cr.) In this course, students begin the process of developing the personal and professional skills required to succeed in college and in business. Topics covered include self motivation, goal setting, managing time and priorities, interpersonal leadership and study skills. Every Year, Fall

## SB 112 Career Planning and Development (1 cr.)

Students develop the skills required to design and execute an individual career plan. The course includes self-assessment as well as the exploration of resources related to academic majors and careers. Skills are developed in networking, resume writing, interviewing and job/internship search strategies. Career life cycle
and career transition issues also are discussed. Every Year, Spring

SB 188 Business Internship (1-3 cr.) This internship in business provides an opportunity for students to complete an additional internship experience beyond the internship within their chosen major. The business internship may only be used to satisfy open elective credit requirements. It is not a substitute for the internship within the major and does not count as a business elective. The internship must be approved by the department chair and the dean in accordance with school and departmental regulations. This course is graded on a pass/fail basis. Every Year, All

SB 211 Business Communications ( 1 cr .) In this course, students develop business writing and presentation skills. Emphasis is placed on writing business documents such as reports, letters, memos and email. The development and delivery of effective business presentations also are covered. Every Year, Fall and Spring

SB 212 Ethics and Diversity ( 1 cr .) This course provides students with a foundation for effectively dealing with issues of ethics and diversity that arise in the workplace. Students are introduced to ethical issues that arise in the functional areas of business and develop the ethical reasoning skills necessary to address such issues. Students also develop an awareness and appreciation of diversity in the workplace as well as the ability to develop strategies to address those issues. Every Year, Fall and Spring

## SB 450 Strategic Integrated Management Seminar

( 3 cr .) This capstone course focuses on the job of top management in formulating and implementing short- and long-term corporate strategy. The course integrates critical concepts from core business subjects including accounting, finance, management, marketing, operations management, international business and economics. Course activities include case studies, individual and/or group projects and computerized business simulations. For seniors only. Prerequisites: AC 211, FIN 201, IB 201, MK 201, MG 210, MG 211; Every Year, Fall and Spring

## SB 450H Honors Strategic Integrated Management

 Seminar ( 3 cr.) This capstone course focuses on the job of top management in formulating and implementing short- and long-term corporate strategy. The course integrates critical concepts from core business subjects including accounting, finance, management, marketing, operations management, international business and economics. Course activities include case studies, individual and/or group projects and computerized business simulations. For seniors only. Prerequisites:AC 211, FIN 201, IB 201, MK 201, MG 210, MG 211; Every Year, Fall and Spring

Courses offered as needed
SB 185 Personal Finance ( 3 cr .)
SB 360 International Microloan Funding ( 3 cr.)
SB 425 CEO Lessons in Leadership (3 cr.)
Prerequisite: MK 201, FIN 201, IB 201, MG 210, CIS 101, AC 102 or AC 212

## Career Practicum (CAR)

CAR 295 Career Practicum (1 cr.) This course offers practical training for an occupation requiring a bachelor's degree. It involves supervised work (paid or unpaid) in an employment setting and career development research and reflection. This course may be repeated for credit up to a total of 6 credits for this course, other workshops, and PE courses combined. The final grade is Pass/Fail.

## College of Arts and Sciences (CAS)

CAS 101 Information Fluency ( 1 cr .) In this course, students learn how to locate and effectively access information, how to critically evaluate research sources and how to use the information within legal, social and ethical parameters. Every Year, Spring

CAS 110 Intellectual Success (1 cr.) Students engage with faculty in the College of Arts and Sciences to explore the structure and goals of an education in the liberal arts and sciences. Students develop the foundations of their education to identify and successfully pursue their interests, develop personal strengths and prepare for productive, engaged lives after graduation. The course provides the context for strong academic advising in the freshman year. For students new to the College of Arts and Sciences. This course is graded on a pass/fail basis. Every Year, Fall

## Chemistry (CHE)

CHE 101 (UC) Fundamentals of General, Organic and Biological Chemistry I ( 3 cr.) This course presents the general fundamentals of chemistry: atomic theory (including radioactivity), bonding (including ions and molecules), stoichiometry, states of matter, and solutions (including solubility, acids, bases and buffers). Must be taken in conjunction with CHE 101L. (Note: this course is designed for health science and biomedical marketing majors.) Prerequisites: a math placement score of 3 or higher is required or completion of MA 107 with a grade of C or higher; Every Year, Fall and Spring

CHE 101L (UC) Fundamentals of General, Organic and Biological Chemistry I Lab ( 1 cr.) Lab must be taken with CHE 101. (2.5 lab hrs.); Every Year, Fall and Spring

CHE 102 (UC) Fundamentals of General, Organic and Biological Chemistry II ( 3 cr .) This course is an introduction to selected functional groups of organic chemistry and their application to biochemistry. Must be taken in conjunction with CHE 102L. Prerequisites: CHE 101, CHE 101L; Minimum grade C-; Every Year, Spring

CHE 102L (UC) Fundamentals of General, Organic and Biological Chemistry II Lab (1 cr.) Lab must be taken with CHE 102. (2.5 lab hrs.) Prerequisites: CHE 101, CHE 101L; Minimum grade C-; Every Year, Spring

## CHE 106 Chemical Principles with Biological

 Applications (4 cr.) Students engage in active learning techniques to learn about atomic theory (including radioactivity), bonding (including ions and molecules) and intermolecular forces, states of matter, solutions (including solubility, acids and bases, buffers, electrolytes and nonelectrolytes), carbon compounds and functional groups, biomolecules (such as carbohydrates, fatty acids, and amino acids and proteins), receptors and enzymes, and nucleic acids and DNA. Students apply these fundamental chemical principles to a variety of health related case studies. A math placement score of 3 or higher is required to enroll in CHE 106. (Students with scores below a 3 must complete MA 107 with a grade of C or higher to improve proficiency in algebraic skills before enrolling in CHE 106.)(Enrollment restricted to nursing majors)(3 lecture hrs., 3 lab hrs.); Every Year, Fall and Spring
## CHE 106L Chemical Principles with Biological

 Applications Lab (0 cr.) Lab to accompany CHE 106. (3 lab hrs.); Every Year, Fall and SpringCHE 110 (UC) General Chemistry I (3 cr.) Students study the atomic theory of matter, nomenclature, chemical formulas and reaction equations, stoichiometry, the gas laws and the kinetic molecular theory, thermochemistry, atomic structure, periodicity of the elements, chemical bonding and molecular structure. (Note: this course is designed for science majors.) Prerequisites: A math placement score of 3 or higher is required or completion of MA 107 with a grade of C or higher. Must be taken in conjunction with CHE 110L; Every Year, All

## CHE 110L (UC) General Chemistry I Lab (1 cr.)

Lab must be taken with CHE 110. (3 lab hrs.); Every Year, All

## CHE 111 (UC) General Chemistry II (3 cr.)

Students study intermolecular forces, properties of solutions, kinetics, chemical equilibrium, pH and acid-base solution chemistry, thermodynamics and electrochemistry. Problem-solving is emphasized. Must be taken in conjunction with CHE 111L. Prerequisites: CHE 110, CHE 110L; Minimum grade C-; Every Year, Spring and Summer

CHE 111L (UC) General Chemistry II Lab (1 cr.) Lab must be taken with CHE 111. (3 lab hrs.) Prerequisites: CHE 110, CHE 110L; Minimum grade C-; Every Year, Spring and Summer

## CHE 202 Chemistry of Macro- and Micronutrients

 ( 4 cr .) Students investigate the fundamental chemistry of macro- and micronutrients through lectures, projects on current research in the chemistry of food, and integrated online chemistry activities. Emphasis is on the study of the chemistry of food components including: carbohydrates, fats, proteins, vitamins, minerals and water, with the additional assessment of how foods must meet nutrient needs in different ways for animals. Enrollment in this course is restricted to students in the Online Health Science Studies BS degree completion program. Students cannot receive credit for CHE 202 AND either SCI 161 or SCI 105. This course is offered online only. Every Other Year, Summer OnlineCHE 210 Organic Chemistry I ( $\mathbf{3}$ cr.) This course presents a comprehensive study of the principles that govern the properties, reactions and methods of preparation of organic compounds correlated with reaction mechanisms, stereochemistry, conformational analysis, resonance and transition state theory as well as nomenclature of organic compounds. Specific groups covered are alkanes, alkyl halides, alkenes and alkynes. Must be taken in conjunction with CHE 210L. Prerequisites: CHE 111, CHE 111L; Minimum grade C-; Every Year, Fall and Summer

CHE 210L Organic Chemistry I Lab (1 cr.) Lab must be taken with CHE 210. (3 lab hrs.); Every Year, Spring

CHE 211 Organic Chemistry II ( 3 cr .) This continuation of CHE 210 covers specific groups such as aromatic compounds, alcohols and phenols, aldehydes, ketones, carboxylic acids and their derivatives and amines, along with their analysis by infrared and nuclear magnetic resonance spectroscopy. Must be taken in conjunction with CHE 211L. Prerequisites: CHE 210, CHE 210L; Minimum grade C-; Every Year, Spring and Summer

CHE 211L Organic Chemistry II Lab (1 cr.) Lab must be taken with CHE 211. (3 lab hrs.); Every Year, Spring and Summer

CHE 215 Analytical Chemistry (3 cr.) This introduction to the principles and practice of modern chemical analysis includes the following topics: treatment of analytical data, experimental design and sample preparation, simple and complex equilibria, potentiometry, chromatography and spectrophotometry. Must be taken in conjunction with CHE 215L. Intended for chemistry and biochemistry majors and chemistry minors. Prerequisites: CHE 111, CHE 111L; Minimum grade C-; Every Year, Fall and Spring

CHE 215L Analytical Chemistry Lab (1 cr.) Lab must be taken with CHE 215. (3 lab hrs.); Every Year, Fall and Spring

CHE 301 Physical Chemistry I (3 cr.) Students investigate the underlying theories of chemical phenomena. The laws and fundamental equations of equilibrium thermodynamics are applied to the quantitative treatment of chemical equilibria, phase equilibria, electrochemical equilibria, and ionic equilibria. The principles of chemical kinetics and reaction mechanisms are also investigated. Prerequisites: one group: CHE 111/111L, MA 141, PHY 111/111L; CHE 111/111L, MA 141, PHY 122/122L; Minimum grade C; Every Other Year, Fall

CHE 301L Physical Chemistry I Lab (1 cr.) Lab must be taken with CHE 301. (3 lab hrs.); Every Other Year, Fall

CHE 302 Physical Chemistry II (3 cr.) This course focuses on the subjects of quantum theory, spectroscopy and statistical thermodynamics. The study of quantum mechanics is used to provide the basis for developing an understanding of atomic and molecular spectroscopy and chemical bonding. Prerequisite: CHE 301; Minimum grade C; Every Other Year, Spring

## CHE 302L Physical Chemistry II Lab (1 cr.) Lab

 must be taken with CHE 302. (3 lab hrs.); Every Other Year, SpringCHE 305 Instrumental Analysis (3 cr.) This course covers the following instrumental analysis techniques: FTIR, NMR, UV-VIS, spectroscopy and separation methods including gas and liquid chromatography and mass spectrometry. Other current techniques are studied as well, including capillary electrophoresis. Must be taken in conjunction with CHE 305L. Prerequisites: CHE 211, CHE 211L, CHE 215, CHE 215L; Minimum grade C-; Every Other Year, Spring

CHE 305L Instrumental Analysis Lab (1 cr.) Lab must be taken with CHE 305. (3 lab hrs.); Every Other Year, Spring

CHE 315 Biochemistry I ( 3 cr .) This course is a comprehensive study of biologically active compounds and their metabolism, biosynthesis and relationship to biological systems, and includes a detailed study of bioenergetics, enzyme kinetics and buffer systems. Must be taken in conjunction with CHE 315L. Prerequisites: CHE 211, CHE 211L; Minimum grade C-; Every Year, Fall and Spring

CHE 315L Biochemistry Lab I (1 cr.) Students carry out a series of experiments that expose them to the basic principles of biochemical techniques including biomolecule quantitation, protein and carbohydrate purification and analysis, and enzyme kinetics. Lab must be taken with CHE 315. (3 lab hrs.); Every Year, Fall and Spring

CHE 316 Biochemistry II (3 cr.) Students study the biochemical and mechanistic basis of key metabolic pathways and their tie-ins with pathology and pharmacology. Nucleic acids, DNA and RNA, are studied to understand the chemical principles that govern the flow of genetic information with an emphasis on the key roles that RNA plays as an intermediate in the flow of genetic information, a catalyst, a sensor of small metabolites, and a regulator of gene expression. Prerequisites: CHE 315, CHE 315L; Minimum grade C; Every Other Year, Spring

CHE 410 Inorganic Chemistry ( 3 cr .) This course includes the study of the electronic structure of atoms, ionic and covalent bonding, acid-base chemistry and non-aqueous solvents, coordination chemistry, and periodicity. Symmetry and chemical applications of group theory are introduced. Prerequisite: CHE 111; Minimum grade C; Every Other Year, Fall

CHE 475 Chemistry Seminar I (1 cr.) Students attend research group meetings and outside seminars, and prepare and present a literature-based seminar on a topic related to their research project. (Enrollment restricted to senior chemistry and biochemistry majors.) Every Year, Fall

CHE 476 Chemistry Seminar II (1 cr.) Students attend research group meetings and outside seminars and prepare and present a seminar and a poster presentation on their research project. (Enrollment restricted to senior chemistry and biochemistry majors.) Prerequisites: CHE 475, CHE 490; Every Year, Spring

CHE 490 Chemistry Research I ( 3 cr.) Students work closely with a faculty mentor on a chemistry research project. A minimum of 100 lab hours or equivalent is required. (Enrollment restricted to senior chemistry and biochemistry majors.) Every Year, Fall

CHE 491 Chemistry Research II (3 cr.) Students continue their work on a chemistry research project,
which they began in CHE 490. A minimum of 100 lab hours or equivalent is required. (Enrollment restricted to senior chemistry and biochemistry majors.) Prerequisites: CHE 475, CHE 490; Every Year, Spring

Courses offered as needed
CHE 300 Special Topics (3 cr.) Prerequisites: two courses from CHE level 200

## Cbinese (CN)

CN 101 Elementary Chinese I ( 3 cr .) This course is an introduction to Mandarin Chinese as a spoken and written language. Students develop reading, writing, oral comprehension and speaking ability in basic Chinese. Chinese culture, customs and business practice are introduced. Every Year, Fall and Spring

CN 102 Elementary Chinese II ( $\mathbf{3} \mathbf{~ c r}$.) This course is a continuation of Chinese 101. Prerequisite: CN 101; Every Year, Fall and Spring

CN 201 Intermediate Chinese I ( $\mathbf{3} \mathbf{~ c r}$.) Grammar is enhanced for strengthening sentence patterns. Students are expected to communicate mostly in Chinese during class and write a longer essay for presentation. Students are exposed to everyday life topics, and cultural highlights increase understanding of current and past Chinese cultural phenomena. Prerequisite: CN 102; Every Other Year, Fall

CN 202 Intermediate Chinese II ( 3 cr.) This course is a continuation of CN 201. Prerequisite: CN 201; Every Other Year, Spring

Courses offered as needed
CN 200 Special Topics (3 cr.)

## Civil Engineering (CER)

## CER 210 Infrastructure Engineering (3 cr.)

This course identifies, analyzes and assesses built infrastructure, which is the foundation for modern society. The complex and interconnected lifecycles are investigated and demands on critical components are calculated. Students explore the nontechnical factors necessary for the functioning of infrastructure including supplies, trained personnel, public policy, ethics and cross-sector dependencies. The course provides a basis for understanding the complexity and cost of maintaining, rebuilding and developing infrastructure. Topics include general infrastructure concepts, water and wastewater, transportation, energy and buildings and cities. Several in-class scenarios are provided to synthesize the connectivity between the major items of infrastructure. Every Year, Fall

CER 220 Civil Engineering Site Design (3 cr.) This course provides students with the necessary background to select and develop sites for civil engineering projects as well as review the work of others. Proper site selection and engineering have a significant impact on the economics of a project and long-term utility of the constructed facility. Specifically, the course covers the skills of determining site layout and access, zoning requirements, establishing site contour and drainage, installation of utilities, elementary surveying, creation of drawings using a computer-aided drafting package, and the development of environmental impact statements. Prerequisite: MA 152; Every Year, Spring

CER 310 Structural Analysis (3 cr.) This course addresses the analysis and design of basic structural forms such as beams, trusses and frames, which are found in bridges and buildings. Classical deflection techniques such as direct integration and virtual work; and indeterminate analysis techniques such as the force method and displacement methods (slope deflection, direct stiffness and moment distribution) are used to determine forces and deflections in elastic structures. Structural analysis computer programs are introduced and directly applied in the solution of graded analysis and design problems. Approximate analysis techniques are used to check the general accuracy of computer-based results. Prerequisite: MER 220; Every Year, Spring

CER 320 Design of Reinforced Concrete ( 3 cr .) This course introduces the materials and mechanical properties of concrete and the design of reinforced concrete structures. Mix design and strength testing labs develop the concept of proportioning constituents for quality concrete and provide a background in techniques of material testing, quality control and sound construction practices. The study of reinforced concrete includes analysis and design of simple structures, resulting in an appreciation for the strength and serviceability of these structures. Current codes and standards are used to guide the practical design of beams, slabs, columns and footings. Prerequisite: CER 310; Every Year, Fall

CER 320L Design of Concrete Structures Lab (1 cr.) Lab to accompany CER 320. Prerequisite: CER 310; Every Year, Fall

## CER 330 Fundamentals of Environmental

Engineering (3 cr.) This course introduces students to the field of environmental engineering with an emphasis on basic principles, design, problem solving, analytical skills and sustainable solutions to environmental engineering problems. Topics include water chemistry, mass balance, water treatment, water quality and pollution control. Prerequisite: CHE 110; Every Year, Fall

CER 340 Soil Mechanics and Foundation
Engineering (3 cr.) Soil mechanics is the study of soil properties, which govern the use of soil as a construction or foundation material. The course is devoted to describing soils, analyzing soil stresses, determining consolidation settlement, designing earth embankments, determining earth pressures and designing foundations based on applicable engineering principles and recognition of the fundamental concepts of soil behavior. During laboratory periods, students examine soil properties and extract necessary parameters for design. Prerequisites: MER 210; MER 220; Every Year, Fall

## CER 340L Soil Mechanics and Foundation

Engineering Lab (1 cr.) Lab to accompany CER 340. Prerequisites: MER 210; MER 220; Every Year, Fall

CER 350 Hydrology/Hydraulic Design (3 cr.) This course studies both hydrology, which is the study of occurrence, movement and distribution of rainfall, and hydraulic design, which is the application of fluid mechanics, physical science and engineering disciplines in the design of structures and development of water resources. Hydrologic principles are applied to model and analyze the distribution and movement of rainfall in a watershed. Hydraulic principles are applied to analyze and design flow-through systems of reservoirs, channels and culverts. The course makes extensive use of computer simulation models used in engineering practice. Prerequisite: MER 310; Every Year, Spring

CER 350L Hydrology/Hydraulic Design Lab (1 cr.) Lab to accompany CER 350. Prerequisite: MER 310; Every Year, Spring

CER 360 Construction Management ( 3 cr.) This course focuses on the implementation of various projects in which a civil engineer may be engaged, including planning and feasibility studies, design and construction. Students study topics relating to the management of construction, including scope of work, rough order-of-magnitude estimating, scheduling, planning, progress reporting, resource constraining and quality control. The roles of the contractor, owner, public entities and designer are explained. Prerequisite: ENR 210; Every Year, Spring

## CER 370 Materials Engineering for Civil Engineers

( 3 cr.) This course introduces the fundamental properties of civil engineering materials, including mechanical, chemical, physical, surface, fracture and rheological properties. The materials discussed are cements, metals, asphalt, wood and composites. Special effort is directed at learning new sustainable construction materials and practices, including alternative binders for concrete and methods for increasing the service life of civil engineering
infrastructure. Prerequisites: CHE 110; MER 220; Every Other Year, Spring

CER 410 Design of Steel Structures ( 3 cr .) The course synthesizes the fundamentals of statics, mechanics of materials and structural analysis and applies them to the design of structural members, with emphasis on satisfying real-world needs. Topics include an introduction to the design of structural systems, steel tension and compression members, beams and beam-columns and connections. All design is performed in accordance with codes and specifications used in current engineering practice. A comprehensive design problem requires development of a design methodology, consideration of alternative solutions and design of an optimal steel structure to meet stated functional requirements. Prerequisite: CER 310; Every Other Year, Spring

CER 415 Advanced Structural Analysis (3 cr.) This course builds upon the material covered in CER 310 to develop a better understanding of structural behavior. Matrix analysis methods, including an introduction to finite elements, are developed as the basis for modern, computer-based structural analysis. These and other advanced analytical techniques are used to analyze and design trusses, beams and frames. Course work involves extensive use of the computer as an analytical tool. Students use state-of-the-art structural engineering analysis and design software. Prerequisite: CER 310; Every Other Year, Spring

CER 435 Geotechnical Aspects of Transportation Infrastructure (3 cr.) Students are exposed to the geotechnical aspects of transportation systems, with a strong focus on pavement design (both rigid and flexible). Basic transportation topics necessary for the geotechnical design of roads are covered. Prerequisite: CER 340; Every Other Year, Fall

## CER 445 Advanced Soil Mechanics and Foundation

 Engineering ( 3 cr.) In this course, students extend what they learned in CER 340 Soil Mechanics and Foundation Engineering. The principal focus of the class is on foundation design (shallow and deep), but other topics introduced include slope stability, field testing, field instrumentation, designing braced excavations, designing piles and drilled shafts, designing flexible walls, designing earth retaining structures and designing earth structures using geosynthetics.Prerequisite: CER 340; Every Year, Spring

## CER 450 Water and Waste Water Technology

( 3 cr.) Students study technical engineering solutions to problems regarding water processing, water distribution, wastewater collection, and wastewater treatment.
Advanced technical topics include: water distribution and sewerage system design, unit process design and
environmental biotechnology. Prerequisite: CER 330; Every Other Year, Spring

CER 455 Advanced Environmental Engineering
(3 cr.) Students extend what they learned in CER 420, Fundamentals of Environmental Engineering. This course provides a more in-depth look at environmental policies and regulations concerning water and air and their implications on design. Case studies and projects both local and global in perspective illustrate the practical concerns and issues involved in environmental stewardship and sustainable development. Advanced technical topics included in these discussions are: environmental pollutants, environmental separations, disinfection byproducts, sludge/residuals processing, water chemistry, brownfields redevelopment and life cycle analysis. Prerequisite: CER 330; Every Year, Fall

## CER 465 Hazardous Waste and Environmental Site

 Assessment (3 cr.) This course provides an introduction to hazardous waste management and preliminary site investigations for environmental hazards. Topics include identification of wetlands, title searches, air photo interpretation for environmental hazards, visual site surveys, operation of environment monitors, current EPA regulations regarding site assessment and investigation, and sampling of surface materials. Additional course work focuses on hazardous waste; in particular, the legal framework, chemistry, quantitative risk assessment and remediation. Prerequisite: CER 330; Every Other Year, SpringCER 475 Groundwater Hydrology and Contaminant Transport ( 3 cr.) Students analyze groundwater flow and contaminant transport in the subsurface. Topics include geologic and physical factors affecting the movement of water and contaminants, sources of pollution, mathematical formulation and solution of groundwater flow and transport problems, remediation methods and an introduction to computer simulation models. Prerequisites: CER 330, CER 340, CER 350; Every Other Year, Spring

## CER 485 Slope and Earth Structures Stability

( 3 cr .) Students deepen their understanding of the mechanical behavior of slopes and earthen structures. The focus of this course is on the design, construction and performance of slopes and earthen structures. Prerequisite: CER 340; Every Other Year, Fall

## CER 490 Engineering Professional Experience

 (1 cr.) Students gain experience by employing engineering skills in a professional setting under the guidance of practicing engineers. Students must obtain departmental approval and register prior to starting the experience. Prerequisite may be waived with permission of adviser. Prerequisite: ENR 395; Every Year, All
## CER 498 Design of Civil Engineering Systems

( 3 cr .) This course provides an opportunity for students to apply and synthesize their knowledge. Working in teams, students develop functional requirements for a proposed project, then complete a design. The deliverables of this effort include a comprehensive design report including drawings and a client briefing. The integrated design experience is augmented by formal classroom instruction in civil engineering systems design and advanced topics in civil engineering. This course constitutes the integrative experience for students majoring in civil engineering and civil engineering studies. Prerequisites: CER 310, CER 330, CER 340, CER 350; Every Year, Spring

Courses offered as needed
CER 230 Advanced Surveying ( 3 cr .) Prerequisite: CER 220
CER 430 Transportation Engineering (3 cr.) Prerequisite: MER 220
CER 440 Introduction to Power and Energy Systems
(3 cr.) Prerequisite: PHY 122
CER 460 Wood and Masonry Design ( 3 cr .)
Prerequisite: CER 310
CER 470 Water Quality (3 cr.) Prerequisite: CER 330

## Communications (COM)

COM 101 Communications First-Year Seminar (1 cr.) This first-semester course is designed to ease the transition to college and to acquaint School of Communications first-year students with timely and important resources and information. Students hear from faculty members in each of the School of Communications departments to learn more about the majors offered. Students also learn how to create their own success in college and as lifelong learners through development of important skills. Topics include effective communication, time management, study skills and degree requirements. This class is required of all firstyear and transfer students entering with 0-26 college credits. Every Year, Fall and Spring

COM 150 (UC) Public Speaking: Principles and Practice ( 3 cr .) This course examines the principles of oral communication and presentation skills and puts those principles into practice. Through multiple assignments, students increase their confidence in delivering presentations and demonstrate effective research skills, speech development and preparation, and delivery. Additionally, critical thinking and listening skills are demonstrated through oral and written critiques. Every Year, Fall and Spring

COM 201 Media Career Development (1 cr.) This course introduces students to the career development process and covers the skills needed to create a personal
career plan. It includes topics such as self-assessment, career research, resume and cover letter preparation, networking and interviewing practice, as well as strategies for internship/job searches. Course material is geared specifically toward media/communication careers. The course is graded on a pass/fail basis. Students majoring in communications cannot count COM 201 toward their major electives. Every Year, Fall and Spring

COM 215 Social Media: Leveraging the Digital Age ( 3 cr .) The focus of this course is to provide students the foundational skills necessary to become influencers in the social space. Students evaluate the relationship of social media with various communication industries. They examine the rise of social media and its effect on social interaction and audience behaviors, and analyze social media strategies and their effectiveness from a personal and organizational perspective. Projects require students to engage with a variety of social media platforms and tools. Prerequisite: MSS 101; Every Year, All

## COM 301 Communications Career Practicum

( 1 cr .) This course offers practical training in a communications-related occupation. Students complete a minimum of 40 hours of supervised fieldwork (paid or unpaid) in an employment setting. The course also involves career development research and reflection. Internship placements must be approved by the internship program director in accordance with the school policies and prior to earning credit. Sophomore status required. This course is graded on a pass/fail basis. Every Year, All

## COM 302 Communications Career Practicum II

( 1 cr.) Refer to COM 301. Prerequisite: COM 301 and permission of department chair; Every Year, All

## COM 303 Communications Career Practicum III

(1 cr.) Refer to COM 301. Prerequisite: COM 302 and permission of department chair; Every Year, All

COM 490 Internship ( 3 cr .) This course aims to promote professional growth through observation and participation in jointly supervised fieldwork with a cooperating organization. The course also provides the opportunity for students to meet and work with active professionals while defining their own career goals. Students complete a minimum of 120 hours of fieldwork supervised by the program director and a qualified field supervisor. Internship placements must be approved by the internship program director in accordance with school policies and prior to earning credit. Junior/senior status is required. This course is graded on a pass/fail basis. Every Year, All

COM 491 Advanced Internship ( 3 cr .) This course is a continuation of COM 490 with an emphasis
on building and expanding on previous fieldwork experience. Junior/senior status is required. This class is graded on a pass/fail basis. Prerequisite: COM 490 and permission of department chair; Every Year, All

Courses offered as needed<br>COM 305 The Vietnam Era: Images and Reality (HS 305) ( 3 cr.) Prerequisite: HS 111, HS 112, HS 131, HS 132 or MSS 101<br>COM 307 The Holocaust (HS 307) (3 cr.) Prerequisites: MSS 101; one course from HS level 200

## Computer Information Systems (CIS)

CIS 101 Introduction to Information Systems (3 cr.)
This course introduces students to contemporary information systems and demonstrates how these systems are used throughout global organizations. The focus is on the key components of information systems-people, software, hardware, data and communication technolo-gies-and how these components can be integrated and managed to create competitive advantage. Students gain an understanding of how information is used in organizations and how IT enables improvement in quality, speed and agility. This course also provides an introduction to systems and development concepts, technology acquisition and various types of application software that have become prevalent or are emerging in modern organizations and society. Every Year, All

CIS 125 Systems Analysis and Design (3 cr.) This course presents a comprehensive introduction to the phased, problem-solving approach commonly used by organizations to examine and improve their information systems. Topics include a systematic analysis of a business problem or opportunity; determining what role, if any, computer-based technologies can play in addressing the business need; articulating the business requirements for the technology-based solution; specifying alternative approaches to acquiring the technology capabilities needed to address the business requirements; and specifying the detailed requirements for the information systems solution. Prerequisite: CIS 101; Every Year, Fall

CIS 225 Object-Oriented Analysis and Design (3 cr.) This course provides an introduction to object-oriented analysis and design techniques that are used to design computer-based applications. Topics include an introduction to the Unified Modeling Language (UML), development of system proposals, and the transformation of business requirements into system specifications that can be implemented via object-oriented programming languages. Computer system design and implementation techniques also are described. Prerequisite: CIS 125; Every Other Year, Spring

CIS 245 Object-Oriented Programming (3 cr.) This course provides an introduction to object-oriented programming using relational databases in a client-server environment. Emphasis is on the product operation skills necessary to function in an object-oriented environment and the graphical application development process. Common programming techniques necessary to create simple but useful applications are explained. Prerequisite: CIS 101; Every Year, Spring

CIS 267 HTML and CSS ( 3 cr .) This course introduces students to techniques used for web development. In this project-based course, students learn XHTML, style sheets, Web databases and PHP. Students become familiar with PHP utilities and learn how to interact with a database to create web applications. Prerequisite: CIS 101; Every Other Year

CIS 270 E-Business Systems ( 3 cr .) This course focuses on the linkage between organizational strategy and networked information technologies to implement a rich variety of business models in the national and global contexts to connect individuals, business, governments and other organizations. Students are introduced to e-business strategy and the development of e-business solutions. Prerequisite: CIS 101; Every Year

CIS 301 Enterprise Systems ( 3 cr.) This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and infrastructure and their fit with the business. Students learn frameworks and strategies for infrastructure management, system administration, content management, distributed computing, middleware, legacy system integration, system consolidation, software selection, total cost of ownership calculation, IT investment analysis and emerging technologies. These topics are addressed both within and beyond the organization, with attention paid to managing risk and security within audit and compliance standards. Students also hone their ability to communicate technology architecture strategies concisely to a general business audience. Prerequisite: CIS 101; Every Year, Fall

CIS 330 Networking and Data Communications (3 cr.) This course examines IT infrastructure issues for students majoring in information systems. It covers topics related to both computer and systems architecture and communication networks, focusing on Internet-based solutions, computer and network security, business continuity and the role of infrastructure in regulatory compliance. Students gain the knowledge and skills needed for communicating effectively with professionals whose special focus is on hardware and systems software technology and for designing organizational processes and software solutions that require in-depth understanding of the IT infrastructure capabilities and limitations. The course
also prepares students for organizational roles that require interaction with external vendors of IT infrastructure components and solutions. Prerequisite: CIS 245; Every Other Year, Fall

CIS 350 Advanced Excel Programming (AC 350) (3 cr.)
This course utilizes advanced topics in Excel to solve a range of complex business problems. Topics include: spreadsheet design, the use of complex formulas, functions, list and data management, macros and Visual Basic for Applications. Prerequisite: CIS 101; Every Year, Spring

CIS 351 Database Programming and Design (3 cr.) This course presents the use of database architecture and programming as a tool for developing integrated solutions for the information requirements of a modern business environment. Students work to identify business solutions by identifying the appropriate database design, and to understand how that design supports the business requirements. Students learn how to design, build and query databases using Microsoft SQL Server. Prerequisite: CIS 125; Every Year, Fall

CIS 355 Business Intelligence ( 3 cr .) The course provides a comprehensive introduction to the Microsoft Business Intelligence platform using Microsoft SQL Server. It explores advanced database techniques, data visualization, data warehousing, online analytical processing, data mining and other business intelligence topics. Prerequisite: CIS 351; Every Other Year, Spring

CIS 381 Web Development ( 3 cr .) This course focuses on the use of JavaScript to implement client side web developments. Topics include automatically updating pages, rollovers, opening and manipulating windows, frames and image maps, form validation, information access and retrieval, timing events and cookies.
Prerequisite: CIS 245; Every Other Year
CIS 440 IT Project Management (3 cr.) This course covers a systematic methodology for initiating, planning, executing, controlling and closing IT projects, and in doing so covers processes, methods, techniques and tools that organizations use to manage their information system projects. The course assumes that IT project management in the modern organization is a complex, team-based activity where various types of technologies (including both project management and group collaboration software) are an inherent part of the PM process. Prerequisites: CIS 125, CIS 301; Every Year, Fall

CIS 484 Information Systems Internship (3 cr.)
Students gain experience by employing their skills in a professional setting under practicing professionals. This internship involves in-depth work related to userdefined information needs and is usually completed in
the summer between the student's junior and senior years. Students must obtain approval and register prior to starting the work experience. Permission of department chair required. Prerequisite: CIS 301; Every Year, All

## CIS 490 Computer Information Systems Capstone

( 3 cr.) Students employ skills learned in all other CIS course work, and are required to deliver a project that may encompass project management, systems analysis and design, enterprise systems, database management systems and programming. Students are responsible for managing the entire project from conceptual design to final deliverable. Prerequisites: CIS 245, CIS 351, CIS 440; Every Year, Spring

Courses offered as needed
CIS 400 Emerging Topics ( 3 cr.) Prerequisites: CIS 125, CIS 301
CIS 411 Information Systems Security ( $\mathbf{3} \mathbf{c r}$.) Prerequisite: CIS 330
CIS 427 Information Systems Strategy ( 3 cr.) Prerequisites: CIS 301, CIS 351

## Computer Science (CSC)

## CSC 110 Programming and Problem Solving (4 cr.)

This course serves as an introduction to computer science and computer programming. Topics include fundamental programming constructs; problem-solving techniques; basic data and control structures; testing; debugging; arrays; and an introduction to objectoriented programming. A lab is included; Every Year, Fall and Spring

CSC 110L Programming and Problem Solving Lab ( 0 cr.) This lab is taken in conjunction with CSC 110; Every Year, Fall and Spring

CSC 111 Data Structures and Abstraction (4 cr.) This course is a continuation of CSC 110. Topics include advanced data structures (linked lists, stacks, queues, trees, hash tables), recursion, abstract data types, introductory algorithms, and intermediate object-oriented programming. A lab is included. Prerequisite: CSC 110; Minimum grade C-; Every Year, Fall and Spring

CSC 111L Data Structures and Abstraction Lab ( 0 cr .) This lab is taken in conjunction with CSC 111. Prerequisites: CSC 110; Every Year, Fall and Spring

CSC 205 Introduction to Discrete Mathematics (MA 205) (3 cr.) This course introduces students to basic concepts and structures of discrete mathematics. Topics can include propositional and predicate logic, sets and set operations, functions, proof techniques,
counting problems, probability and basic number theory. Applications include computer science, biology, social sciences, law and the physical sciences. Prerequisite: CSC 110 or MA 110 or higher; Minimum grade C-; Every Year, Spring

## CSC 210 Computer Architecture and Organization

 ( 4 cr .) Students are introduced to the organization and architecture of computers. Topics related to computer organization include digital logic, data representation, computer arithmetic, data path and control unit implementation, memory system organization, and I/O communications. Architecture topics include machine language programming, instruction set design, and factors affecting processor performance. A lab component is included. Prerequisite: CSC 111; Minimum grade C-, Every Year, SpringCSC 210L Computer Architecture and Organization Lab ( $0 \mathbf{c r}$.) This lab is taken in conjunction with CSC 210. Every Year, Spring

## CSC 215 Algorithm Design and Analysis (3 cr.)

This course presents a study of the design and analysis of algorithms. Topics include Asymptotic Analysis, Complexity Theory, Sorting and Searching, Underlying Data Structures, Recursion, Greedy Algorithms, Divide and Conquer, Dynamic Programming, and NP-completeness. Additional topics may include Graph Algorithms, Probabilistic Algorithms, Distributed Computing and Parallel Algorithms. Prerequisites: CSC 111, CSC 205; Minimum grade C-; Every Year, Fall

## CSC 225 Introduction to Software Development

(SER 225) ( 3 cr .) This course presents introductory software development concepts including group development, large-scale project work and theoretical aspects of object-oriented programming. The course expands on material from previous courses. Professional behavior and ethics represent an important component of this course. Prerequisite: CSC 111; Minimum grade C-; Every Year, Fall

## CSC 310 Operating Systems and Systems

Programming (3 cr.) Students are introduced to operating systems and the software to support these systems. Topics include operating system principles, concurrency, scheduling and dispatch, virtual memory, device management, security and protection, file systems and naming, and real-time systems. Prerequisites: CSC 210, CSC 225; Minimum grade C-; Every Other Year, Fall

CSC 315 Theory of Computation (MA 315) (3 cr.) This course provides an introduction to the classical theory of computer science. The aim is to develop a mathematical understanding of the nature of computing by trying to answer one overarching question: What are
the fundamental capabilities and limitations of computers? Specific topics include finite automata and formal languages (How do we define a model of computation?), computability (What can be computed? and How do we prove something cannot be computed?), and complexity (What makes some problems so much harder than others to solve? and What is the P versus NP question and why is it important?). Prerequisites: CSC 210 or MA 301; Minimum grade C-; Every Other Year, Fall

CSC 318 Cryptography (MA 318) (3 cr.) Students study methods of transmitting information securely in the face of a malicious adversary deliberately trying to read or alter it. Participants also discuss various possible attacks on these communications. Students learn about classical private-key systems, the Data Encryption Standard (DES), the RSA public-key algorithm, discrete logarithms, hash functions and digital signatures. Additional topics may include the Advanced Encryption Standard (AES), digital cash, games, zero-knowledge techniques and information theory, as well as topics chosen by the students together with the instructor for presentations. Prerequisite: MA 229, CSC 215 or ISM 301; Minimum grade C-; Every Other Year, Fall

CSC 325 Database Systems (SER 325) (3 cr.) Students are introduced to the theory and application of database systems. Topics include data modeling and the relational model, query languages, relational database design, transaction processing, databases and physical database design. Prerequisites: CSC 215, CSC 225; Minimum grade C-; Every Other Year, Spring

## CSC 375 Advanced Topics in Computer Science

( 3 cr .) This course explores advanced computer science topics not available in other courses, as well as new topics as they emerge in this rapidly evolving discipline. Topics may be interdisciplinary. Prerequisites: CSC 215, CSC 225; Minimum grade C-; Every Year, Spring

CSC 491 Senior Project 1 (1 cr.) This is the first of a two-course sequence required for all computer science majors (beginning with students who entered the program in 2006). Students explore the profession of computing by working independently, under the guidance of a faculty member, on a significant computing project. Participants review professional literature and explore professional ethics, as they work to synthesize their knowledge of computer science. During the first part of the project, students develop a project plan and submit a proposal for approval to their adviser. Students meet regularly to present and discuss progress. Senior status is required. Every Year, Fall

CSC 492 Senior Project 2 ( 1 cr .) This is the second of a two-course sequence required for all computer science majors (beginning with students who entered
the program in 2006). Students explore the profession of computing by working independently, under the guidance of a faculty member, on a significant computing project. Participants review professional literature and explore professional ethics, as they work to synthesize their knowledge of computer science. During the second part of the project, students complete work on their project, and create an appropriate formal presentation of their results. Prerequisite: CSC 491; Minimum grade C-; Every Year, Spring

Courses offered as needed
CSC 101 Introduction to Internet Studies ( 3 cr .)
CSC 105 Introduction to Computer Science ( 3 cr .)
CSC 109 Special Topics ( 3 cr .)
CSC 200 Special Topics ( 3 cr .)
CSC 300 Special Topics (3 cr.)
CSC 320 Compilers ( 3 cr.) Prerequisites: CSC 210, CSC 215, CSC 225; Minimum grade C-
CSC 340 Networking and Distributed Processing (3 cr.) Prerequisites: CSC 210, CSC 215, CSC 225; Minimum grade C-
CSC 345 Computer Graphics ( 3 cr .) Prerequisites: CSC 215, CSC 225; Minimum grade C-
CSC 350 Intelligent Systems ( 3 cr .) Prerequisites: CSC 215, CSC 225 ; Minimum grade C-
CSC 355 Programming Language Concepts ( 3 cr .) Prerequisites: CSC 215, CSC 225; Minimum grade C-
CSC 361 Numerical Analysis (MA 361) ( 3 cr.)
Prerequisites: MA 142 or MA 152; MA 229; Minimum grade C-

## Criminal Justice (CJ)

CJ 101 Crime and Society ( 3 cr .) This course examines crime as a cultural phenomenon and as a problem of social control. Topics include the nature of law, characteristics of the criminal justice system, types of crime, as well as the critical evaluation of theories of crime. Every Year, All

## CJ 205 From College to Career (SO/GT 205)

( 1 cr .) This course introduces sociology, gerontology and criminal justice majors to the disciplines and fields in which they are majoring. Students meet once a week to discuss the origins, breadth and potential careers in their fields. The course orients the student to the professions within sociology, criminal justice and gerontology through interaction with departmental faculty, former students and practitioners in the field. For sociology, criminal justice and gerontology majors only. This course is graded on a pass/fail basis. Prerequisite: CJ 101; Every Year, Spring

## CJ 232 Women in the Criminal Justice System

(SO/WS 232) ( 3 cr .) This course examines the changing patterns of women's criminality, the experiences of
women who are processed as crime victims, and the evolution of women's role in law, law enforcement and corrections. Prerequisite: SO 101 or CJ 101; Every Year, Fall

CJ 240 Organized Crime ( 3 cr.) This course considers the history of organized crime, its functions in distributing goods and services, in establishing order and disorder, its role in the integration of marginal ethnic groups, and the response of law enforcement and government agencies. Prerequisite: SO 101 or CJ 101; Every Year, Spring

CJ 241 Police and Policing ( 3 cr.) This course considers the history and development of functions in policing. Issues and controversies in policing such as: training, police ideology, police management styles, the development of a working police personality, the appropriate use of force, racial profiling, police corruption, patrol, professionalism, due process and vocational considerations are examined. Prerequisite: CJ 101; Every Year, All

CJ 243 Investigative Techniques ( $\mathbf{3}$ cr.) This course provides students with knowledge of basic concepts of case and crime scene investigation; scene and investigative personnel management; nature of investigative personnel roles; steps in the processing of scenes and evidence; methods of documentation; general and specialized techniques for the recognition, identification and individualization of evidence; sources of investigative information; interview techniques; reconstruction of events; and legal and ethical considerations during criminal investigations. For majors only. Prerequisite: SO 101 or CJ 101; Every Year, Spring

CJ 250 Youth Crime (SO 250) ( $\mathbf{3} \mathbf{c r}$.) This course deals with youth crime as distinct from adult offending. Students examine the development of the juvenile delinquency concept and justification for classifying juvenile offenders as separate from adults. Factors contributing to the onset of juvenile delinquency and relevant research also are examined. The course considers development and current functions of the juvenile justice system, paying particular attention to the challenges justice officials face daily. A range of widely used treatment strategies for dealing with juvenile offenders is examined. Prerequisite: SO 101 or CJ 101; Every Year, Fall

## CJ 251 Probation Parole and Community Corrections

 ( $\mathbf{3} \mathbf{~ c r . ) ~ O f f e n d e r s ~ a r e ~ s e n t e n c e d ~ t o ~ o n e ~ o f ~ t h e s e ~ a l t e r - ~}$ natives to incarceration in order to change or control behavior. Methods of supervision, special goals such as shock probation or parole, electronic and other hightech monitoring, controversies over effectiveness and punitive aspects of these technologies are considered. Prerequisite: SO 101 or CJ 101; Every Year, SpringCJ 253 Sexual Violence ( 3 cr.) This course takes a historical perspective on the societal and psychological as-pects of sexual violence as it applies to the criminal justice system. It includes an examination of the etiology of sexual abuse as a law enforcement issue and explores the societal impact of sexual violence upon both those who commit it and those who are the victims of it. The course encourages students to deepen their understand-ing of the social structural and individual treatment modalities that are employed within the system to decrease sexual violence. Prerequisite: SO 101 or CJ 101; Every Year, Spring

CJ 261 Prisons and Jails ( $\mathbf{3}$ cr.) This course covers incarceration in both prisons and jails. Students examine incarceration as a social phenomenon, exploring its connections to political, economic and cultural forces in society. Participants investigate the history of imprisonment, theories of punishment and the (intended and unintended) societal ramifications of incarceration. Topics include prison architecture, social classifications, prison culture and inmate social structure, violence in prison, Supermax prisons, rehabilitation and prisoner reentry. Prerequisite: SO 101 or CJ 101; Every Other Year

## CJ 271 Public Order Crimes (SO 271) (3 cr.)

Approximately two-thirds of the inmates in U.S. correctional institutions have been found guilty of public order crimes, moral crimes, or crimes not likely to have a self-identified victim. This course concentrates on crimes associated with such activities as illegitimate gambling, consensual sex, and the criminal use and sale of both legal and illegal substances. Prerequisite:
SO 101 or CJ 101; Every Year, Fall
CJ 290 Criminal Justice Methods ( 3 cr.) In this course, students gain an understanding of the theory and methods involved in criminal justice research and how these are implemented in program evaluation. Emphasis is placed on understanding general research principles and methods for conducting research in the criminal justice field. For criminal justice majors in their sophomore year. Every Year, All

CJ 320 Victimology ( 3 cr.) Historically, the primary concern of the justice system was the apprehension and punishment of offenders. More recently, however, the needs of crime victims are increasingly recognized both formally and informally in the justice process. This course examines the emergence of victimology as a field of study and the origins and impacts of victim stigma. Students learn about the range of harms crime victims experience and the importance of addressing victim needs throughout the justice process. Prerequisite: CJ 101 or SO 101; Every Year, Spring

CJ 330 Perspectives on Violence (SO 330) ( 3 cr .) This course explores the many ways that violence is viewed in our society. Topics include types of violence, empirical evidence of incidence, characteristics of violent crimes, offender motivation, victim profiles, and sociological and theoretical explanations. Prerequisite: CJ 101 or SO 101; Every Year, Fall

## CJ 333 Drugs, Alcohol and Society (SO 333) (3 cr.)

This analytical discussion-based course explores the use of drugs and alcohol in U.S. society. The emphasis is on drug and alcohol use and abuse as a social phenomenon. Students explore issues such as the relationship of drug use to particular groups in society (age, sex, race/ethnicity); patterns of drug use and abuse; the promotion of drugs by the media; and drug and alcohol abuse in historical perspective. Students also learn about drug categories, drug education, prevention and treatment and about drug laws. Prerequisite: CJ 101 or SO 101; Every Year, Spring

## CJ 343 Forensic Issues in Law Enforcement (3 cr.)

 This course presents an overview of the scientific method and its application to the analysis of physical evidence as it impacts law enforcement investigations. Topics include the study of basic methods of documentation, collection and preservation of physical evidence; general schemes for the analysis of chemical and biological evidence; identification and individualization of firearms, fingerprints, imprints, hairs, fibers, blood and body fluids, paint, drugs and poisons, and other materials associated with crimes. The course material is reinforced through the use of actual case studies, hands-on exercises and class exercises. Prerequisite: CJ 101 or SO 101; Every Year, FallCJ 355 Crime and Media (SO 355) (3 cr.) Despite little direct contact with offenders or the criminal justice system, people typically hold strong opinions about crime-related issues. The goal of this course is to understand how media sources shape our attitudes and beliefs about crime and how we should respond to it. To this end, participants examine media involvement in constructing the reality of crime and justice and its implications for the justice process. Prerequisite: CJ 101 or SO 101; Every Other Year, Spring

## CJ 370 Constitution, Ethics and Policing ( 3 cr.)

Students are introduced to the constitutional limitations and ethical considerations that affect police behavior. These include use of force, coercion, entrapment, right to counsel, wiretapping, confessions and exclusionary rule. Prerequisite: SO 101 or CJ 101; Every Year, All

CJ 385 Senior Seminar in Criminal Justice Policy (3 cr.) This senior-level course examines social policy as applied to a selected aspect of the criminal justice field. Senior status in criminal justice major required. Every Year, All

CJ 392 Internship Seminar (3 cr.) For criminal justice majors in their junior or senior year only. Students complete 120 hours of supervised fieldwork in a criminal justice setting such as a local or federal law enforcement agency, an organization providing services to crime victims or offenders, a probation or parole office or a court. Students also spend one hour per week in the internship seminar class. Throughout the course, students demonstrate the connection between academic course work and work in the field through reflections on disciplinary concepts such as: organizational structure and culture, power, diversity and social policy. In addition to the seminar requirements, students are required to adhere to strict standards of professionalism, confidentiality and responsibility at their internship site. Every Year, All

CJ 394 Advanced Internship Seminar ( 3 cr.) An optional second internship for criminal justice majors in their junior or senior year only. Students complete 120 hours of supervised fieldwork in a criminal justice setting such as a local or federal law enforcement agency, an organization providing services to crime victims or offenders, a probation or parole office or a court. They also spend one hour per week in the advanced internship seminar class. Throughout the course, students build upon the knowledge gained from their first internship experience to deepen their understanding of social structures, broaden their experience with diversity, and refine their personal sense of responsible citizenship. Students also assess their interpersonal strengths and weaknesses through written and oral reflection in preparation for graduate school and/or future employment. In addition to the seminar requirements, students are required to adhere to strict standards of professionalism, confidentiality and responsibility at their internship site. Prerequisite: CJ 392; Every Year, All

Courses offered as needed
CJ 200 Special Topics (3 cr.) Prerequisite: SO 101 or CJ 101
CJ 260 Politically Motivated Crime (3 cr.)
Prerequisite: SO 101 or CJ 101
CJ 300 Special Topics ( 3 cr.) Prerequisite: SO 101 or CJ 101
CJ 368 Violent Offenders: Assessment and Treatment (3 cr.) Prerequisite: SO 101 or CJ 101

## Diagnostic Imaging (RS)

## RS 100 Fundamentals of Diagnostic Imaging (1 cr.)

This course provides the student with a basic knowledge of the fundamentals of diagnostic imaging practice. Topics include defining diagnostic imaging as it relates to all imaging modalities, historical development of the profession, introduction to current and emerging practice arenas, and application of professional terminology. Students complete a self-study in medical terminology. Every Year, Fall

## RS 101 Introduction to Diagnostic Imaging (3 cr.)

 Designed to provide an orientation to diagnostic imaging, this course includes history, ethics and basic principles of radiation protection, medical and medicolegal terminology, as well as preclinical observation. Prerequisite: RS 100; Every Year, SpringRS 201 Gross Anatomy Imaging Lab I (1 cr.) This course presents in-depth consideration of gross anatomy within systems located in the chest, abdomen and upper extremity of the body. Students discuss the structure and function of each anatomic component within each region. Conventional anatomic illustrations are correlated with their radiographic counterpart. The radiographic appearance of specific structures as demonstrated on conventional radiographic images is correlated to images obtained using other advanced imaging modalities such as computed tomography, magnetic resonance and sonography. Prerequisites: BIO 211, BIO 211L, BIO 212, BIO 212L; Every Year, Fall

RS 202 Gross Anatomy Imaging Lab II (1 cr.) This course presents in-depth consideration of gross anatomy within systems located in the head, neck, pelvis and lower extremity. For each region, students discuss the structure and function of each anatomic component. Conventional anatomic illustrations are correlated with their radiographic counterpart. The radiographic appearance of specific structures as demonstrated on conventional radiographic images is correlated to images obtained using other advanced imaging modalities such as computed tomography, magnetic resonance and sonography. Prerequisites: BIO 211, BIO 211L, BIO 212, BIO 212L; Every Year, Spring

RS 212 Radiographic Procedures I (2 cr.) This course introduces the student to the basic concepts, principles and applications of radiographic and radiologic procedures. Additional applications related to orthopaedic terminology, pathologies and procedures, trauma and patient-related modifications also are presented. Prerequisites: RS 101, MA 275, BIO 101, BIO 101L, BIO 102, BIO 102L; Every Year, Fall

RS 212L Laboratory Practicum I (2 cr.) This practicum develops preclinical competency in radiographic procedures studied in RS 212, as well as routine hospital procedures and radiographic tasks, basic radiographic analysis, patient management, communications and manipulation of imaging equipment. Prerequisites: RS 101, MA 275, BIO 101, BIO 101L, BIO 102, BIO 102L; Every Year, Fall

RS 215 Radiation Safety and Protection (3 cr.) Students are introduced to the effects of ionizing radiation on biological systems at the molecular, cellular, organism, and community levels, with emphasis on medical implications and radiation protection. Prerequisite: RS 260; Every Year, Spring

RS 222 Radiographic Procedures II (3 cr.) This course builds on the previous foundations developed in RS 212. Trauma, pathologies and patient-related modifications also are included and expanded. Prerequisites: RS 212, RS 212L; Every Year, Spring

RS 222L Laboratory Practicum II (2 cr.) Designed to develop preclinical competency in radiographic procedures studied in RS 222, this practicum focuses on radiographic tasks, basic radiographic analysis, patient management, communications and manipulation of imaging equipment. Prerequisites: RS 212, RS 212L; Every Year, Spring

RS 232 Radiographic Procedures III (3 cr.) This course provides continued integration and expansion on the concepts, principles and applications developed in RS 212 and RS 222. Prerequisites: RS 222, RS 222L; Every Year, Fall

RS 232L Laboratory Practicum III (2 cr.) This practicum is designed to develop preclinical competency in routine hospital procedures and radiographic tasks, basic radiographic analysis, patient management, communications and manipulation of imaging equipment. Prerequisites: RS 222, RS 222L; Every Year, Fall

## RS 241 Radiographic Image Production and

Evaluation (3 cr.) This course presents the basic principles, concepts and practical applications of radiographic image production and diagnostic quality. Topics include radiation production, description and proper selection of exposure factors, radiation protection, imaging media, imaging equipment and basic imaging formulas. Prerequisites: RS 101, MA 275, BIO 101, BIO 101L, BIO 102, BIO 102L; Every Year, Fall

## RS 241L Radiographic Image Production and

Evaluation Lab I (1 cr.) The laboratory, which accompanies RS 241, is designed to demonstrate and reinforce the concepts and principles presented in class. (2 lab
hrs.) Prerequisites: RS 101, MA 275, BIO 101, BIO 101L, BIO 102, BIO 102L; Every Year, Fall

RS 242 Radiographic Image Production and Evaluation II (3 cr.) This course expands on the foundations developed in RS 241. Integration and application of these foundations includes the development of exposure charts, methods of image processing, and the causation and identification of image artifacts. The course also incorporates quality control concepts and testing, and introduces basic terminology and principles of quality control and digital imaging systems. Prerequisites: RS 241, RS 241L; Every Year, Spring

RS 242L Radiological Processing and Exposure Lab (1 cr.) Lab to accompany RS 242. (1 lab hr.)

## RS 250 Radiologic Clinical Education I (2 cr.)

Students are provided their initial clinical experience under the supervision of certified clinical instructors and clinical staff. Clinical competency and proficiency related to the performance of the radiologic and radiographic procedures of RS 212 and RS 212L are developed and assessed. Prerequisites: RS 101, RS 212, RS 212L, RS 241, RS 241L; Every Year, Spring

RS 253 Radiologic Clinical Education II ( 4 cr.) This course, a continuation of RS 250, is a clinical experience under the supervision of certified clinical instructors and clinical staff. Clinical competency and proficiency related to the performance of the radiologic and radiographic procedures of RS 212/212L and RS 222/222L are developed and assessed. Prerequisite:
RS 250; Every Year, Summer
RS 254 Radiologic Clinical Education IV (3 cr.) This course, a continuation of RS 253, is a clinical experience under the supervision of certified clinical instructors and clinical staff. Clinical competency and proficiency related to the performance of the radiologic and radiographic procedures of RS 212/212L and RS 222/222L are developed and assessed. Prerequisite: RS 253; Every Year, Fall

RS 255 Radiologic Clinical Education (3 cr.) This course, a continuation of RS 254, is a clinical experience under the supervision of certified instructors and clinical staff. Clinical competency and proficiency related to the performance of radiologic and radiographic procedures of RS 212/212L, RS 222/222L and RS 232/232L are developed and assessed. Prerequisite: RS 254; Every Year, Spring

## RS 260 Radiographic Physics and Instrumentation

( 3 cr .) This course presents an analysis of the production of X-rays and the interaction of radiation with matter, units of radiation measurements and radiation
protection. Prerequisites: BIO 101, BIO 102, RS 101, MA 275, RS 241, RS 241L, RS 242, RS 242L; Every Year, Fall

## RS 290 Advanced Radiographic Procedures IV

( 3 cr.) Radiographic and radiologic procedures related to imaging of the cranium, facial bones and sinuses, myelography, arthrography and venography are presented. Students also are introduced to other imaging modalities including mammography, bone densitometry, basic principles of computed tomography and image intensification systems. Prerequisites: RS 232, RS 232L; Every Year, Spring

RS 290L Laboratory Practicum (1 cr.) This practicum develops preclinical competency in radiographic procedures studied in RS 290. (2 lab hrs.) Prerequisites: RS 232, RS 232L; Every Year, Spring

RS 297 Methods of Patient Care ( 2 cr .) This course focuses on a study of skills in providing humanistic care for the well, acute or chronically ill individual, including preparing patients for invasive as well as noninvasive imaging studies; basic clinical skills in infection control, including aseptic technique, venipuncture, vital signs and O 2 administration; effective communication with emphasis on problem-solving skills. (2 lab hrs.) Prerequisites: RS 212, RS 212L, RS 241, RS 241L; Every Year, Spring

RS 297L Methods of Patient Care Lab (1 cr.) This lab develops preclinical competency for the procedures described and demonstrated in RS 297. Every Year, Spring

RS 318 Pathology for Imaging Sciences ( 3 cr.) This course provides an introduction to the basic study of disease, including etiology, pathophysiology and current diagnostic procedures. Normal structure and function are reviewed prior to the discussion of each anatomic system. Prerequisites: RS 212, RS 212L, RS 222, RS 222L; Every Year, Fall

RS 320 Ultrasound Physics and Instrumentation (3 cr.) The course presents theoretical concepts and practical applications related to ultrasound physics and instrumentation including transducers, Doppler, static and realtime techniques. Prerequisite: RS 300; Every Year, Spring

RS 322 Introduction to Sectional Anatomy (3 cr.) The positions and graphic identification of the major blood vessels, structures and organs of the head, neck, thorax and abdomen are studied. Every Year, Fall

RS 323 Advanced Sectional Anatomy (3 cr.) This continuation of the regional anatomy considered in RS 322 includes shoulder, wrist, pelvis, hips, knee and ankle. In addition to coronal, sagittal and axial imaging
examined in the previous course, oblique sections and three-dimensional reconstruction are included. Every Year, Spring

RS 334 Bone Densitometry (1 cr.) This distance learning course provides students with an overview of the history of bone densitometry as well as knowledge in the areas of osteoporosis and bone health, equipment, quality control, patient preparation and safety, and scanning. The course encompasses didactic components to cover all relevant material currently consistent with the ARRT certification examination. Prerequisite: ARRT Registered Radiologic Technologist. Every Year, Summer

## RS 336 Pharmacology for the Radiographer ( 2 cr .)

The major classifications/categories, clinical applications and implications of pharmaceuticals used in diagnostic imaging and interventional procedures are presented. Every Year, January Online

## RS 338 Introduction to CT Scanning (3 cr.)

Computed tomography (CT) scanning as it pertains to diagnostic imaging is studied. Topics include principles, physics, image reconstruction, equipment, image quality, radiation dose, specialized techniques, diagnostic applications and some cross-sectional anatomy. Prerequisite: ARRT certification or permission of the department. Every Year, Fall

RS 338L Computed Tomography Lab I (1 cr.) The course demonstrates the principles presented in the didactic component of the course, RS 338, and enables the student to develop hands-on skills with the Toshiba Aquilion 64 slice computed tomography unit. Training includes the operation of the hardware and software components of the equipment with the objective to optimize image quality and minimize patient radiation dose. Prerequisite: ARRT certification or permission of the department. Every Year, Fall

## RS 340 Principles of Mammography (3 cr.)

This course provides an overview of the history of mammography as well as fundamental knowledge in the areas of anatomy, physiology and pathology of the breast, mammographic equipment and instrumentation, positioning and technique for mammography. Also covered are methods of patient education and quality control. The course prepares students for the ARRT Mammography Certification Examination and meets all ACR/FDA training requirements. Prerequisite: ARRT certification or permission of the department. Every Year, Spring

RS 345 Women's Health and Imaging ( $\mathbf{3} \mathbf{~ c r}$.) This course provides a thorough look at women's health and disease with a focus on diagnostic imaging. Students examine common health factors for females including
pathophysiology, family history, socioeconomic status and diagnostic procedures. This course investigates common health topics for the betterment of overall care of self, community and the health care consumer enabling the health professional to answer questions and have a general understanding of the diseases that may be encountered in health care practice. Program content is dynamic and is modified each year to represent the most current data and statistics. Requires permission of the department. Every Year, Spring

## RS 414 Research: Analysis and Critique (3 cr.)

This course explores the basic elements of health care research including different types of research models and research strategies. Students explore the differences between a variety of publication types, including editorials, case studies and peer-reviewed research articles. Students also learn techniques for database queries. Prerequisite: RS 101; Every Year, Fall

## RS 415 Introduction to Magnetic Resonance

Imaging (3 cr.) Magnetic resonance imaging is studied as it pertains to diagnostic imaging. Topics include mathematics, physical principles, imaging concepts, equipment, image quality, clinical applications and biologic effects of MRI. Prerequisite: ARRT certification or permission of the department. Prerequisite: RS 322; Every Year, Fall

## RS 415L Magnetic Resonance Imaging Principles

 I-Lab Practicum ( $\mathbf{1} \mathbf{~ c r . )}$ ) This course demonstrates the principles presented in the didactic component of the course, RS 415, Introduction to Magnetic Resonance Imaging. This lab complement enables the student to develop hands-on skills with the Toshiba Vantage 1.5 Tesla Magnetic Resonance Imaging scanner. Training includes the operation of the hardware and software components of the equipment with the objective to optimize image quality. This course also influences the student's development of patient care skills dealing with claustrophobia and safety concerns regarding MRI. Prerequisite: ARRT certification or permission of the department.
## RS 416 Advanced MRI Principles and Imaging

( 3 cr .) This course is designed for the student who has successfully passed RS 415 (Introduction to Magnetic Resonance Imaging) and/or for the Technologist actively working in the MRI Field. The main objective for this course is to expand on the basic MRI physics and advanced MRI imaging applications. Prerequisite: RS 415; Every Year, Spring

RS 416L MRI Scanning Lab II (1 cr.) This course demonstrates the principles presented in the didactic component of the course, RS 416-Advanced MRI Principles and Imaging. This lab complement enables
the student to further develop hands-on skills with the Toshiba Vantage 1.5 Tesla Magnetic Resonance Imaging scanner and expand upon the basic MRI physics and advanced imaging applications. Training includes the operation of the hardware and software components of the equipment with the objective to optimize image quality. This course also influences the student's continued development of patient care skills dealing with claustrophobia and safety concerns regarding MRI; Every Year, Spring

RS 450 Forensic Imaging I (1 cr.) Students are introduced to forensic radiography. Methods and procedures are studied to properly perform and document a forensic examination. Every Year, Fall

RS 451 Forensic Imaging Lab (1 cr.) This practical course employs procedures for radiography and autopsy and/or necropsy of specimens. (1 lab hr.) Every Year, Fall

RS 452 Forensic Imaging II ( 1 cr .) This course is a continuation of RS 450. Every Year, Fall

RS 453 Forensic Imaging-Clinical (1 cr.) This course links theory presented in RS 450 and RS 452 with clinical applications at the Office of the Chief Medical Examiner for the state of Connecticut. Students participate in obtaining radiographs from homicides, suicides, burn victims, decomposed bodies and sudden infant deaths. Prerequisites: RS 450, RS 451, RS 452; Every Year, Fall

RS 454 Forensics Imaging Seminar ( 3 cr.) This seminar-style course consists of a series of lectures given by professionals from various areas of forensic practice and expertise. Students are introduced to a wide variety of topics such as forensic photography, anthropology, death investigation, paleoimaging and forensic CT and MRI applications. Every Year, Spring

## RS 460 Pathology for CT and MRI Technologists

( 3 cr .) This course covers identification, pathophysiology and pattern recognition of common pathologies observed in computed tomography and magnetic resonance imaging. Normal and abnormal comparisons are presented.
Prerequisite: RT(R) or RS 322 or permission of the department. Prerequisite: RS 322; Every Year, Spring

## RS 471 Gynecological and Peripheral Sonography

 ( 3 cr .) This course is designed to prepare the student toward eligibility for the gynecological portion of the obstetrical (OB) portion of the ARDMS Registry and the peripheral structures portion of the abdominal (AB) portion of the ARDMS Registry. The course encompasses all aspects of gynecological and peripheral scanning including: anatomy and vasculature, normal variants and congenital abnormalities, pathology, organfunction and laboratory tests, and scanning methods and practical tips. Prerequisite: RS 470; Every Year, Fall

## RS 471L Gynecological and Peripheral Sonography <br> Lab ( 0 cr.) Lab to accompany RS 471. (3 lab hrs.) Every

 Year, FallRS 472 Obstetrics Sonography ( $\mathbf{3}$ cr.) This course is a continuation of the objectives and applications of RS 471 with emphasis on the obstetrical portion of the ARDMS Registry. The course encompasses anatomy and vasculature, normal and congenital abnormalities, pathology and advanced scanning methods. Prerequisite: RS 471; Every Year, Spring

RS 472L Obstetrics Sonography Lab (0 cr.) Lab to accompany RS 472. (3 lab hrs.) Every Year, Spring

RS 473 Breast Sonography ( $\mathbf{3} \mathbf{c r}$.) This course is geared toward students who are pursuing breast certification by the ARRT or the ARDMS. Students gain a thorough understanding of the anatomy and physiology of the breast, as well as the normal and abnormal sonographic appearance of breast tissue. Students have an opportunity to utilize ultrasound equipment to learn to identify sonographic anatomy of the breast and develop scanning techniques. Prerequisite: registered radiologic technologists with the ARRT or medical sonography students, who have successfully completed RS 320. Exceptions require permission of the department. Prerequisite: RS 320; Every Year, Fall

RS 473L Breast Sonography Lab (1 cr.) This course is geared toward mammographers who are pursuing breast certification by the ARRT, as well as sonographers who are pursuing breast certification by the ARDMS. To produce high-quality diagnostic images, it is necessary for students to have a thorough understanding of image orientation, acoustic properties, scanning techniques and image documentation. Students have an opportunity to utilize ultrasound equipment to learn to identify sonographic anatomy of the breast and develop scanning techniques. The students learn to review and compare sonographic and mammographic images; Every Year, Fall

RS 480 Medical Sonography Clinic I (2 cr.) This practical course links theory presented in RS 320 and RS 470 with clinical applications. The course is designed to provide experience and develop proficiency with ultrasound scanning methods, protocols and utilization of equipment under the supervision of certified medical sonographers. Prerequisite: RS 470; Every Year, Summer

RS 481 Medical Sonography Clinic II (2 cr.) This course is a continuation of RS 480. Prerequisite: RS 480; Every Year, Fall

## RS 482 Medical Sonography Clinic III (2 cr.)

This course is a continuation of RS 480 and RS 481. Prerequisite: RS 481; Every Year, Spring

RS 483 Breast Sonography Clinical Practicum (2 cr.)
This course provides a clinical experience over a 15 -week period. Students are required to attend clinical three days per week. Application of skills related to patient care and management, radiographic pattern recognition and procedural variances are employed. Students gain invaluable experience needed for the American Registry of Radiologic Technologists certification examination. Prerequisites: RS 473, RS 473L; Every Year, Spring

RS 492 Ethical Behavior in Imaging Sciences (2 cr.) This distance-learning course provides an opportunity for exploring ethical and legal issues as they pertain to the practice of diagnostic imaging. Topics include ethical theory, behavior and dilemmas, legal responsibilities, informed consent, diversity and overview of future challenges as they apply to reallife situations in health care. Prerequisite: Registered Radiologic Technologist or health and science studies major or permission of instructor. Every Year, Summer

RS 498 Imaging Seminar ( 1 cr ) This seminar is designed to provide an overview of the field of imaging with emphasis on new developments in procedures, equipment and professional requirements for advanced responsibilities. Every Year, Fall

RS 499 Thesis ( 3 cr .) This capstone course is intended for diagnostic imaging majors in their final semester. Students are required to develop a research project as it relates to the field of diagnostic imaging. The project may relate to the student's chosen focus and must include either a formal thesis paper or poster presentation. Prerequisite: RS 454; Every Year, Spring

Courses offered as needed
RS 352 Radiologic Clinical Education (2 cr.) Prerequisite: RS 351
RS 401L Quality Management in Diagnostic Imaging Lab ( 0 cr.)
RS 417 Clinical Practicum: MRI (1 cr.)
RS 418 Clinical Practicum: MR I (2 cr.)
RS 419 MRI Clinical Practicum II (2 cr.) Prerequisite: RS 417
RS 421 Non-traditional Applications of Diagnostic Imaging ( 1 cr .)
RS 422 Non-traditional Applications of Diagnostic Imaging (1 cr.)
RS 425 Cadaver Imaging ( 1 cr .)
RS 430 Clinical Practicum: Mammography I ( 2 cr .)
RS 431 Clinical Practicum: Mammography II (2 cr.)

RS 434 Advanced Clinical Education: Cardiovascular Interventional Procedures (CVIT) (2 cr.)
RS 438 Clinical Practicum: Computed Tomography (CT) I (2 cr.)
RS 439 Clinical Practicum: Computed Tomography (CT) I I (2 cr.)
RS 440 Artifact Imaging Practicum (1 cr.)
RS 465 Advanced Imaging II: Equipment and Instruments (3 cr.)
RS 489 Independent Study (1 cr.)
RS 491 Open Topic ( 1 cr .)
RS 493 Open Topic ( 3 cr .)

## Diagnostic Medical Sonography

DMS 100 Foundations of Diagnostic Imaging (1 cr.) This course provides the student with a basic knowledge of the fundamentals of Diagnostic Imaging practice. Topics include defining diagnostic imaging as it relates to all imaging modalities, historical development of the profession, introduction to current and emerging practice arenas, and application of professional terminology. Students complete a self-study in medical terminology. This course is offered online during winter intercession. Every Year, Fall

## DMS 101 Introduction to Diagnostic Medical

Sonography ( 3 cr .) This is an introductory course to the field of diagnostic medical sonography. This course is taken in conjunction with DMS 101L. Throughout the course, the career of sonography is defined. Students are introduced to terminology pertaining to ultrasound as well as the physics responsible for its production. Crosssectional anatomy pertaining to the abdomen, thyroid gland, scrotum and prostate is presented. Normal sonographic anatomy of the abdomen and small parts also is presented. Prerequisite: DMS 100; Every Year, Spring

## DMS 101L Sonography Laboratory Practicum I

( 1 cr.) This is an introductory lab course to the field of diagnostic medical sonography. This course is taken in conjunction with DMS 101. To produce high-quality diagnostic images, it is necessary for the students to have a thorough understanding of image orientation, acoustic properties, scanning techniques and image documentation. The students have the opportunity to utilize ultrasound equipment to learn to identify normal sonographic anatomy of the abdomen and small parts and begin to develop scanning techniques. Prerequisite: DMS 100; Every Year, Spring

DMS 200 Sonography Physics and Instrumentation I ( 3 cr .) This core course is designed to prepare the student toward eligibility for the Sonography Physics and Instrumentation portion of the American Registry of Diagnostic Medical Sonographers (ARDMS) registry exam. The course encompasses the theoretical
concepts and practical applications related to ultrasound physics and instrumentation. Concepts include: sound, sound waves, pulse waves, intensities, interaction of sound and media, transducers, sound beams and display modes. These concepts are tied in with terms used in Introduction to Sonography course and how they apply to practical, daily scanning skills. Prerequisites: PHY 101, MA 275; Every Year, Fall

DMS 201 Sonography Physics and Instrumentation II ( 3 cr .) This core course is designed to prepare the student toward eligibility for the Sonography Physics and Instrumentation portion of the American Registry of Diagnostic Medical Sonographers (ARDMS) registry exam. The course encompasses the theoretical concepts and practical applications related to ultrasound physics and instrumentation. Concepts include: two dimensional imaging, real-time imaging, displays, harmonics, contrast agents, hemodynamics, Doppler, artifacts, quality assurance and bioeffects. These concepts are tied in with terms used in the Physics and Instrumentation I course and how they apply to practical, daily scanning skills. Prerequisites: PHY 101, MA 275, DMS 200; Every Year, Spring

DMS 205 Gross Anatomy Lab I (1 cr.)

## DMS 206 Gross Anatomy Lab II (1 cr.)

DMS 210 Abdominal and Small Parts Sonography ( 3 cr .) This course is designed to prepare the student toward eligibility for the abdomen (AB) portion of the ARDMS Registry. This course is taken in conjunction with DMS 210L. The course encompasses all aspects of abdominal and small parts scanning including: anatomy and vasculature, normal variants and congenital abnormalities, pathology, organ function and laboratory tests. The course continues to emphasize cumulative learning to include materials covered in prior ultrasound directed courses. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Fall

DMS 210L Abdominal and Small Parts Sonography Lab Practicum (1 cr.) This lab course is designed to prepare the student toward eligibility for the abdomen (AB) portion of the ARDMS Registry. This course is taken in conjunction with DMS 210. The course encompasses all aspects of abdominal and small parts scanning including: anatomy and vasculature, normal variants and congenital abnormalities, pathology, organ function and laboratory tests. The students utilize ultrasound equipment to learn to identify sonographic anatomy of the abdomen and small parts and develop scanning techniques. The students learn to review and critique sonographic images. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Fall

DMS 220 Vascular Sonography ( 3 cr .) This course is dedicated to the instruction of vascular sonography. It is designed to prepare students for the (VT) portion of the ARDMS registry exams. This course is taken in conjunction with DMS 220L. Anatomy pertaining to the vascular system is reviewed. Sonographic anatomy and pathologic conditions of the upper and lower extremity veins, the aorta, abdominal vasculature, the upper and lower extremity arteries, the carotid arteries and intracranial arteries are presented. Venous and arterial physiologic testing, interventional vascular procedures, surgery and other treatment options are introduced. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Spring

## DMS 220L Vascular Sonography Lab Practicum

 ( 1 cr .) This lab course is dedicated to the instruction of vascular sonography. It is designed to prepare students for the (VT) portion of the ARDMS registry exams. This course is taken in conjunction with DMS 220. Sonographic anatomy and pathologic conditions of extremity veins, the aorta, abdominal vasculature, extremity arteries, the carotid arteries and intracranial arteries are presented. The students utilize ultrasound equipment to learn to identify sonographic anatomy of the vascular system and develop scanning techniques. The students learn to review and critique sonographic images. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, SpringDMS 250 Sonography Clinical Education I (3 cr.) This course is designed to develop the student's sonographic scanning skills and interpersonal communication skills through experiences in the clinical setting. Prerequisites: DMS 101, BIO 101, BIO 102, MA 275; Every Year, Fall

DMS 260 Sonography Clinical Education II (3 cr.) This course is a continuation of DMS 250. Prerequisite: DMS 250; Every Year, Spring

DMS 270 Sonography Clinical Education III (5 cr.) This course is a continuation of DMS 260. Prerequisite: DMS 260; Every Year, Summer

DMS 297 Methods of Patient Care (3 cr.) Every Year, Spring

## DMS 297L Methods of Patient Care Lab (1 cr.) Every Year, Spring

DMS 330 OB/GYB Sonography ( 3 cr.) This course is designed to prepare the student toward eligibility for the OB/GYN ARDMS Registry exam. This course is taken in conjunction with DMS 330L. The course encompasses all aspects of gynecology, and obstetrical scanning including: anatomy and vasculature, normal
variants and congenital anomalies, pathology, organ function and laboratory tests. The course continues to emphasize cumulative learning to include materials covered in prior ultrasound directed courses. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Fall

## DMS 330L OB/GYN Sonography Lab Practicum

 (1 cr.) This lab course is designed to prepare the student toward eligibility for the OB/GYN ARDMS Registry. This course is taken in conjunction with DMS 330. The course encompasses all aspects of gynecology, and obstetrical scanning including: anatomy and vasculature, normal variants and congenital anomalies, pathology, organ function and laboratory tests. The students utilize ultrasound equipment to learn to identify sonographic anatomy of the female pelvis and develop scanning techniques. The students learn to review and critique sonographic images. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, FallDMS 340 Breast Sonography ( $\mathbf{3}$ cr.) This is a course dedicated to the instruction of the growing field of breast sonography. This course is designed to prepare the student toward eligibility for the breast portion of the ARDMS Registry. This course is taken in conjunction with DMS 340L. In order to produce high quality diagnostic images it is necessary for the students to have a thorough understanding of the anatomy and physiology of the breast as well as the normal and abnormal sonographic appearance of breast tissue. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Spring

## DMS 340L Breast Sonography Lab Practicum

( 1 cr .) This is a course dedicated to the instruction of the growing field of breast sonography. This lab course is designed to prepare the student toward eligibility for the breast portion of the ARDMS Registry. This course is taken in conjunction with DMS 340. The students utilize ultrasound equipment to identify sonographic anatomy of the breast and develop scanning techniques. The students learn to review and compare sonographic and mammographic images. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Spring

DMS 350 Musculoskeletal Sonography (3 cr.) This course is designed to prepare the student toward eligibility for the MSK ARDMS Registry. This course is taken in conjunction with DMS 350L. The course encompasses all aspects of MSK scanning including: anatomy and vasculature, normal variants, physiology, pathology, interventional procedures. The course continues to emphasize cumulative learning to include materials covered in prior ultrasound directed courses. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Spring

DMS 350L MSK Sonography Lab Practicum (1 cr.)
This lab course is designed to prepare the student toward
eligibility for the MSK ARDMS Registry. This course is taken in conjunction with DMS 350. The course encompasses all aspects of MSK scanning including: anatomy and vasculature, normal variants, physiology, pathology and interventional procedures. The students utilize ultrasound equipment to identify MSK sonographic anatomy of the upper and lower extremities and develop scanning techniques. The students learn to review and critique sonographic images. Prerequisites: DMS 101, BIO 101, BIO 102; Every Year, Spring

DMS 380 Sonography Clinical Education IV (3 cr.) This course is a continuation of DMS 270. Prerequisite: DMS 270; Every Year, Fall

DMS 390 Sonography Clinical Education V ( 3 cr.) This course is a continuation of DMS 380. Prerequisite: DMS 380; Every Year, Spring

DMS 414 Research Analysis and Critique (3 cr.) Every Year, Fall

DMS 425 Thesis (3 cr.) Every Year, Spring

## Drama (DR)

DR 101 (UC) Understanding Theater (3 cr.) This course presents an introduction to the practices and purposes of theater through play going, readings in theater history, dramatic theory and stage production work. Every Year, All

DR 140 (UC) Stagecraft ( 3 cr.) This course provides an introduction to the theory, techniques, materials and equipment of theater technology. Participants focus on the principles and practice of set and costume construction, scenery painting, tools and their safe usage, technical production organization and management. Materials are presented in a lecture format with extensive practical work, which is arranged by the instructor on an individual student basis (usually 2 hours per week). As part of the course, students are required to participate in technical production work for two productions during the semester. Every Year, All

## DR 150 (UC) Performance Fundamentals (3 cr.)

This course provides an introduction to those basic vocal, physical and improvisational skills necessary for successful performance in a variety of areas. Skills to be emphasized include vocal support and projection, physical relaxation and focus, diction, articulation and improvisational techniques. Students interested in broadcast journalism, newscasting, public relations and advocacy, as well as more theatrical areas of public performance, learn to work effectively in front of an audience while maintaining focus and energy. Every Year, All

DR 160 (UC) Acting I (3 cr.) Students are introduced to the basic principles of acting, including scene analysis, motivation, intention and character work. Students perform exercises, monologues and scenes. Every Year, All

DR 181 (UC) Improvisational Acting (3 cr.) This course introduces students to long-form improvisational theater. In this form, actors build scenes from scratch with only a one-word suggestion from the audience. This course is an introductory course and is suitable for students with or without prior performance experience. Every Year, All

DR 191 (UC) Theater Practice I (1 cr.) All basic theater components through the active production of a full-length play are studied in this course. Students may participate as actors, designers, stage managers, assistant directors, dramaturges and in various production roles. (Minimum 40 hours production work.) Requires permission of instructor. Every Year, All

DR 220 (UC) Voice and Movement (3 cr.) This course covers practical laboratory work in vocal production and movement, utilizing developmental techniques of Kristen Linklater, Alexander Feldenkrais, Jerzy Grotowski, Michael Chekhov, with special emphasis on individual coaching and problem solving. Studio work also may include techniques of characterization, including neutral and character mask exploration, work with classical texts, and acquisition of dialect skills. Every Year, Fall

DR 230 (UC) Directing for the Theater (3 cr.) This course serves as an introduction to the craft of the theatrical director. Topics include play analysis and interpretation, director's concept, visual composition and the history and theories of directing. Also included: methods of actor coaching, rehearsal techniques and working with the creative team of designers, dramaturges and production staff. As a final project, each student directs a scene or one-act play that is presented in a student workshop performance at the end of the semester. Every Year, Spring

DR 260 (UC) Acting for Film/TV (3 cr.) This is an intermediate studio course in which students gain experience in the specialized performance skills demanded by the film and television mediums. Students work on monologues and scenes that emphasize truth and emotional reality and receive training in the techniques of Stanislavski, Lee Strasberg and Sanford Meisner. When scheduling permits, students in Drama 260 collaborate with a mass communications video production class in filming/taping acting scenes. Every Year, All

DR 270 (UC) World Theater History and Dramatic Literature I (3 cr.) In this course, students integrate a multicultural history of world theater with the study of performance traditions and dramatic literature. Participants study the ritual foundations of theater through the theater of the early Renaissance period, emphasizing the importance of historical and literary research in devising actual production concepts for period plays. Students apply their knowledge in active and creative projects. Does not have to be taken in sequence with DR 275. Every Other Year, Spring

## DR 275 (UC) World Theater History and Dramatic

Literature II (3 cr.) Students trace the development of theater from the Renaissance through the late 19 th century and the beginning of modern drama. This study of performance traditions and dramatic literature emphasizes the importance of locating dramatic literature within its cultural, social and historical contexts. An understanding of theater history and literature is applied to creative projects in which students develop concepts for staging plays chosen from the course reading list. Does not have to be taken in sequence with DR 270. Every Other Year, Spring

DR 286 (UC) Comparative Drama/Play Analysis ( $\mathbf{3} \mathbf{~ c r}$.) Selected motifs and structures in drama are examined. Plays with common themes are compared in order to illuminate differing playwriting strategies. Comparative method cuts across rigid chronological and geographic compartments. The course includes visits to area theaters. Every Other Year, Fall

DR 290 (UC) Acting for Classical Stage (3 cr.) This intermediate studio course emphasizes the performance skills necessary to execute a classical role. Students work on monologues and scenes drawn from the plays of the Greek tragedians, Shakespeare, Moliere and the writers of the English Restoration. Students acquire the techniques necessary to speak verse and to physically embody a classical character. Every Other Year, Fall

DR 291 (UC) Theater Practice II (3 cr.) All basic theater components through the active production of a full-length play are studied in this course. Students may participate as actors, designers, stage managers, assistant directors, dramaturges and in other production roles. (Minimum 80 hours of student involvement, rehearsal journal and research project). Requires permission of instructor. Every Year, All

DR 307 (UC) Drafting and Rendering for Theater ( 3 cr .) This studio course explores the graphic techniques used by theatrical designers. Students learn to implement architectural lettering, generate hand drafting of ground plans and detail drawings, and effectively master color blending, rendered painting of
surface materials, and three-dimensional rendering. Students use acrylic paints and pencil drafting tools. During the course, students build a professional portfolio of work. Every Other Year, Spring

DR 340 (UC) Scenic Design ( 3 cr.) This course explores the principles of scenic design with emphasis on drawing, painting, drafting and model making. Students develop three-dimensional design solutions for an array of scenic situations through the conceptualization of spatial relationships. Prerequisites: DR 307, DR 307; Every Other Year, Fall

## DR 341 (UC) Lighting Design for the Theater

( 3 cr .) This course provides hands-on experience with the technical and design elements of stage lighting. Students use equipment and techniques directly relating to the theatrical productions scheduled in a given semester, using an artistic and collaborative approach and working with lighting systems in a theater. Prerequisites: DR 307, DR 307; Every Other Year, Spring

DR 342 (UC) Costume Design (3 cr.) This course provides an introduction to the theory, techniques, materials and equipment of costuming. Participants focus on costume construction, fabric, fasteners, sewing machine use, dyeing techniques and costume design. Extensive practical work is completed on an individual student basis. Students participate in costume construction for two productions during the semester. Every Other Year, Fall

DR 350 (UC) Playwriting ( 3 cr .) The course explores a wide range of playwriting strategies, exercises in technique and innovative methods through which new playwrights may begin to develop an individual voice and unique style capable of communicating their visions. Students read well-known plays of the modern era, analyzing the ways in which individual playwrights have employed conventional and unconventional structures in telling their stories. Students also complete a series of writing exercises designed to develop specific skills. As a culminating exercise, each student produces an original, one-act play. Prerequisite: EN 101; Every Other Year, Fall

DR 360 (UC) Advanced Acting ( 3 cr .) In this advanced studio course, student actors use exercises in acting technique to deepen and refine their ability to create reality on stage. The techniques portion of the class consists of exercises and theories drawn from the work and writings of Stanislavski, Strasberg, Meisner, Hagen, Adler, Lewis and Chekhov. Students explore the skills necessary to create a sense of truth on stage, whether working with realistic texts or those drawn from non-realistic and classical theater. Prerequisite: DR 160; Every Other Year, Fall

DR 370 (UC) Internship in Theater Administration, Production, Performance, Education or Theater and Community ( $\mathbf{3} \mathbf{c r}$.) Junior or senior theater majors complete a semester-long or summer-long internship in their focus area. Possible internship sites include education and humanities departments of regional and professional theaters, public schools, social service agencies, administration and production departments of professional and regional theaters; and professional theaters in the New York/New England area offering internship programs in performance. Prerequisite: junior or senior status in the major. Every Year, All

DR 386 (UC) Modern Drama ( 3 cr.) Students are introduced to principal movements in continental, British and American drama from Ibsen to the present. Emphasis is on the main currents of modern dramatic development through the critical analysis of representative plays. Every Other Year, Fall

DR 391 (UC) Theater Practice III (3 cr.) All basic theater components through the active production of a full-length play are studied in this course. Students play substantial roles in the production, either acting in a major role or taking on a major production responsibility (e.g., stage manager, assistant director, student designer). (Minimum 120 hours of student involvement, rehearsal journal and substantive dramaturgical/research project). Requires permission of instructor. Every Year, All

DR 410 (UC) Senior Project ( 3 cr.) This senior project in the theater major's chosen focus area may be research, production or performance-based, but must entail both analytic and creative endeavor involving substantial research, analysis and writing. A public presentation or performance is required. Depending upon their focus area, theater majors may opt to complete DR 300 Laboratory in Theater and Community as the senior project. A directed study, this course is the capstone experience for all theater majors. Prerequisite: Senior standing in the major. Every Year, All

Courses offered as needed
DR 200 (UC) Special Topics (3 cr.)
DR 210 (UC) Hands On: An Introduction to
Puppetry (3 cr.)
DR 300 (UC) Special Topics ( 3 cr.)
DR 305 (UC) Theater for Young Audiences (ED 362) ( 3 cr .)
DR 310 (UC) Laboratory in Theater and Community ( 3 cr.) Prerequisite: one course from $\mathrm{HS}, \mathrm{PO}, \mathrm{DR}$, SO level 200
DR 320 (UC) Advanced Voice and Movement (3 cr.) Prerequisites: DR 220
DR 325 (UC) Theater Seminar (3 cr.) Prerequisite: DR 101

DR 330 (UC) Advanced Directing (3 cr.) Prerequisites: DR 230
DR 335 (UC) Musical Theater Performance (3 cr.)
Prerequisite: one course from DR level 200
DR 345 (UC) Dance for the Musical Theater (3 cr.)
Prerequisites: DR 160; one course from DR level 200
DR 375 (UC) History and Dramatic Literature of the Contemporary Theater (3 cr.)
DR 380 (UC) Theater Administration (3 cr.)
Prerequisite: DR 101
DR 386H (UC) Honors-Modern Drama (3 cr.)

## Economics (EC)

EC 111 (UC) Principles of Microeconomics (3 cr.) This course examines scarcity and choice, demand and supply, government price setting and taxes, elasticity, production and cost, and the theory of the firm. A writing component is required. Every Year, Fall and Spring

EC 111H (UC) Honors Principles of Microeconomics ( 3 cr .) This examination and application of basic economic theory considers scarcity and choice, demand and supply, elasticity, consumer theory, firm theory and market structure. A writing component is required. Calculus is used in this course. Every Year, Fall

## EC 112 (UC) Principles of Macroeconomics (3 cr.)

This course examines the determinants of national income, unemployment and inflation. In addition, students learn how fiscal policy and monetary policy influence the economy. A writing component is required. Prerequisite: EC 111; Every Year, Fall and Spring

EC 112H (UC) Honors Principles of Macroeconomics ( 3 cr .) This examination and application of basic macroeconomic theory covers scarcity and choice, unemployment and inflation, national income accounts, Keynesian and alternative models of income determination, fiscal policy, and monetary theory and policy. A writing component is required. Calculus is used in this course. Prerequisite: EC 111; Every Year, All

EC 206 Urban Economics (3 cr.) This course provides an economic analysis and evaluation of urban problems organized around the inherent conflict between private enterprises and the maintenance of the quality of life in urban areas. Economic factors in growth of cities and metropolitan areas are explored. Topics include the location of economic activity, land use patterns and transportation, combating poverty and poor housing, provision of adequate health care, organization and financing of public activities and problems of decline and growth. Prerequisite: EC 112; Every Other Year, Spring

EC 211 Intermediate Microeconomics (3 cr.) This advanced analysis of microeconomic theory includes study of consumer theory with use of indifference curves and budget constraints, firm theory with use of isoquants and isocosts, market structures and market failures. Calculus is used in this course. Prerequisites: EC 112; MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141; Every Year, Spring

EC 212 Intermediate Macroeconomics (3 cr.) This course helps students to understand two phenomena: long-run growth and business cycles. The section of the course devoted to long-run growth emphasizes the importance of technological change for increasing the standard of living. The section devoted to business cycles emphasizes the causes of these cycles and the roles of fiscal and monetary policy in preventing business cycles. Computer assignments using spreadsheet or statistical software are an essential part of this course. Calculus is used in this course. Prerequisites: EC 112; MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141; Every Year, Fall

EC 250 International Economics ( 3 cr .) This course examines international trade theories, trade policies, exchange rate determination models and macroeconomic policies in open economies. Prerequisite: EC 112; Every Other Year, Fall

EC 271 Applied Statistical Methods ( 3 cr.) This course teaches statistical methods and concepts used in business decision making. Topics include descriptive statistics, sampling distributions, estimation, hypothesis testing, correlation and linear regression. Every Year, All

EC 271H Honors: Applied Statistical Methods (3 cr.) This course teaches statistical methods and concepts used in business decision making. Topics include descriptive statistics, sampling distributions, estimation, hypothesis testing, correlation and linear regression. Prerequisite: MA 107, MA 118 or MA 141; Every Year, All

EC 304 Environmental Economics (3 cr.) This course examines environmental issues and their economic impact. Topics include economic efficiency both in market and nonmarket activities; dynamic efficiency for nonrenewable and nonrenewable resources; how environmental problems are modeled from an economic perspective; and principles of environmental policy design at the state and federal level. Prerequisite: EC 112; Every Other Year, Spring

EC 315 Urban and Real Estate Economics (3 cr.) In this course, students develop an understanding of how urban structure, policies and industrial composition impact household and commercial locational choices and real estate markets. The material covered
includes studies of the evolution of economic activities, demographic trends within and across cities, public and private transportation and local government taxing and spending behaviors as they affect real estate. Prerequisite: EC 112; Every Other Year, Fall

EC 320 Law and Economics ( 3 cr.) This course covers the application of microeconomic theory to the law. Topics covered include the efficiency and welfare aspects of property rights, contract law, torts and criminal law, and the impact of changes in the law on economic agents. Prerequisite: EC 112; Every Other Year, Fall

EC 325 Sports Economics (SPS 325) (3 cr.) The primary focus of this course is professional sports; microeconomic foundations of sports economics, industrial organization of the sport industry, antitrust and regulation, financing sports stadiums, labor issues, and the economics of college sports. Prerequisite: EC 112; Every Other Year, Fall and Spring

EC 330 Public Finance (3 cr.) This course examines the role of government in the economy. Tools of economic analysis are applied to government taxation and expenditure policies. The efficiency and welfare implications of government intervention in the economy are analyzed. Prerequisite: EC 112; Every Other Year, Fall and Spring

EC 341 Money and Banking ( 3 cr .) This examination of the institutions and theory of monetary systems considers the domestic and international macroeconomic impacts of changes in monetary policy. Prerequisite:
EC 112; Every Other Year, Spring
EC 352 Industrial Organization (3 cr.) Market structures are examined with an emphasis on the imperfectly competitive markets. Market failures and regulation and antitrust also are considered. Prerequisite: EC 112; Every Other Year, Fall

EC 361 Labor Economics (3 cr.) This course examines the application of microeconomic theory to labor markets and also considers, unions, labor market, immigration, discrimination and other topics. Prerequisite: EC 112; Every Other Year, Spring

EC 365 Econometrics ( 3 cr.) This course provides an introduction to the statistical methods and tools used in applied economic research. Topics include model specification estimation, and inference in the simple and multivariate regression model. The use of statistical software is required. Prerequisites: EC 112, EC 271; Every Year, Spring

EC 412 Economic Growth ( 3 cr .) This course discusses the determinants of long-run economic growth. In
particular, it discusses how government policy promotes and inhibits economic growth. The course is a combination of analytical models, empirical facts and policy discussion. Prerequisite: EC 112; Every Other Year, Spring

EC 450 Senior Seminar ( 3 cr .) This capstone seminar is designed for senior economics majors. Students draw on the tools developed in the economics program to produce a research paper or project on an original topic. Students may be required to present their results and conclusions to the class and other faculty members. Topics are chosen by the student in consultation with the instructor. Prerequisites: one group: EC 365, EC 211; EC 365, EC 212; Every Year, All

EC 452 Game Theory ( 3 cr .) Applied game theory analysis of real-world strategic environments in economics and business. Topics include: Normal form games, Nash equilibrium, mixed strategies, repeated games, sequential games with perfect and imperfect information, subgame perfect equilibrium, and principal-agent problems. Prerequisite: EC 112; Every Other Year, Spring

## Courses offered as needed

EC 363 American Economic History (3 cr.) Prerequisite: EC 112
EC 364 Managerial Economics ( 3 cr .) Prerequisite: EC 112
EC 366 Advanced Econometrics ( 3 cr .) Prerequisite: EC 365
EC 498 Special Topics in Economics (3 cr.)

## Education (ED)

ED 140 Introduction to Public Education and the Teaching Profession ( 1 cr .) This course is open to all underclass students (freshmen and sophomores) who are interested in public education in the U.S. The course is required for students who plan to enroll in the five-year MAT program, as it provides basic knowledge of public education and the teaching profession including current functions, trends and future expectations. The course also addresses issues related to the teaching profession including licensure, interstate certification, dual and cross-endorsements and teacher and pupil demographics across the U.S. Finally, the course provides opportunities for applicants to practice and refine writing skills essential for success in the five-year MAT program. Course is graded pass/fail. Every Year, Fall and Spring

## ED 250 (UC) Diversity, Dispositions and

 Multiculturalism (3 cr.) This course examines the social, economic and political organization of public education in the United States, with a particular emphasis on the implications for historically marginalized populations. The course explores diversity and multiculturalism on the individual aswell as institutional level, with a focus on concepts such as privilege, discrimination, racism and social transformation. Prerequisite: EN 101, EN 103H or EN 101; Every Year, Fall and Spring

ED 260 (UC) Social and Philosophical Foundations of Education (3 cr.) This course introduces students to the social and philosophical principles that underlie the education system in the United States. Education is defined in the broad sense to refer to not only what happens in schools and universities, but also in the family, when people interact with media, with their social groups and so forth. The course examines a wide range of philosophical questions related to education and schooling in the United States, including: What is the purpose of schooling? What does it mean to be educated? And what role should educational institutions play in our lives? Prerequisite: EN 101; Every Year, Fall and Spring

ED 301 Elementary Field Study I (3 cr.) Students gain experience in an elementary school setting. They explore the complexities of the work of teachers and develop skills in ethnographic field observation as a tool for reflection and research. This course requires 20 hours of fieldwork over 10 weeks. Prerequisite: admission to the MAT program. Every Year, Fall

ED 302 Elementary Field Study II (3 cr.) Students gain experience in an elementary school setting. They analyze the conceptual and chronological development of the American public school system and examine multiple ways of interpreting historical events and their impact on schooling. This course requires 20 hours of fieldwork over 10 weeks. Prerequisite: ED 301; Every Year, Spring

ED 310 Field Study I (3 cr.) Students gain experience in a middle school or high school setting. They explore the complexities of the work of teachers and develop skills in ethnographic field observation as a tool for reflection and research. The course requires 20 hours of fieldwork over 10 weeks. Admission to the MAT program is required. Every Year, Fall

ED 311 Field Study II (3 cr.) Students gain experience in a middle school or high school setting. They analyze the conceptual and chronological development of the American public school system and examine multiple ways of interpreting historical events and their impact on schooling. This course requires 20 hours of fieldwork. Prerequisite: ED 310; Every Year, Spring

ED 315 Diversity, Dispositions and Multiculturalism ( 3 cr .) This course helps students understand that teaching is a social enterprise laden with moral responsibility and that, as teachers, they must be willing
to act as agents for social justice in their classrooms and in their schools. Students acquire the dispositions, cultural knowledge and competencies to adapt their curriculum and instructional skills for culturally responsive classroom practice. Admission to the MAT program is required. Every Year, Fall

## ED 320 Social and Philosophical Foundations of

 Education (3 cr.) This course introduces students to the field of education through the linking of some of the philosophical and social foundations of education to the students' own pedagogical experiences. Recognizing that teaching is a holistic process, students have an opportunity to analyze the ways in which these foundations are related to pedagogical practice. Specifically, this course challenges students to examine critically many of the assumptions and goals regarding teaching and learning in light of some of the central historical ideas on education. Prerequisite: ED 301; Every Year, SpringED 325 Diversity in the Classroom (3 cr.) This course helps students understand that teaching is a social enterprise laden with moral responsibility and that, as teachers, they must be willing to act as agents for social justice in their classrooms and in their schools. Students acquire the dispositions, cultural knowledge and competencies to adapt their curriculum and instructional skills for culturally responsive classroom practice. Admission to the MAT program is required. Every Year, Fall

ED 401 Elementary Field Study III (3 cr.) Students gain experience in an elementary school setting. Participants develop an understanding of lesson planning and objective designing to ensure that every student learns. Students also become familiar with the state standards and grade level equivalent learning goals as they relate to high-stakes testing and outcomes-based education. This course requires 20 hours of fieldwork over 10 weeks. Prerequisite: ED 302; Every Year, Fall

ED 402 Elementary Field Study IV (3 cr.) This course provides teacher candidates in the elementary program with the opportunity to apply their knowledge and skills of early literacy instruction to small group or individual tutorial situations. Students are required to complete 20 hours of literacy instruction/seminar reflections in a supervised setting. Instruction includes diagnostic assessment, preparation and implementation of lessons based on initial and ongoing assessment and final assessment reporting. Weekly seminar discussions and reflection questions focus on the analysis of the pedagogy provided in the clinical settings. Prerequisite: ED 401; Every Year, Spring

ED 408 Classroom Environment (3 cr.) This course explores how to create a classroom environment that is
conducive to learning for all students. The spectrum of theories of classroom discipline is explored with special emphasis on the theory of discipline with dignity.
Prerequisite: ED 311; Every Year, Fall
ED 412 Field Study III (3 cr.) Students gain experience in a middle school or high school setting. Participants evaluate the ethical choices teachers make and analyze the effects of these choices on students and the school community. Also, students engage in self-evaluation and assess their value-laden perspectives in light of the professional code of teacher responsibilities. This course requires 20 hours of fieldwork over 10 weeks. Prerequisite: ED 311; Every Year, Fall

ED 413 Field Study IV ( 3 cr.) Students gain experience in a middle school or high school setting. Participants discuss the teacher's responsibility to communicate with parents and community agencies to promote K-12 students' learning and well-being. Also, students develop problem-solving skills to ensure that every student learns. This course requires 20 hours of fieldwork over 10 weeks. Prerequisite: ED 412; Every Year, Spring

ED 421 Social and Philosophical Foundations of Education (3 cr.) This course is an inquiry into the institutional structures, social values and philosophical foundation of education. Teacher and student reflections focus on issues pertaining to the teaching-learning process, including freedom/authority/discipline; cultural diversity; multiplicity of learning modes; mind-body integration; community; alienation/violence; sexism/ racism/elitism; and teacher/student roles. Prerequisite: ED 310; Every Year, Spring

## ED 436 Teaching Literacy in the Primary Grades

( 3 cr .) This course provides knowledge of diagnosis, assessment and instructional strategies for the development of early literacy in Grades K-3 and knowledge of the Common Core State Standards for early language arts instruction. Emphasis is on the development of teaching strategies necessary for the success of early readers and writers. Prerequisite: ED 401; Every Year, Spring

## ED 440 Learning and Teaching in the Elementary

 Classroom ( 3 cr .) This course explores how learning theory and philosophy are linked to the teaching-learning process. Students investigate elementary curricula and ways teachers plan units, lessons and assessment of learning to meet the learning needs and styles of their pupils. The Common Core State Standards are used to reflect upon the content and appropriate learning opportunities in grades K-6 elementary classrooms. Students prepare units, lessons and assessment activities. Prerequisite: ED 302; Every Year, FallED 441 Elementary Classroom Management and Design (3 cr.) This course focuses on the philosophy and practice of behavioral theory and applied behavior analysis as they relate to teaching in the elementary classroom. Students learn how to develop a positive and supportive learning climate and explore teacher behaviors that foster learning, independence and appropriate behavior for elementary children.
Prerequisite: ED 302; Every Year, Fall
ED 468 Teaching Mathematics in the Primary Grades (3 cr.) This course introduces students to the instructional methods and curricular materials used to enhance the instruction of mathematics in the primary grades and knowledge of the Common Core State Standards for primary level mathematics instruction. Students learn to develop lesson plans and assessment methods that positively affect the learning of mathematics in grades K-3. Students are required to apply this knowledge within their field placement to better understand the relationship of theory and practice in the instruction of mathematics in the lower elementary grades. Prerequisite: ED 401; Every Year, Spring

## Engineering (ENR)

ENR 110 The World of an Engineer (3 cr.) This course introduces students to the study and practice of engineering, including overviews of specific disciplines. Participatory focus involves group design projects, hands-on learning, computer work, team building and engineering ethics discussions. Every Year, Fall

## ENR 210 Engineering Economics and Project

 Management ( 3 cr .) This course provides an introduction to the concepts of economics/finance/ costing and explains how these affect the engineering functioning and contribute to decision making in engineering operations. A portion of the course covers the concepts of project management, team building and leading teams that are used throughout the program and in professional practice. Prerequisite: MA 141 or MA 151; Every Year, SpringENR 395 Professional Development Seminar (1 cr.) Through discussions, case studies and guest speakers, students are introduced to topics on engineering professionalism, ethics and licensure as well as relevant innovations in engineering to prepare them to enter the workplace as engineering professionals. Prerequisite: Junior status in the major or permission of instructor. Every Year, Fall

ENR 490 Engineering Internship (1 cr.) Students gain experience by employing engineering skills in a professional setting under the guidance of practicing
engineers. Students must obtain approval and register prior to starting the work experience. Prerequisite: Must have completed 3rd year engineering curriculum for major. Faculty approval required. Prerequisite may be waived with permission of adviser. Prerequisite: ENR 395; Every Year, All

## English (EN)

EN 101 (UC) Introduction to Academic Reading and Writing (3 cr.) EN 101 introduces students to the ways that writing is grounded in reading and that inquiry is essential to learning. Through close reading of academic texts, students are given authority as learners to undertake serious intellectual projects that emphasize critical and creative thinking. Instructors guide students through sequenced reading and writing assignments, and highlight the revision process of multiple-draft writing that leads to increasingly complex thinking and rhetorical presentation. As a community of learners, students begin to recognize academic writing as a site where knowledge is produced, understood and communicated. Portfolio assessment; grade of C- or better required to pass EN 101. Full-time students are expected to have completed EN 101 and EN 102 by the end of three semesters. Refer to Academic Good Standing Policy for Undergraduates for details. Every Year, All

## EN 101 I (UC) Introduction to Academic Reading

 and Writing Intensive (3 cr.) EN 101I is essentially the same course as EN 101; however it meets five hours per week. This class is intended for students who feel that they may need more support in complex reading and/or essay writing. The additional class time allows for more contact with the professor and more feedback and discussion with peers. Portfolio assessment; grade of C- or better required to pass. Full-time students are expected to have completed EN 101 and EN 102 by the end of three semesters. Refer to Academic Good Standing Policy for Undergraduates for details. Every Year, All
## EN 102 (UC) Academic Writing and Research

(3 cr.) Building on the practices of EN 101, this course introduces students to the kind of critical and creative thinking necessary to understand the relationship between academic research and argumentation. Working primarily with literary texts and secondary sources, students undertake projects that focus on a field of inquiry and that lead to increasingly proficient rhetorical presentation. Students develop a practical understanding of the ways in which critical thinking, writing and research all depend upon a shared process of inquiry that can be applied across disciplines and within their chosen majors. Portfolio assessment. Full-time students are expected to have completed EN 101 and EN 102 by the end of three semesters. Refer to Academic Good Standing Policy for

Undergraduates for details. Prerequisite: EN 101 or EN 101I; Every Year, All

EN 102H (UC) Honors Academic Writing and
Research ( $\mathbf{3}$ cr.) This EN 102 class is reserved for Honors Program students and exceptional students from Fall EN 101 classes. Portfolio assessment. Prerequisite: EN 101; Every Year, Spring

EN 103H (UC) Advanced Academic Writing and Research (3 cr.) This course satisfies all first-year writing requirements. Through close readings of expository prose and short fiction, students learn to write for academic success. EN 103 H integrates the practices of academic reading and writing so that students learn to think critically and creatively as they conduct inquiry in diverse and increasingly rigorous scholarly contexts. With instructor guidance, students undertake self-directed projects and develop rich collaborations among peers, including shared commentary, research and revision, enabling students to identify and transfer best practices to their future performance as readers, writers and thinkers across disciplines, and within their chosen majors. Portfolio assessment. Placement score of 6 required. Every Year, Fall

EN 150 Advanced Revision and Editing (1 cr.) This five-week course teaches the principles of revising and editing an original argumentative essay on a controversial issue in contemporary American society with an emphasis on a critical approach to weighing evidence from a range of ideological arenas. Weekly drafts undergo intensive instruction on informational flow, topic strings, transitions and introductory and conclusive structures. (Required of all minors in English.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Spring

EN 201 Creative Writing (3 cr.) This course blends seminar and workshop approaches to the reading and writing of imaginative literature. Students compose and revise original works in multiple genres, maintain a writer's journal, and assemble a comprehensive final portfolio. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, All

EN 202 Introduction to Creative Nonfiction (3 cr.) Students read a variety of short works with an eye toward understanding the stylistic techniques employed by contemporary writers of creative nonfiction. Students are then asked to employ a number of stylistic techniques in their own short works of creative nonfiction. The class emphasizes reading like a writer, writing as a process, the writing workshop, and careful revision and editing. Prerequisite: EN 101, EN 102, EN 102 H or EN 103 H ; Every Year, Fall

EN 203 Practicing Stylistics (3 cr.) Students review and practice the fundamental rules governing language, focusing specifically on grammar and syntax. They analyze and practice their own emerging style through imitation and revision exercises across a variety of poetic, fictional and nonfictional models. Required reading includes The Art of Styling Sentences, Exercises in Style and Stylish Academic Writing. The class culminates with a deeply revised portfolio of original efforts and a final referenced essay on what style means-and how to achieve it. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, All

EN 204 Critical Theory and Practice (3 cr.) This course introduces students to how literature is studied in the discipline of English. Elementary concepts of literary and critical theory are discussed with reference to both literature and scholarly criticism. Attention is paid to writing and researching in the discipline in an effort to prepare students for upper-division courses and the Senior Seminar. Course should be taken in sophomore or junior year. Prerequisite: EN 101, EN 102, EN 102H, EN 103H; Every Year, Spring

EN 206 Introduction to Writing Poetry (3 cr.) This course gives students a strong foundation in the formal traditions of poetry in English from blank verse to free verse. Students work closely with Robert Pinsky's The Sounds of Poetry to get a grasp of the basic, formal principles of the art, the better to hear poems and understand the ways in which they work. Students explore a variety of poetic forms, reading and discussing poems that exemplify these forms and practicing their own poems based on these models. For the final project of the semester, students assemble a portfolio of all their work, introduced by a reflective essay. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Fall

EN 210 (UC) The Art of Poetry (3 cr.) Students undertake close reading and discussion of the genre of poetry not limited by historical period. Attention is paid to technique, formal and stylistic qualities, and repeated themes in an attempt to experience and understand poetry. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Spring

EN 212 (UC) The Personal Essay (3 cr.) In this advanced writing course, students read, write about and create various strains of the personal essay while sampling British and American permutations of the letter, the diary and the journal-from the 18th to the late 20th century. The Reader Response Journal is the central mode for preparing reading and discussion of assigned canonical essayists, and these journals are then revised for the writing of several brief academic and personal essays. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Fall

EN 213 (UC) The Nature Essay (3 cr.) This advanced writing course focuses on the history and evolution of human thinking about nature and our relationship to it. Looking first at Biblical, Greek, Roman and Medieval sources, students concentrate on American writers, beginning with Lewis and Clark and ending with a longer reading by a contemporary naturalist writer (e.g., Annie Dillard, Norman Maclean, Terry Tempest Williams, Barry Lopez). In-class journals and formal writing assignments are used to advance discussion and emphasize persuasion and argumentation. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Fall

EN 215 (UC) The Travel Essay (3 cr.) This genrebased advanced writing course provides a historical overview of nonfiction, travel writing and its emergence as an area of scholarly interest. It explores the ways in which travel writers create narrative personae, construct essays to persuade readers to their perspective, and help to compose the identities of the peoples and cultures about whom they write. Emphasis is on the sustained examination and practice of student writing. Prerequisite: EN 101, EN 102 or EN 103H; Every Other Year, Spring

EN 220 (UC) The Short Story as a Genre (3 cr.) This course covers the development of the short story from the 19th century to the present with intensive study of masterpieces of internationally recognized masters: Hawthorne, Poe, Melville, Wharton, James, Tolstoy, Joyce, Lawrence, Hemingway, Faulkner, Erdrich and others. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Spring

EN 222 Comics and Graphic Novels ( 3 cr.) This course explores comics and graphic novels emphasizing contemporary works. Students consider the (often unnoticed) complexity of the comics form, as well as its historical development and representative genres. Readings are drawn from many different genres; the readings also balance genders and survey a wide variety of national origins, the better to represent the inevitable human diversity embodied in comics creation and reading. Students have the chance to develop an original portfolio that focuses on any creator, genre or theme of their choosing. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Fall

EN 235 (UC) Literature by Women (WS 235) (3 cr.) With the question of what it means to extract a canon of literature defined by gender as its center, this course enables students to consider the ways in which women have contributed a language and form to the literary tradition. In particular, the course explores the process by which this literature, often written from the margins of experience, has shaped how we read today.

Varied female authors are discussed, including Woolf, the Brontës, Emily Dickinson, Zora Neal Hurston, Sylvia Plath, Toni Morrison, Sandra Cisneros, Jamaica Kincaid, Leila Abouzeid, and Maxine Hong Kingston, among others. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Fall

## EN 240 (UC) Survey of English Literature I (3 cr.)

 The development of English literature as reflected in the works of major authors from Anglo-Saxon times through the 18th century is explored. Students gain an understanding and appreciation of literature through the study of the cultural background, the literary work itself, and the life of the author. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, FallEN 260 (UC) Survey of American Literature I (3 cr.) This course explores the development of American literature as reflected in the works of major authors and works from the Colonial era through the Civil War. Students gain an understanding and appreciation of this literature through study of the cultural background, the literary work itself, and the life of the author. Major authors may include Bradstreet, Emerson, Thoreau, Whitman, Hawthorne, Melville and Davis. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Fall

EN 265 (UC) Survey of African-American Literature ( 3 cr .) This survey course explores African-American literature from Colonial times to the present, concentrating on 20th-century literature. Emphasis is placed upon close reading of selected texts in light of the changing sociocultural conditions faced by African Americans. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Spring

## EN 270 (UC) Survey of American Literature II

( 3 cr .) This course explores the development of American literature as reflected in the works of major authors from the Civil War to the present. Students gain an understanding and appreciation of literature through study of the cultural background, the literary work itself, and the life of the author. Major authors include Emily Dickinson, Fitzgerald, Hemingway, Faulkner, T.S. Eliot, Philip Roth and Marilyn Robinson. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Year, Spring

## EN 280 (UC) The European Tradition in Literature

 I ( $\mathbf{3} \mathbf{~ c r}$.) This survey course presents selected European masterpieces, both written in English and in translation, including representative selections from Homer to 1700. Emphasis is on literary and philosophic values with attention to methods of literary analysis as applicable to works by Virgil, Dante, Cervantes and others. The course presents historical backgrounds and study in thegeneric traditions of literature. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Fall

## EN 281 (UC) The European Tradition in Literature

II ( $\mathbf{3} \mathbf{~ c r}$.) This survey course presents selected European masterpieces, both written in English and in translation, including representative works from 1700 to the present.
Emphasis is on literary and philosophic values with attention to methods of literary analysis as applicable to the works of Moliere, Voltaire, Rousseau, Goethe, Pushkin, Flaubert, Dostoyevsky, Chekhov, Mann and Kafka. The course combines historical backgrounds and study in the generic traditions of literature. Prerequisite: EN 101, EN 102, EN 102H or EN 103H; Every Other Year, Spring

EN 301 Advanced Fiction-Writing Workshop (3 cr.)
This advanced fiction-writing course uses a workshop approach to help students understand and experience the process of drafting, revising and editing short stories, as well as the importance of reading and critiquing the work of their peers. Students read contemporary short fiction and give formal presentations on print and web-based literary journals and magazines. Each student chooses a public venue (e.g., public reading, website, blog, etc.) and presents selections from his/her work. The final portfolio represents the breadth of the students' work, including multiple drafts of stories, workshop comments, reading responses and a writer's journal. Prerequisite: EN 201 or EN 202; Every Year, Fall

EN 302 Advanced Creative Nonfiction (3 cr.) This advanced writing course focuses on the reading, analyzing and writing of creative nonfiction. Students read essay and book-length works of creative nonfiction with an emphasis on understanding authorial presence, issues of audience, questions of truth and memory and artistic techniques. Students are asked to employ what they learn from studying masterworks of creative nonfiction to their own longer works of creative nonfiction. Prerequisite: EN 201 or EN 202; Every Year, Spring

## EN 303 The Art of Audio Narrative (FVI 380 GDD

 303) ( 3 cr.) This course is about storytelling. Students learn the basics of multitrack audio recording and mixing. They write and produce fiction and nonfiction audio narratives. Each project is shared in a stimulating and mutually supportive workshop environment. Students read and listen widely to gain a sense of the history and theory of radio art. Participants also spend time identifying target audiences and looking at ways to distribute student work to the larger world of public and independent radio. Prerequisite: EN 201 or EN 202; Every Other Year, FallEN 304 Junior Seminar in Critical Theory (3 cr.) This course presents a study of the major critical theories: formalism, deconstruction, psychoanalysis, Marxism, feminism, new historicism and cultural studies. Readings from primary theoretical texts pay special attention to understanding and researching different modes of criticism currently used, and practicing how these modes aid in doing textual analysis and interpretation. This course is taken in the junior year. Prerequisite: one course from EN level 200; Every Year, Spring

## EN 306 Advanced Poetry Writing Workshop (3 cr.)

 This course assumes a prior foundation in the reading of poetry and the practice of writing in traditional forms and seeks to push students to write original poems in a contemporary idiom. Students write a poem on assignment each week, drawing from readings of contemporary poetry collections as well as additional model poems. Students perform their own work publicly and attend literary events to observe and respond to how other writers perform their work. This practice culminates in a public reading given by the whole class. The final project is to assemble a chapbook of poems. Prerequisite: EN 201 or EN 206; Every Year, SpringEN 308 Composing America (3 cr.) This researchbased, advanced composition and period course is a hybrid that crosses the divide between the study of literature and the study of rhetoric. Students investigate the intersection between literature and literacy/composition practices in the U.S. between World War II and the Vietnam War (1939-72). Participants consider how the U.S. has been composed through the acts of reading and writing by studying a variety of texts (poetry, drama, novels, travel, anthropology, folktales, music, theory, film and art). Prerequisites: EN 101, EN 102; one course from EN level 200; Every Other Year, Fall

EN 320 Studies in the Novel ( 3 cr.) Students explore the development of the novel from its beginning to the present through discussion of the theories of prose narration. Special attention is given to characteristics of the genre. The course may be repeated for credit when topic changes (e.g., American novel, English novel, Continental novel). Prerequisite: one course from EN level 200; Every Third Year, All

EN 322 Modern British Literature (1900-1945) (3 cr.)
This course focuses on readings in British literature of the early 20 th century. Students study writers such as Conrad, Lawrence, Joyce, Yeats and Eliot against a background of social and political crises from 1900 to 1950. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 323 Contemporary British Literature (1945-
Present) ( 3 cr.) Devastated by Hitler's Blitz, Britain
watched its empire crumble and its global power recede. In a nation of social troubles, British writers began again to write for the public. From the Beatles to the Rushdie affair, British culture has thrived in the face of rapid change by producing a literature of social engagement and aesthetic vibrancy. This course includes texts that speak to these wider historical currents and the aesthetic and intellectual life of Britain since 1945. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 324 The Gothic Novel (3 cr.) This course offers a historical survey of the Gothic genre, from Horace Walpole's 1764 "The Castle of Otranto" leading to its many variations in subsequent centuries: terror narratives, the political gothic, the female gothic, science and crime and the postmodern gothic. The course considers the Gothic genre's deployment in historical, social and cultural contexts, as well as the structural and epistemological changes that have emerged since the late 18th-century. Prerequisite: one course from EN level 200; Every Third Year, Fall

## EN 325 History of the English Language (3 cr.)

This course introduces students to the origins and development of the English language and to its social, cultural and historical contexts. It is required of all English majors in the MAT program. Prerequisite: one course from EN level 200; Every Year, Spring

EN 338 American Literature by Women of Color (WS 338) (3 cr.) This course explores the diverse literary traditions, themes and narrative strategies employed by American women of color, including black, Latina, Asian and Native American female writers. Students examine how race, ethnicity and gender affect form, content, language and style in literature. Writers include: Silko, Erdrich, Morrison, Walker, Angelou, Giovanni, Tan, Kingston, Yamamoto, Cisneros and Viramontes. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 340 Immigrant Fictions ( $\mathbf{3} \mathbf{c r}$.) This course explores fiction by/about immigrants, examining U.S. history and culture through their stories. Participants focus primarily on 20th- and 21st-century texts by Jewish, Latin American, Caribbean, Asian and African migrants to understand how they represent the race, class and gender barriers (and opportunities) that underlie the American Dream. We also use critical scholarship on racial formation, immigration, citizenship, human rights and diaspora to produce presentations and essays. Students use these concepts to help theorize how the most marginalized aliens have made America the complex and contradictory nation it is today. Prerequisite: one course from EN level 200; Every Other Year, Spring

## EN 341 Chaucer and the Medieval Period (3 cr.)

This course presents a critical interpretation, in its historical setting, of the chief imaginative work in England of the period, "The Canterbury Tales." Other representative works include "Gawain and the Green Knight," selections from Dante's "Divine Comedy," other dramatic and lyric poetry. Attention is given to the cultural and artistic setting. Prerequisite: one course from EN level 200; Every Other Year, Fall

## EN 343 Shakespeare: Histories and Comedies

(3 cr.) Extensive structural and thematic analysis of Shakespeare's histories and comedies is the basis of this course, which concentrates on selected problems of scholarship, criticism and performance. Prerequisites: two courses from EN level 200; Every Other Year, Fall

## EN 344 Shakespeare: Tragedies and Romances

( 3 cr .) Extensive structural and thematic analysis of Shakespeare's tragedies and romances is the basis of this course, which concentrates on selected problems of scholarship, criticism and performance. Prerequisites: two courses from EN level 200, 300; Every Other Year, Fall

## EN 345 English Literature of the Renaissance

( 3 cr .) This intensive study of the principal genres of 16th-century English literature, including lyric poetry (Sidney) and Romance such as "The Faerie Queen" (Spenser), places special emphasis on the major works of the Elizabethan period. Some attention is given to the medieval background, Renaissance art and music, and continental literature. Prerequisite: one course from EN level 200; Every Third Year, Spring

EN 348 Milton and the 17th Century ( 3 cr.) This intensive study of literature within this revolutionary period emphasizes the cultural context for poetry, prose and drama in England from 1603 to about 1665. The course focuses on Milton's "Paradise Lost" and on works of other major writers, such as the metaphysical poets (Donne, Marvell, Herbert), and Ben Jonson, Francis Bacon and Thomas Middleton (drama). Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 350 18th-Century British Literature (1660-1800)
( 3 cr .) The idea that literature is changing in form and content as well as in its social function is central to the study of literature in the long 18th century: what's at stake in the change? This course explores this question by reading a variety of texts including Defoe's "Robinson Crusoe," Swift's "Gulliver's Travels," Pope's "Essay on Man," and Eliza Haywood's "Fantomina," among others, works that seem to be rather strange Literature by modern standards. Participants also read about the rise of print culture, the many historical changes of the period, such as the rise of the colonial empire, and the change from a poetics of the elite to the
aesthetics of feeling. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 351 Studies in Rhetoric and Writing (3 cr.) This is an advanced course in the theory and practice of writing. The class explores the historical evolution of a rhetorical tradition or of a theoretical practice. Topics include classical rhetoric or modern theoretical practice and rhetoric. Emphasis is not only on theory, but on the sustained examination and practice of student writing guided by the theoretical or practical boundaries of the course. Prerequisite: one course from EN level 200; Every Other Year, Spring

## EN 352 British Romanticism (1785-1832) ( $\mathbf{3}$ cr.)

This period of time is revolutionary: the Industrial Revolution, the agricultural revolution, the political revolutions in France and America, a literary revolution that constructs a broader reading public, and a print revolution that expands the publishing industry. In this course, students question what these revolutions have to do with novels, poetry and essays of the period, and explore how literature of this period help revolutionize the individual, nature and society at the same time that it seems to romanticize them. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 355 Victorian Literature ( 3 cr .) During the Victorian period, the industrial age in England reached its height as the nation expanded its cultural and economic boarders to become the world power that was the British Empire. It was a time when immense wealth was coupled with immense poverty, and propriety, duty and family was the slogan of Victorian morality but hidden in the open was the growth of brothels and the drug trade. It was the first age where literacy was widespread, and reading was the primary entertainment for the elite and the masses. Students explore the variety of literature in which the Victorians imagined themselves and the world they lived in. Prerequisite: one course from EN level 200; Every Third Year, Fall

EN 360 Literature and Popular Culture (WS 360) ( 3 cr .) This examination of the major works in a specific genre focuses on a period in, but not restricted to, American culture. Analysis of primary texts reveals themes and patterns that emphasize the relationship between literature and culture. Sample courses include Western Fiction and Film, Detective Fiction, Literature and the Environment, etc. Topics change (as do instructors), so course may be repeated for credit. Prerequisite: one course from EN level 200; Every Third Year, Spring

EN 361 Origins of U.S. Literature (1492-1865) (3 cr.) At the heart of our national literature lies a complex early narrative. It contains darker issues with an unresolved past, conflicting histories, encounters
with the other, our Calvinist relationship with Nature and nature, a mixed psychology as colonials and revolutionaries, and the tension between our aspiration to be the city on the hill and the realities of life on the edge of wilderness. It also contains the exuberance of the new Adam (and Eve), where we can start the story over again and again. This course invites students to test and interrogate these ideas by reading authors in the founding traditions of U.S. literature, such as Charles Brockden Brown, Phillis Wheatley, Susanna Rowson, Benjamin Franklin, Ralph Waldo Emerson, Nathanial Hawthorne and Mary Rowlandson. Prerequisite: one course from EN level 200; Every Other Year, Spring

## EN 365 The American Renaissance (1830-1865)

( 3 cr .) This course presents a study of the dichotomy in the literature of the American Renaissance as reflected in such works as "Self-Reliance," "The American Scholar," "Civil Disobedience," "Walden, Song of Myself," "The Scarlet Letter" and "Moby Dick." Prerequisite: one course from EN level 200; Every Year, Fall

## EN 366 Modern U.S. Literature (1900-1945) (3 cr.)

The early 20th-century movement known as Modernism was an exhilarating time when the Western world's artists and thinkers were exploring how to represent human experience authentically. In the context of U.S. contributions to this era, students investigate questions of aesthetic innovation (especially in poetry), literary subgenres, popular vs. high culture, and national and ethnic identity (including the Harlem Renaissance). Representative authors might include Cather, Frost, Hammett, Hemingway, Hurston, Larsen, Stein, Stevens, Toomer and Yezierska. Prerequisite: one course from EN level 200; Every Other Year, Fall

## EN 367 Contemporary U.S. Literature (1945-

Present) (3 cr.) After World II, the U.S. experienced profound change, including the Atomic Age and the Cold War (and later wars on drugs and terrorism), unprecedented global travel and migration, Civil and Human Rights movements, and astonishing technological revolution. Engaging these seismic shifts, cultural expressions have changed as well. This course focuses on the late 20th-21st-century writers who reimagined our world, among them Postmodernists such as Nabokov, political writers such as Kerouac, writers of color such as Morrison, and poets and innovators of form such as Plath or Anzaldua. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 373 Modern American Poetry (3 cr.) This course examines readings in major figures in modern American poetry beginning with Walt Whitman and Emily Dickinson in the 19th century. Poets from the 20th century include T.S. Eliot, W.C. Williams,

Robert Frost, Wallace Stevens, Marianne Moore, Robert Lowell and Allen Ginsberg. Contemporary poets, such as Sylvia Plath, Ann Sexton, Philip Booth, Adrienne Rich, Robert Pinsky and Etheridge Knight also are studied. Emphasis is on reading poems closely and articulating connections between authors. The distinctive qualities of American themes, verse forms and language are discussed. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 380 Realism and Naturalism in U.S. Literature (1865-1930) ( 3 cr.) U.S. Realism and Naturalism were late 19th-/early 20th-century aesthetic movements that emerged after Romanticism. The nation's post-Civil War mood produced a literature that reflected forces from industrialism and social migration to Darwinism and the New Woman. In this course, students examine literature written in relation to those forces and specifically study how the novel matures in the U.S. tradition. Authors may include Rebecca Harding Davis, Mark Twain, Henry James, Kate Chopin, Emily Dickinson, Charles Chesnutt, Frank Norris, Stephen Crane, William Dean Howells, Edith Wharton, Sarah Orne Jewett and Richard Wright. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 460 Senior Seminar in Literature ( 3 cr .) Topics, which are subject to change each year, include extensive and intensive study of a major author; of thematic, philosophic, or artistic patterns of major or minor authors; of a genre; or of a period. Oral presentations and discussions lead to a major paper. Open to senior English majors. Prerequisite: EN 204, EN 304; Every Year, All

EN 470 Senior Thesis (3 cr.) Senior thesis is open to English majors who are candidates for honors in English. Candidates must be recommended by a member of the English faculty, who consents to serve as adviser for the thesis. This adviser and the student select two additional faculty to serve as a reading committee for the student's final thesis presentation. Prerequisites: EN 204, EN 304; one course from EN level 300; Every Year, All

Courses offered as needed
EN 200 Special Topics in Literature ( 3 cr.) Prerequisite: EN 101, EN 102H or EN 103H
EN 208 (UC) Greek Tragedy (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 208H (UC) Honors Greek Tragedy (3 cr.)
Prerequisite: EN 102H or EN 103H
EN 214 (UC) The History Essay (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 214H (UC) Honors The History Essay (3 cr.)
Prerequisite: EN 102 H or EN 103H
EN 220H (UC) Honors: The Short Story As a Genre (3 cr.) Prerequisite: EN 102 H or EN 103H

EN 236 (UC) The Myth of the West in Fiction and Film: Gunslingers, Homesteaders and Native Americans (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 250 (UC) Survey of English Literature II (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 250H (UC) Honors Survey of English Literature II (3 cr.) Prerequisite: EN 102H or EN 103H
EN 275 (UC) Literature of the Modern South (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 283 (UC) The American Dream: Paradise or Failure (3 cr.) Prerequisite: EN 101, EN 102, EN 102H or EN 103H
EN 293 Internship (1 cr.) Prerequisite: one course from EN level 200
EN 300 Special Topics in Literature ( 3 cr .) Prerequisite: one course from EN level 200
EN 311 Epic Poetry (3 cr.) Prerequisite: one course from EN level 200
EN 312 Autobiography ( 3 cr.) Prerequisite: one course from EN level 200
EN 313 The Bible: Beginnings and Endings ( 3 cr .) Prerequisite: one course from EN level 200
EN 321 The Russian Novel ( 3 cr.) Prerequisite: one course from EN level 200
EN 326 Modern Irish Drama (3 cr.) Prerequisite: one course from EN level 200
EN 335 Images of Women in Psychology and Literature (WS 335) (3 cr.) Prerequisite: one course from EN level 200
EN 372 Law in Literature ( 3 cr.) Prerequisite: one course from EN level 200
EN 377 Faulkner and Literature Between the Wars ( 3 cr .) Prerequisite: one course from EN level 200
EN 382 James Joyce ( 3 cr .) Prerequisite: one course from EN level 200
EN 387 The Men and Women of Wharton and James ( 3 cr.) Prerequisite: one course from EN level 200

## Entrepreneurship (ENT)

## ENT 210 Fundamentals of Entrepreneurship

( 3 cr .) This course introduces students to what it means to be an entrepreneur, and helps them develop an understanding of the philosophy of entrepreneurship and how it can relate to both starting a business and improving an existing business. Students develop their need for achievement and assess themselves as nascent entrepreneurs. Every Year, All

ENT 250 Ventures in Social Enterprise (3 cr.) Social enterprises use the skills and strategies of business to innovatively and sustainably solve social, environmental and/or economic problems. The ventures created by social entrepreneurs can be nonprofit, for-profit or an innovative hybrid of the two. Drawn from the public
service dimension of the University mission, this course provides guidance in the conception, design and execution of experiential service learning projects that fall under the social enterprise domain. Every Year, Spring

ENT 290 Digital Businesses ( 3 cr .) Students form their own teams to develop a digital business idea into a viable business and compete to win money to launch their businesses. Students learn about content creation, business concepts, and presentation skills in preparation for a successful launch. Prerequisite: ENT 210; Every Year, Fall

ENT 310 Entrepreneurial Creativity (3 cr.) This course helps students gain an understanding of entrepreneurial creativity as related to the entrepreneur and the venture. Topics of exploration include the creative process, development of a viable product/service, and how to sell creative ideas. From the enterprise level, students learn to proactively manage and promote creativity throughout the venture, develop the creative potential of others, and protect their intellectual capital. Prerequisite: ENT 210; Every Year, Fall

ENT 320 Small Business Marketing (3 cr.) This course applies the principles of marketing to the process of developing a marketing plan and strategy for the small business. Students explore how the marketing plan integrates into the overall business plan and how it applies to small business operations and strategy implementation. By reviewing case studies of successful contemporary entrepreneurs, participants develop a further understanding of what personal characteristics and insights the entrepreneur and small business owner must cultivate to be successful in marketing. Prerequisite: ENT 210; Every Year, Fall

ENT 330 Entrepreneurial Finance ( 3 cr .) This course addresses the myriad finance problems faced by the entrepreneur and by new and emerging businesses. The sources of capital-bootstrap, debt and equityeach have their merits and caveats for ownership and management of the new company. Other topics include: valuation of the business for liquidation, purchase, sale or harvest; use of financial ratios; and measuring and evaluating financial performance. Prerequisite:
ENT 210; Every Year, Spring
ENT 340 Opportunity Recognition and Negotiation (3 cr.) This course helps students identify which resources they need for their business, how to find and assess the quality of entities that can fulfill those needs, and negotiate for the best deal. Prerequisite: ENT 210; Every Year, Spring

ENT 360 Small and Family Business (3 cr.) This course helps students understand how to start and/
or successfully operate a small or family business. It covers how to develop a business plan, strategies for the business, how to secure financing, marketing the firm, estate planning and succession planning. The course further covers the unique characteristics that distinguish a family business from other small businesses.
Prerequisite: ENT 210; Every Year, Spring
ENT 410 Business Plan Creation (3 cr.) Students learn to create a comprehensive business plan that provides a step-by-step process to actually create a business. Prerequisite: ENT 210; Every Year, Fall

ENT 420 Entrepreneurial Implementation I (3 cr.) In this intensive course, students learn and apply the fundamentals of implementing a successful business. Students implement the business idea that they formulated in ENT 410. Any type of business may be implemented and may include technology firms, service businesses, manufacturing businesses, etc. This course is taken concurrently with ENT 430. Enrollment is by permission only. Prerequisites: ENT 210, ENT 410; Every Year, Spring

ENT 430 Entrepreneurial Implementation II (3 cr.) This intensive course is an extension of ENT 420. Students apply the fundamentals of implementing a successful business. This course is taken concurrently with ENT 420. Enrollment is by permission only. Prerequisites: ENT 210, ENT 410; Every Year, Spring

## ENT 488 Entrepreneurship Internship (3 cr.)

Students gain work experience under the joint supervision of a faculty member and practicing manager or business owner. Students must meet School of Business internship requirements. This course is graded on a pass/fail basis. Prerequisite: ENT 210; Every Year, All

Courses offered as needed
ENT 299 Special Topics (3 cr.)
ENT 371 Business Plan Competition (3 cr.)
Prerequisites: ENT 210, ENT 250
ENT 490 Special Projects (3 cr.)

## Film, Television and Media Arts (FTM)

FTM 102 Understanding Film ( 3 cr.) Available only to non-FTM majors, this survey of the art, industry and techniques of global cinema introduces students to the significance of film as an international medium. By exposing students to the work of outstanding filmmakers and to the major elements of film language, the course helps students develop their critical faculties and visual literacy. The course includes some weekly $21 / 2$-hour screenings of full-length theatrical feature
films and other short clip screenings and lecture/ discussion sessions. Every Year, All

## FTM 110 Fundamentals of Media Production

( 3 cr .) This course gives students a thorough grounding in the basic techniques of audio and video storytelling. Students learn basic audio production, visual composition, field camera practice, lighting fundamentals and digital video editing. This is a handson course that requires students to produce a number of media projects throughout the semester. Every Year, All

## FTM 112 Fundamentals of Media Production II

( 3 cr .) This second course introduces students to the techniques of designing and producing creative and effective audiovisual communications primarily in a studio setting. Students learn to develop creative concepts and to take them from script to screen. Lighting, and principles of good composition, structure and program design are emphasized. Prerequisite:
FTM 110; Every Year, All

## FTM 230 Animation and Mobile Media (3 cr.)

This course introduces the concepts and production techniques that prepare students for creative work in mobile media. Students completing this course learn how to produce animated and interactive content for the web and mobile devices or kiosks. Projects may include simple animations, interactive stories, photo and video viewers, web interfaces, green screen, animations for video, and video projects optimized for the web. Prerequisite: FTM 110 or permission of instructor; Every Year, All

FTM 240 Analysis of the Moving Image (3 cr.) How do we read images? This course explores the techniques used to create moving image media-including film, television and interactive media-from a formal and aesthetic perspective. Students learn to think and write critically about how the techniques of production work to communicate ideas and convey meaning and emotion to viewers. Sophomore status required. Every Year, All

FTM 242 Directing Film and Television (3 cr.) This course is an introduction to the history, theory and basic concepts of narrative single camera field and multicamera studio direction for current and developing distribution platforms. This course emphasizes principles of dramatic structure, script breakdown and analysis, visualization and story boarding, preproduction scheduling and casting, working with actors to effectively shape performances and working with crew. Students prepare and direct a series of short scenes. Prerequisite: FTM 110; Every Year, Spring

FTM 245 Writing and Producing Media (3 cr.)
Media messages are created to meet a variety of goals,
which are tailored to appeal to defined audiences. Media can be designed to entertain, to inform, to educate, to persuade or to sell. In this course, students are challenged to discern what makes a good story or project idea for each of several different content objectives. Students work through all phases of preproduction and production including scriptwriting, scheduling and budgeting as they complete a series of projects during the semester, with special emphasis on creative conceptualization, message and writing. Prerequisite: FTM 110; Every Year, All

## FTM 310 Projects in Animation and Mobile Media

 ( 3 cr .) This course focuses on the creation of advanced mobile media projects. Students are challenged to create projects that incorporate multiple forms of media delivered for the web, mobile devices or kiosks. Projects may include advanced animations, webisode stories with video and audio production, product promotions, maps, web interfaces, games, educational materials, mobile apps and other content. Prerequisite: FTM 230; Every Year, SpringFTM 320 History of Film I ( 3 cr.) This course, the first in a two-semester sequence, provides a foundation in the history and aesthetics of moving image arts. Through individual films, clips, lectures and discussion, students analyze the major international film movements, their genres, directors and themes that have contributed to the development of narrative cinema. Organized thematically, films are chosen to showcase aesthetic, historical, technological and ideological concepts and their impact on the evolution of film from its inception to 1970. Every Year, All

FTM 322 History of Film (and Television) II (3 cr.)
This second part of a two-semester sequence builds on the history and aesthetics of moving image arts in film and also television from 1970 to the present. Through individual films, excerpts from films and television clips, lectures and discussion, students analyze the evolution of global television and major international film movements, their genres, directors and themes to understand how they have contributed to the development of television entertainment and narrative cinema. Organized thematically, works of film and television are chosen to showcase aesthetic, historical, technological and ideological concepts and their impact on the evolution of film and television. Sophomore status required. Prerequisite: FTM 320 or permission of instructor; Every Year, All

FTM 342 Directing Film and Television (3 cr.) This course is an introduction to the history, theory and basic concepts of narrative single camera field and multicamera studio direction for current and developing distribution platforms. This course emphasizes
principles of dramatic structure, script breakdown and analysis, visualization and story boarding, preproduction scheduling and casting, working with actors to effectively shape performances and working with crew. Students prepare and direct a series of short scenes. Prerequisites: FTM 110, FTM 112; Every Year, Spring

## FTM 355 Projects in Single-Camera Production

( 3 cr.) This course challenges students to master the conceptual and technical skills of visual storytelling to produce more advanced, single-camera field projects on selected, specialized topics that may change from semester to semester. Past course content has included documentary production in South Africa and in Ireland, as well as in the United States. The course emphasizes professional production roles, including writing and directing, scheduling and production management, production, post-production, distribution and marketing. Prerequisites: FTM 110, FTM 112 or permission of instructor; Every Year, All

FTM 372 Scriptwriting (3 cr.) Students learn to shape stories for the screen. Emphasis is on dramatic structuring, character development, pacing and dialogue. Professional screenplays are analyzed and discussed, and final projects give students the opportunity to develop an original short screenplay. Prerequisite: FTM 245; Every Year, All

FTM 375 Advanced Camera and Lighting (3 cr.)
This course covers such topics as the characteristics and qualities of light, lighting control, principles of visual composition and design, color, contrast, the properties of lenses, how film emulsions and image sensors react to light, filters, matte boxes and other image control devices, metering and exposure control, the effective use of various lighting instruments and accessories, electrical safety and the basics of gripping and gaffing on set and on location. Students learn in an active, hands-on workshop environment and produce a major project. Prerequisite: FTM 245; Every Year, Fall

## FTM 380 Projects in Audio Production (EN 303/

 GDD 303) ( 3 cr.) This course is about storytelling. Students use multitrack audio production to activate not only the human voice in narratives, but also the ambient sounds of the environment, the music in imagination and the more subtle inner-symphonies of moods, attitudes and emotions. Participants read and listen widely to gain a sense of the history and theory of radio art. The class asks questions and listens to answers. Students represent what they see and hear, and invent that which they do not see or hear. They sit and write in isolation, wrestle with not-so-familiar technologies, learn to become ruthless and artful editors, and share the results of their labors in a stimulating and mutually supportive workshop environment. Finally, they spend time identifying target audiences and looking at ways to distribute their work tothe larger world of public radio. Prerequisite: FTM 110, EN 201 or permission of instructor; Every Year, All

## FTM 390 Projects in Multi-Camera Production

( 3 cr .) Attracting and keeping the audience's attention is the first responsibility of the director. This course gives students the opportunity to explore the art and craft of directing in a multi-camera, high-definition studio environment. Participants examine the roles and responsibilities of the director, including shot composition, crew motivation, calling a live production and ethics. Students are asked to visually design a television program from concept to completion in a number of genres, including news, sports, sitcoms, dramas and commercials. Prerequisites: FTM 110, FTM 112; Every Year, All

FTM 392 Post-Production Techniques (3 cr.) In this course, students explore such topics as the expressive capability of the editing process; how editing functions to create time, tempo and visual rhythm; the building of scenes in editing to achieve various dramatic goals; and telling the story through careful control of sound and image over time. Students gain experience in using the tools and techniques of modern digital post-production technology. Topics may include: post-production planning; continuity editing; digital video effects; compositing; green screen techniques; graphics design; 2D and 3D animation; audio mixing and sound design; interactivity; preparing video for broadband distribution and mobile devices; DVD design and authoring. Prerequisites: FTM 110, FTM 112; Every Year, All

## FTM 393 Advanced Animation Techniques (3 cr.)

Students learn to create sophisticated 2D and 3D still and animated electronic graphics for video that are aesthetically pleasing, expressive and meaningful. Principles of good design, composition and color are stressed, as well as the ability to produce visual interest in support of communication goals. Prerequisites: FTM 110, FTM 112; Every Year, All

FTM 450 Senior Seminar ( $\mathbf{3}$ cr.) This seminar entails an in-depth examination of issues and research perspectives in film, video and interactive media. Seminar titles vary each term and may cover subject areas such as film history, reality television, political documentaries, docudrama, and contemporary trends in the media industry. Students should consult the School of Communications course bulletin for information about each semester's offerings. Senior status is required. Every Year, All

FTM 494 Senior Project Colloquy (1 cr.) This required 1-credit discussion, pre-production and production course must be taken in the semester prior to the student's undertaking of the Senior Project. Meeting collectively and individually, all fourth-year FTM students consult with FTM faculty several times during the term to identify and hone the presentation
of their required individual Plan for Senior Project. Prerequisite: senior status in FTM. Every Year, Fall

FTM 495 Senior Project ( 3 cr.) In this capstone course, students are asked to create an individual thesis project that reflects the highest level of their abilities. From pitching their individual project ideas through writing, production and post-production, students are pushed to work at the peak of their skills. The creativity, quality and professionalism of the finished projects are judged by outside professionals and faculty and staff from the School of Communications FTM program, and give graduating seniors important portfolio material. Senior status in FTM is required. Prerequisite: FTM 494; Every Year, Spring

Courses offered as needed
FTM 300 Special Topics (3 cr.)
FTM 397 Summer Production Project (4 cr.)
Prerequisites: FTM 110, FTM 112

## Finance (FIN)

FIN 201 Fundamentals of Financial Management ( 3 cr .) This course introduces students to the theory and practice of financial management. Topics include the uses and valuation of securities, the structure and purpose of capital markets, financial risk, investments and corporate financial analysis and decision making. Prerequisite: EC 111; Every Year, All

FIN 310 Investment Analysis (3 cr.) This course introduces students to the theory and practice of investment analysis. Emphasis is on the uses, characteristic and valuation of fixed income securities, equities and derivatives in the global financial marketplace. Students are exposed to both classical and modern theories of evaluating and quantifying financial risk. Prerequisite: FIN 201; Every Year, Fall

FIN 320 Financial Modeling ( 3 cr.) This course examines standard financial models and data analysis in the areas of capital budgeting, financial statement analysis, asset pricing, portfolio management and performance, hedging and option pricing. Students learn to extract, model and analyze data using computer spreadsheets. Prerequisite: FIN 201; Every Year, Fall

FIN 345 Risk Management and Insurance (3 cr.)
This course covers risk management principles and the nature of insurance as a risk-transferring device to reduce various loss exposures. Topics include insurance programs, financial aspects of insurance companies and markets, insurance industry structure, managerial aspects of underwriting and pricing, and public policy issues. Prerequisite: FIN 201; Every Year, Fall

FIN 350 Financial Markets and Institutions (3 cr.) This course presents a study of financial markets and intermediaries in a global setting with emphasis on how funds flow from investors in financial assets to investors in real assets. The types and functions of markets and institutions that exist today are discussed along with the differences between them. Topics include the role of monetary policy and the operations of central banks; the regulatory environment in which financial markets and institutions operate; and the financial instruments traded in the markets today. Prerequisite: FIN 201; Every Year, Spring

## FIN 355 Retirement Planning and Employee

Benefits (3 cr.) This course provides students with an understanding of the retirement planning process. The main objectives are to learn the usefulness of retirement plans and employment-based benefits, and to develop recommendations on important retirement and employee benefit decisions. Topics include: Social Security, qualified retirement plans, nonqualified retirement plans, self-employed plans, IRAs, group life insurance, group disability insurance and group health insurance. Prerequisite: FIN 345; Every Year, Spring

FIN 356 Real Estate Finance ( 3 cr .) This course examines the structure of real estate markets. Topics include principles of mortgage lending; property appraisal; the secondary mortgage market; mortgage securitization and valuation; residential and commercial real estate investment; leverage and capital structure for real estate project analysis; and real estate investment in the portfolio context. Prerequisite: FIN 201; Every Other Year, Spring

FIN 360 Financial Statement Analysis (3 cr.) This course focuses on the development of analytical skills used by investors and analysts in their evaluation of various financial statements. Topics include the review and analysis of balance sheets, income statements and statements of cash flow; ratio analysis and developing pro forma financial statements to support equity analysis and credit analysis. Prerequisite: FIN 201; Every Year, Fall

## FIN 380 Intermediate Corporate Finance ( 3 cr.)

 Students gain an advanced understanding of corporate finance. The main objectives are to learn to apply financial concepts, construct and implement financial decision models, and relate various financial theories to one another. Topics include capital budgeting, the valuation of firms, capital structure, cost of capital, dividend policy and risk management. Prerequisite: FIN 201; Every Year, SpringFIN 420 Bank Management and Loan Underwriting ( 3 cr .) This course focuses on the theory and techniques
used to underwrite bank loans and manage a bank loan portfolio. Other fundamental bank processes such as management of liquidity, investment portfolios, funding costs and capital adequacy also are examined. Emphasis is placed on the application of real-world best practices. Prerequisite: FIN 201; Every Year, Spring

FIN 430 Portfolio Theory and Practice ( 3 cr.) This course offers a rigorous examination of the theory and practice of portfolio management. Topics include portfolio construction, valuation and performance measurement. Equity and fixed-income portfolio strategies are considered as well as the use of futures and options in portfolio management. Prerequisites: FIN 310, FIN 320; Every Year, Spring

## FIN 440 Introduction to Fixed Income Analytics

( 3 cr .) This course introduces students to the analytical processes associated with fixed income investing. The course bridges the gap between valuing bonds based on a yield to maturity and valuing bonds as a package of zero-coupon instruments. The concepts of theoretical spot rates, par rates of the on-the-run treasury securities, duration and convexity are discussed. A binomial model is explained and used to value bonds that have built-in options. Prerequisite: FIN 201; Every Year, Fall

## FIN 450 Applied Portfolio Management (3 cr.)

Students apply investment and portfolio management techniques and strategies in a real-life environment by managing a portion of the Quinnipiac University Endowment fund-the Student-Managed Portfolio. Students are responsible for developing investment strategies, constructing, monitoring and rebalancing the portfolio, and reporting on actual portfolio performance. Permission of instructor required. Prerequisite: FIN 430; Every Year, All

## FIN 451 Applied Portfolio Management II (3 cr.)

This course is a continuation of FIN 450 for students who have excelled in Applied Portfolio Management I and wish to take a leadership role in the management of the fund. Permission of instructor required.
Prerequisite: FIN 450; Every Year, All
FIN 455 Financial Markets and Monetary Policy (3 cr.) This course focuses on analysis of the immediate level of economic activity and how the tools of monetary policy can be used to affect future economic activity. Data are obtained from original sources to determine the history of key economic variables and their present status. The economic variables are then utilized to develop a class consensus on the current state of the economy. Based on this class consensus, alternative monetary policy action is considered with a consensus again being developed. A team of students from the class presents the consensus
reports to the Federal Reserve Bank of Boston as part of the National College Fed Challenge. Permission of department chair required. Prerequisite: FIN 350 or EC 341; Every Year, Fall

FIN 460 Mergers and Acquisitions ( 3 cr.) This course presents the theory and evidence of corporate acquisitions and restructuring activities. Topics include the foundations of mergers and restructures, the valuation of assets, various means of financing acquisitions, defensive strategies, as well as post-merger, acquisition, and take-over performance. Prerequisite: FIN 380; Every Year, Spring

FIN 465 Working Capital Management (3 cr.) This course examines the theory and practice of cash and liquidity management. Topics include cash management, credit and accounts receivable management, collections and cash concentrations, short-term investments and borrowing, forecasting cash flows, and international cash management. Prerequisite: FIN 201; Every Other Year, Spring

FIN 470 Trading Strategies and Practices (3 cr.) This course introduces financial market microstructure and trading strategies to students. The lectures focus on how trading on exchanges is organized and regulated as well as price formation, informational efficiency and liquidity. Various trading strategies are explored using the Financial Trading Systems (FTS) simulation. Prerequisite: FIN 310; Every Year, Fall

FIN 485 Derivative Securities (3 cr.) This course introduces students to derivatives and the markets in which they are traded. Emphasis is on the techniques for the valuation of options, futures and related contracts as well as the use of derivative contracts in investments, corporate finance and risk management and engineering of structured products. Prerequisite: FIN 310; Every Year, Spring

FIN 488 Finance Internship (3 cr.) This internship in finance must be approved by the department chair and the dean in accordance with school and departmental regulations. Junior/senior status is required. This course is graded on a pass/fail basis. Prerequisite: FIN 201; Every Year, All

Courses offered as needed
FIN 300 Special Topics (3 cr.) Prerequisite: FIN 310, FIN 320

## Fitness, Leisure and Wellness

FLW 102 Yoga Yashtanga/Vinasa (1 cr.) Through yoga, students learn to honor their bodies, quiet their minds and relieve stress and anxiety. Practicing yoga helps participants to bring peace and order into their busy lives. Every Year, Fall and Spring

FLW 106 Fundamentals of Boxing (1 cr.) Basic offensive and defensive boxing skills are taught and practiced. Balance, movement and conditioning are stressed. Timed workouts include rope jumping, punching bags, shadow boxing and sparring. Final class may be held in actual boxing facility. Every Year, Fall and Spring

FLW 109 Indoor Rock Climbing (1 cr.) This is a basic course in rock climbing, utilizing indoor climbing walls at an off-campus facility. Students are taught proper technique, safety and knots, as well as the purchase, use and maintenance of equipment. Off campus: Prime Club, Wallingford. Students must provide their own transportation. Course fee. Every Year, Fall and Spring

FLW 113 Beginning Golf (1 cr.) Students are introduced to the fundamentals of golf, including use of irons, woods and putter, as well as rules of golf and course etiquette. A full set of clubs is provided. Off campus: Sleeping Giant Golf Course, Hamden. Student must provide own transportation. Course fee. Every Year, Fall and Spring

FLW 115 Beginners Tennis (1 cr.) Students are introduced to the basic skills of tennis with special emphasis on forehand, backhand, serve and playing strategies. Scoring, rules of tennis, and court etiquette also are presented. Small classes learn in a fun-filled environment. Racquets and balls are provided. Every Year, Fall and Spring

FLW 117 Beginning Golf for Women (1 cr.) This course is gender-specific for women. It informs a female beginning golfer's understanding and appreciation of the game of golf. Students are introduced to all of the elements of golf as they relate to the rules of the game, the techniques of the various golf swings, and the art of self-management before, during and after a game. Any permanently or temporarily physically challenged individual is welcome to attend this class; special arrangements are made to maximize their golf experience. Full sets of golf clubs are provided. Every Year, Fall and Spring

FLW 119 Advanced Golf Weekend Workshop (1 cr.) This course is presented as a weekend golf school, with lessons and playing time for intermediate and advanced golfers only. Every aspect of the game is covered in
seminars, on the driving range and on the golf course. Students must be available Friday 4-7 p.m., Saturday and Sunday 10 a.m. -4 p.m. Off campus: Laurel View Country Club, Hamden. Student must provide own transportation. Course fee. Every Year, Fall and Spring

FLW 125 Pilates ( $1 \mathbf{c r}$.) Pilates is one of the most challenging and effective means of building core stability, improving body mechanics, balance, coordination, strength and flexibility. Starting with the foundation of mat Pilates, this course presents an in-depth approach to breathing instruction, body alignment and a unique set of challenging exercise sequences. Students learn basic anatomy and physiology as it relates to Pilates. Every Year, Fall and Spring

## FLW 126 Fundamentals of Kickboxing (1 cr.)

Patterned after the training routines of international competitive kickboxers, this course teaches basic and intermediate boxing and kicking techniques, footwork, combinations, and if desired, light sparring. It provides an excellent cardiovascular workout and flexibility training, while enhancing muscular endurance. Every Year, Fall and Spring

FLW 127 Beginning Fencing ( 1 cr.) This course presents the fundamentals of fencing using the three classes of weapons: foil, sabre and epee. Offensive and defensive movements are studied, as well as the techniques of engage, disengage, parry and lunge. It is the perfect sport for students of all ages, sizes and abilities. All equipment is provided. Every Year, Fall and Spring

FLW 128 Step and Sculpt (1 cr.) This fundamental course offers a unique blend of simple and easy-to-learn step choreography with intervals of strength training using free weights, resistance bands, medicine balls and more. Students improve their overall fitness, including endurance, strength and agility while learning the proper form to execute all exercises. Every Year, Fall and Spring

FLW 131 Introduction to Orienteering ( 1 cr .)
Orienteering is a unique mix of fun, fitness, mental challenge and immersion in nature's beauty. In this course, students learn how to read orienteering maps, use a compass for navigation and incorporate physical fitness in an exciting outdoor sport. Using surrounding state/ national parks, students traverse terrain, sometimes difficult, to race from point to point while navigating only with a map and compass. Time is split between classroom and outdoor experiences. Every Year, Fall

FLW 135 Rocks and Ropes Camp-Out Weekend (1 cr.) This two-day, two-night class includes group challenges, high and low rope course activities, a night hike, and canoe instruction on the lake. Food and lodging are provided. Students must provide their own
sleeping bag. Off campus: Deer Lake, Killingworth. Students must provide own transportation. Course fee. Every Year, Fall

## FLW 143 Recreational Games Weekend (1 cr.)

Leisure time games are the agenda for this class.
Activities may include volleyball, duckpin bowling, dodgeball, kickball, pickleball and more. Students must be available Friday 4-7 p.m., Saturday and Sunday 10 a.m. -4 p.m. Course fee. Every Year, Fall and Spring

## FLW 144 Fresh Water Fishing Weekend (1 cr.)

Fishing is one of the most popular recreational activities in America. This course provides information about rods and reels; fishing line, hooks, bobbers and lures; fishing knots; types of fish; releasing fish; cleaning and cooking fish. Instruction includes classroom as well as actual fishing time. Students must be available Friday 4-7 p.m., Saturday and Sunday 9 a.m. -2 p.m. Off campus: Hamden ponds. Students must provide own transportation. Course fee. Every Year, Fall and Spring

FLW 145 willPower \& Grace ${ }^{\circledR}$ ( 1 cr.) This course is based on willPower \& grace ${ }^{\circledR}$-a dynamic, functional fusion group exercise program. The workout is the ideal cardiovascular solution for mind-body practitioners. It is practiced barefoot, equipment-free and infused with positive and motivating philosophy. The willPower \& grace ${ }^{\circledR}$ workout is an easy-to-follow, linear, strong and focused program structured for students of all levels. Goal setting is used to help ensure progression. This workout is a manifestation of strength and elegance. Students learn to link the strength, power and desires of the mind with the demands and potential of the body. Every Year, Fall and Spring

FLW 148 Spinning (1 cr.) Spinning is an indoor cycling program. Participants set their own level of intensity by adjusting the bike's resistance. Learn proper bike setup and safety, heart rate training guidelines and aerobic base building principles. The riding time begins at 30 minutes and progresses each week with final ride of 1 hour, 15 minutes. Everyone succeeds. Spinning is taught at the York Hill Campus. Every Year, Fall and Spring

FLW 151 Cardio Conditioning ( 1 cr .) This class delivers a total body workout, combining non-impact aerobic and progressive training with hand-held weights and resistance rubber bands (no weight room). Class activities provide the most efficient and effective methods to improve cardiovascular performance while strengthening and sculpting muscle groups. Every Year, Fall and Spring

## FLW 152 Cardio Sculpt and Pump (1 cr.) This

class features a total body workout and an insightful approach to highly practical, safe, adaptable techniques specifically designed to develop strength, balance and
flexibility. The instructor utilizes a specific contingent of conditioning exercises with emphasis on precision (no weight room). Aesthetics aside, this is a great way to develop good posture and a strong, flexible, graceful body. Every Year, Fall and Spring

FLW 153 Flow Yoga (1 cr.) An innovative series of yoga postures that build and flow with sequential linking challenging your muscular strength, cardiovascular endurance, flexibility, balance, and mental stamina. Every Year, Fall and Spring

FLW 154 Cardio Kickboxing ( 1 cr.) This is a highenergy aerobic workout consisting of real kickboxing and self-defense techniques choreographed to the latest techno and trance music. Participants sweat and tone the upper and lower body with jabs, punches, kicks and more. Every Year, Fall and Spring

FLW 161 Ballroom Dancing (1 cr.) Learn to tango, salsa, swing and more. This course covers basic patterns and some variations in three to four dances with an emphasis on basic technique and learning to move comfortably on the dance floor. Every Year, Fall and Spring

FLW 162 Canoeing Weekend ( 1 cr. ) In this course, participants learn to canoe. Instruction allows students to explore several parts of the Connecticut coastline including lakes, Farm River and the New Haven harbor. No experience is necessary; all equipment is provided. Students must be available Saturday and Sunday from 9 a.m. -5 p.m. Off campus: Hanover Pond, Meriden. Students must provide their own transportation. Course fee. Every Year, Fall

FLW 165 Introduction to Power Lifting (1 cr.) This class covers proper form and technique as it relates to weight lifting for beginner and intermediate students. Topics include: the basics of repetition schemes, the effect of changing reps and weights for maximum muscle hypertrophy and/or growth, and proper nutrition for optimal recovery and results, including nutrient timing and basic supplementation for weight lifting. The class includes lectures as well as workout time in the Fitness Center. Every Year, Fall and Spring

FLW 167 Walking (1 cr.) This course introduces students to the performance of fitness walking as a lifelong activity that maintains and enhances physical health and overall well-being. The course provides the information to prepare students to organize, plan and implement a safe walking program. Every Year, Fall and Spring

FLW 170 Fitness Frenzy (1 cr.) In this dynamic course, students learn about the cardiovascular and muscular endurance components of physical fitness through a
variety of physical activities to promote health and wellbeing. Students learn basic anatomy and physiology as it relates to the movements and exercise formats in each class setting. Class design focuses on a specific modality, incorporates core conditioning and ends with flexible strength for a complete training session. Every Year, Fall and Spring

FLW 171 All Levels Golf Weekend (1 cr.) This class is aimed at improving the playing skills and course management techniques of all participants. This weekend course includes lessons and practice time in a variety of settings. A round of golf is played each day. Golf clubs are provided when necessary. Students must attend ALL sessions: Friday, 4-7 p.m.; SaturdaySunday, 10 a.m. -4 p.m. Instruction takes place off campus at Laurel View Country Club in Hamden. Students must provide their own transportation. Course fee. Every Year, Fall and Spring

FLW 172 Introduction to Jazz Technique (1 cr.) This course combines jazz/modern warm-up with an emphasis on stretching. This technique study enhances body placement (alignment) and conditioning. Students learn general health guidelines and nutrition, while mastering choreography pieces. Every Year, Fall and Spring

## FLW 174 Ballet to Broadway-Classical Technique Applied to Contemporary Choreography (1 cr.) This course offers a ballet technique study including classical training in barre, center floor and across the floor. Students learn the influences of Russian, French and Italian, including styles of arm carriage (port de bra) and arabesque lines. They learn ballet technique in strength and body placement, and choreography with contemporary styles using American Musical Theatre arrangements. Every Year, Fall and Spring

## FLW 175 Yoga Foundation and Fundamentals (1 cr.)

 Yoga is more than movement. This class explores the theory, rationale and basic components of yoga that go beyond the poses themselves. Students focus on movement, meditation and yogic sleep and how they fit into our everyday life. This course provides a strong foundation to what yoga is really about. Taught at York Hill. Every Year, Fall and Spring
## FLW 176 Physical Activity and Community Service

 (1 cr.) This class involves various activities coupled with community service. Activities may include general park maintenance, invasive tree and plant management, and home and neighborhood restoration projects. Course takes place on two consecutive Saturdays; students must be available for both dates. Instruction takes place off campus. Every Year, Fall and SpringFLW 178 Bowling (1 cr.) Students learn the proper techniques of bowling, including bowling etiquette. Instruction is targeted to various skill levels, from beginner to advanced bowlers. Topics include proper grip, stance, how to keep score, positioning and different methods of throwing the ball. Instruction takes place off campus; students must provide their own transportation. Every Year, Fall and Spring

FLW 180 Self Defense-Krav Maga (1 cr.) This course introduces students to the basic physical and mental skill sets needed to increase the probability of surviving an attack. Students focus on nonweapon close combat methods, including proper fighting stance, movement, striking, choke defense, head lock defense and defense against displacement attacks. Students work closely with the instructor in a structured environment where safety is considered the top priority, followed closely by fun and fitness! Every Year, Fall and Spring

FLW 181 Cardio Stomp (1 cr.) This class offers a cardio workout with dance influence. The class moves at a high-pace rhythm. Claps, taps and runs get the heart beating to the sound of music. This is a high-speed dance style movement class. Dancers and nondancers, runners and walkers will enjoy this class. Every Year, Fall and Spring

FLW 182 Taekwondo I (1 cr.) Taekwondo is a form of self-defense, an art form, and a competitive sport. Classes consist of extensive stretching, the teaching of basic forms of self-defense and sparring techniques including traditional punching, kicking and blocking techniques. Students gain an understanding of the ancient martial arts discipline for self-defense, the principles of self-control, focus, balance, oneness and self-discipline. Taekwondo emphasizes the use of the whole body, enhances flexibility and coordination and increases aerobic capability. Promotional tests are held at the end of each semester. Every Year, Fall and Spring

FLW 184 Pain Free Fitness (1 cr.) This class helps students erase pain and tension in their feet, hands, lower back and neck brought on by everyday stress and overuse. Students learn exercises to rebalance and strengthen the neuromuscular core system to keep the belly flat, back strong and body functioning well. The MELT Core program helps to align the spine, decompress the neck and lower back, stabilize the pelvis and give the organs integrity for proper digestion. Every Year, Fall

## FLW 190 Essentials of Fitness and Wellness (3 cr.)

 The course covers health-related illnesses, leading causes of death and disease prevention through healthy lifestyle choices. Students explore the connections between the dimensions of wellness and the impact on personal health. Topics include the benefits of the fivecomponents of physical fitness including cardiovascular, muscle strength, muscle endurance, body composition and flexibility. Students assess their own fitness and wellness through class activities and assignments. Every Year, Spring and Summer

FLW 191 Introduction to Eco-Fashion (1 cr.) This unconventional sewing course does not require the operation of a sewing machine or using textiles to design pieces of garments. Students learn the basics of sewing-reading patterns, laying out and cutting material, taking body measurements, conducting fittings and handstitching seams. Students design and construct one garment and one accessory item from 100 percent sustainable material. Projects are showcased at the Sustainable Fashion Show on Earth Day. Every Year, Spring

FLW 215 Wellness Through Community Action: Best Buddies (2 cr.) Students actively participate in planning, organizing, implementing and evaluating a community event with a service learning approach. Students have meaningful involvement in planning the Best Buddies CT walk hosted by the School of Health Sciences. Essential topics to be covered include dimensions of wellness, event planning, sponsorship, marketing, programming, volunteer management and intellectual and developmental disability awareness. Students must be available for the Best Buddies weekend, Saturday 9 a.m.-noon, Sunday 10 a.m. -3 p.m. Every Year, Fall

FLW 282 Taekwondo II (1 cr.) This class is designed for the student who wishes to continue studying the art and sport of Taekwondo including punching, kicking and blocking techniques, as well as the disciplines of self-control, focus, balance and oneness. Taekwondo teaches students techniques to defend themselves, provides a great workout and promotes a healthy lifestyle. Prerequisite: FLW 180 or FLW 182; Every Year, Fall and Spring

FLW 283 Fundamentals of Mixed Martial Arts (1 cr.) This fundamental course uses mixed martial arts techniques from all over the world to teach students the proper skills of kickboxing, wrestling, and Brazilian jiu-jitsu. Students achieve a high level of strength, speed and coordination while learning about flexibility, muscular strength and endurance during this cardiovascular workout. Prerequisite: PE 106, PE 126, PE 180 or PE 182; Every Year, Fall and Spring

Courses offered as needed
FLW 118 Jujitsu (Self-Defense) (1 cr.)
FLW 120 Aerobic Instructor Training (1 cr.)
FLW 122 Advanced Tennis Weekend Workshop (1 cr.)
FLW 140 Elementary Physical Education (1 cr.)
FLW 149 Intramural Officiating-Fall Sports (1 cr.)
FLW 150 Dance Salsa Plus! (1 cr.)

FLW 163 Leisure Time Activities for the Aging (1 cr.) FLW 166 Intermediate Ballroom Dancing (1 cr.) FLW 168 Intermediate Golf (1 cr.) FLW 173 Rhythm Tap (1 cr.)

## French (FR)

FR 101 Elementary French I (3 cr.) This introduction to the French language focuses on oral practice, basic grammar study, and practice in reading and writing. Students who have three or more years of high school French with grades of B or above may not take this course for credit. Every Year, Fall and Spring

FR 102 Elementary French II (3 cr.) This course is a continuation of FR 101. Prerequisite: FR 101 or placement into FR 102. Every Year, Fall and Spring

FR 201 Intermediate French I ( $\mathbf{3} \mathbf{~ c r}$.) This course is for students who wish to develop further their ability to read, write and speak French. Reading is drawn from a wide variety of fictional works and forms (short story, plays, poems) on topics of general interest. Prerequisite: FR 102 or placement into FR 201. Every Year, Fall

FR 202 Intermediate French II (3 cr.) This course is a continuation of FR 201. Every Year, Spring

Courses offered as needed
FR 200 Special Topics (3 cr.)
FR 300 Special Topics ( 3 cr .)
FR 301 Advanced French I (3 cr.)
FR 302 Advanced French II (3 cr.)

## Game Design and Development

GDD 101 Introduction to Game Design (3 cr.)
This course introduces students to the history and development of games (card games, social games, digital games); theories of game design and play; the study of the social effects of games; the role of serious games for teaching and learning and production practices in the games industry. Every Year, All

GDD 110 Introduction to Visual Design for Games ( 3 cr .) This foundation course in research methods for game design prepares students for upper-level course work by introducing critical, analytical and problemsolving strategies for researching and developing graphics for games. Practical hands-on methods include visual research, design journals, thumbnail sketches, concept art, visualization drawings, storyboarding, diagramming and content development. Every Year, Fall

GDD 200 Introduction to Game Development (3 cr.) This course provides an overview of game development
through project work. Students examine different game genres, game mechanics and playability, sound, level design and interface. Through project work, students gain an understanding of the game development life cycle and the roles of design teams. Every Year, Spring

GDD 201 Game Design I (3 cr.) In this course, students delve deeper into game design principles and how they apply to games. Students critically assess game concepts, objectives, narrative structure and storyline, character development, game mechanics, playability, the potential of meaningful or serious play for teaching and learning. Students apply the results to a variety of game design projects. Prerequisite: GDD 101 or GDD 110; Every Year, Fall

GDD 202 Game Art I (3 cr.) This course introduces students to the underlying concepts and practical skills for the design of characters, costumes, props, levels, environments and worlds. Using sketches, concept art, drawing and storyboards, students learn the software tools required for designing and building 2D and 3D assets, while gaining knowledge of development tools. Prerequisite: GDD 110 or GDD 175 or permission of the program director; Every Year, Fall

GDD 210 Game Lab I: Team Projects ( 3 cr .) This is the first of a two-course sequence focusing on game production and prototyping. In Game Lab I, students work individually and in teams to define and develop a game concept, research content, develop the game mechanics and game play and build game assets and working prototypes. Prerequisite: GDD 200; Every Year, Fall

GDD 211 Game Lab II: Team Projects ( 3 cr.) This course is a continuation of GDD 210. Students continue to work individually and in teams to build working prototypes and learn the game development process, project management, play testing and usability testing. Prerequisite may be waived with permission of the program director. Prerequisite: GDD 210; Every Year, Spring

GDD 250 Interactive Storytelling and Narrative ( 3 cr.) Students critically analyze narrative structure and character development based on readings and game play. Students use creative writing, create interactive multimedia projects and create games that explore new emerging forms such as digital storytelling, interactive theater and virtual worlds. Prerequisites: EN 102; Every Year, Fall

## GDD 280 (ENT 290) Digital Businesses (3 cr.)

Students form their own teams to develop a digital business idea into a viable business and compete to win money to launch their businesses. Students learn about content creation, business concepts and presentation skills
in preparation for a successful launch. Prerequisite: GDD 101; Every Year, Fall

GDD 290 Internship (1 cr.) Under the supervision of a faculty member and a participating private company, corporation, institution or community organization, students gain real-world experience working in the field of game design. For majors or minors in game design and development. Requires permission of the program director. Every Year, All

GDD 301 Game Design II ( 3 cr .) This course is a continuation of GDD 201. Through the analysis of select games, students continue the critical assessment of game concepts, objectives, narrative structures and storylines, character development, game mechanics, playability and the potential of meaningful or serious play for teaching and learning. Prerequisite: GDD 201; Every Year, Spring

GDD 302 Game Art II (3 cr.) Students continue working with software tools required for designing and building 3D assets such as characters, costumes, props, levels, environments and worlds while gaining knowledge of game engines, scripting and cross platform development. Topics include techniques of 3D modeling, texturing, lighting, motion capture and animation, cut scenes, virtual camera angles, rendering, editing and compositing. Prerequisite: GDD 202; Every Year, Spring

## GDD 303 The Art of Audio Narrative (FVI 380/

 EN 303) ( 3 cr.) This course is about storytelling. Students learn the basics of multi-track audio recording and mixing. They write and produce fiction and nonfiction audio narratives. Each project is shared in a stimulating and mutually supportive workshop environment. Students read and listen widely to gain a sense of the history and theory of radio art. Participants also spend time identifying target audiences and looking at ways to distribute student work to the larger world of public and independent radio. Prerequisite may be waived with permission of program director. Prerequisite: GDD 101; Every Other Year, FallGDD 310 Game Lab III: Team ( $\mathbf{3}$ cr.) Game Labs III and IV form a two-course sequence that builds upon the experience of game design and prototyping gained in Game Labs I and II. Students work in teams to define and develop game concepts, research content, determine a development platform, use storyboarding to develop game mechanics and game play and build the game assets. Individual team members are assigned specific roles based their skills, and appropriate to their chosen track on game design or game art. Prerequisite may be waived with permission of the program director. Prerequisite: GDD 211; Every Year, Fall

GDD 311 Game Lab IV: Team Projects ( 3 cr.) In Game Lab IV, teams build working prototypes and begin to manage the life cycle of the game development process for a specific platform including troubleshooting, play-testing, usability testing and revisions. Prerequisite may be waived with permission of program director. Prerequisite: GDD 310; Every Year, Spring

## GDD 370 Acting and Directing for Game Design

(3 cr.) This course provides an introduction to the craft of directing and acting for game production. Topics include story analysis and interpretation, director's concept, visual composition and the history and theories of directing. Students learn the basic principles of acting, including scene analysis, motivation, intention and character work. They perform exercises, monologues and scenes. Additional topics include methods of actor coaching, rehearsal techniques and working with the creative game design team. As a final project, each student acts in or directs a scene for a game prototype. Every Year, Fall

GDD 390 Internship ( $\mathbf{1}$ cr.) Under the supervision of a faculty member and a participating private company, corporation, institution or community organization, students gain real-world experience working in the field of game design. For majors or minors in game design and development. Requires permission of the program director. Every Year, All

## GDD 395 Critical Game Studies Seminar (PL 395)

( 3 cr .) In this course, students address current research in game studies, ludology or play theory to develop critical, conceptual and cultural understandings of narrative, meaning and identity in digital games. The course also addresses the design and development of serious and meaningful games and the aesthetic, social and technological implications of new emerging forms such as digital storytelling, interactive theater and virtual worlds. Prerequisite may be waived with permission of the program director. Prerequisite: GDD 101 or PL 101; Every Year, Fall

GDD 396 Games, Learning and Society ( 3 cr.) This course addresses the design and use of serious and meaningful games in education and the relationship of digital games to important trends in teaching, learning and literacy. Prerequisite may be waived with permission of the program director. Prerequisite: GDD 101 or GDD 110; Every Year, Spring

GDD 402 Game Art III (3 cr.) Students continue with more advanced work using software tools required for designing and building 3D assets while gaining knowledge of game engines, scripting and cross platform development. Topics include techniques of advanced 3D modeling, texturing, lighting, motion capture and animation, scene planning, virtual camera
angles, rendering, editing and compositing. Prerequisite: GDD 302; Every Year, Fall

GDD 405 Game Audio Design (3 cr.) This course covers sound design for games while exploring techniques of digital sound synthesis, recording, sampling and editing. Prerequisite may be waived with permission of the program director. Prerequisite: GDD 101 or GDD 110; Every Year, Spring

## GDD 410 Game Lab V: Team Projects (FVI 410)

 (3 cr.) Game Lab V and VI forms a two-course sequence that builds upon the knowledge and skills of prior courses and extends the experience of game production and prototyping gained in Game Labs I, II, III and IV. In Game Lab V, students form teams to develop game concepts, including game mechanics and game artwork and assets during the semester. Simulating the real-world environment of game production, team members are assigned specific roles based the skill set of their chosen track in game design or game art. Team members perform the necessary game research, planning, development and project life-cycle management, and determine the platform for development. Prerequisite: For game design and development majors; requires senior status or GDD 311 or permission of the program director. Every Year, FallGDD 411 Game Lab VI: Team Projects (3 cr.) This course is a continuation of Game Lab V. Students manage the life cycle of the game development process for a specific platform including troubleshooting, play-testing,usability testing and final revisions. Teams prepare plans for distribution, software standards, software testing and quality assurance. At the end of the semester, teams present a working prototype and provide documentation of their design and development process. Prerequisite: For game design and development majors; requires senior status or GDD 410 or permission of the program director. Prerequisite: GDD 410; Every Year, Spring

GDD 490 Internship (1 cr.) Under the supervision of a faculty member and a participating private company, corporation, institution or community organization, students gain real-world experience working in the field of game design. For majors or minors in game design and development. Requires permission of the program director. Every Year, All

GDD 495 Senior Project and Seminar I (3 cr.) This senior-level seminar is taken concurrently with GDD 411, Game Lab VI. Students develop a portfolio, website, resume and other professional materials for presentation of game projects, which reflects their work in their chosen track in game design or game art. The seminar engages in discussions to support and critically appraise and assess the game development process and
addresses all relevant critical and theoretical issues. At the end of the course, students present their portfolios to a panel of department faculty and industry professionals. Prerequisite: For majors or minors in game design and development. Requires senior status or permission of the program director. Every Year, Spring

Courses offered as needed
GDD 175 Special Topics in Game Design (3 cr.)

## Geography (GP)

GP 101 Introduction to Geography ( 3 cr.) This course examines the general structure and methodology of geographical study. The physical, biotic and cultural environment and people's activities are covered, as are the world's land masses, their surface features and climates, and their relationships to human, social, economic and political organization. Every Other Year, All

## German (GR)

GR 101 Elementary German I ( 3 cr.) This introduction to the German language includes oral practice, the study of basic grammar, and practice in reading and writing. Students who have three or more years of high school German with grades of B or above may not take this course for credit. Every Year, Fall

GR 102 Elementary German II ( $\mathbf{3} \mathbf{c r}$.) This course is a continuation of GR 101. Prerequisite: GR 101 or placement into GR 102. Every Year, Spring

GR 200 German Business Culture ( 3 cr.) Students are introduced to vocabulary and etiquette in a German-language business context, and learn about differences between American and German business practices. Students develop practical skills, such as writing business letters, resumes, application letters and business emails, as well as communicating effectively in job interviews, common business situations and on the telephone. Students review and expand their knowledge of German grammar. Language and cultural proficiency are enhanced through a variety of homework and in-class assignments such as role-playing and individual and group projects. Particular emphasis is placed on listening and reading comprehension, as well as oral expression in complete, idiomatic sentences. Prerequisite: GR 102; Every Year, Fall

GR 300 German Business Culture ( 3 cr.) Students are introduced to vocabulary and etiquette in a German-language business context, and learn about differences between American and German business practices. Students develop practical skills, such as writing business letters, resumes, application letters and
business emails, as well as communicating effectively in job interviews, common business situations and on the telephone. Students review and expand their knowledge of German grammar. Language and cultural proficiency are enhanced through a variety of homework and in-class assignments such as role-playing and individual and group projects. Particular emphasis is placed on listening and reading comprehension, as well as oral expression in complete, idiomatic sentences. Prerequisite: GR 202; Every Year, Fall

Courses offered as needed
GR 201 Intermediate German I (3 cr.)
GR 202 Intermediate German II ( 3 cr.)

## Gerontology (GT)

GT 200 Biology of Aging (BMS 200) (3 cr.) The aim of the course is to study the specific and primary changes in physiological mechanisms that result in the process of aging. See description for BMS 200. Every Year, All

GT 205 From College to Career (SO/CJ 205) (1 cr.)
This course introduces sociology, gerontology and criminal justice majors to the disciplines and fields in which they are majoring. Students meet once a week to discuss the origins, breadth and potential careers in their fields. The course orients the student to the professions within sociology, and gerontology through interaction with departmental faculty, former students and practitioners in the field. For sociology majors only. This course is graded on a pass/fail basis. Prerequisite: SO 101; Every Year, Spring

GT 234 Adult Developmental Psychology (PS 234)
( 3 cr .) This course considers facts, theory and speculation about adult development and aging. Focus is on physical, cognitive and social development as well as family and career patterns for periods of young, middle and late adulthood. Prerequisite: PS 101; Every Other Year

GT 263 (UC) Sociology of The Aged (SO 263) (3 cr.) This introduction to gerontology examines the myths and realities of aging through historic, demographic and sociological analyses of the conditions of old people in our society. The ways in which social and cultural factors enter into the aging process are also considered. Prerequisite: SO 101; Every Year, All

## GT 270 Program Planning and Administration

 (SO 270) (3 cr.) This course considers program planning and administration of services to the elderly; models of needs identification, the process of problem analysis, styles of leadership and administrative dilemmas; elements of grant proposal writing. Prerequisite: SO 101; Every Other Year
## GT 305 Death, Grief and Bereavement (SO 305)

 ( 3 cr .) Death is studied from the perspective of social interaction between the dying person, professional caregivers and family members and loved ones. Attitudes and values about death, cultural components of grief, and the function of bereavement are examined. Particular attention is paid to the social organization of death work and dying in bureaucratic settings, such as hospitals and nursing homes, as opposed to the nonbureaucratic structure of hospice care. Prerequisites: two courses from SO, GT; Every Year, All
## GT 311 Introduction to Social Work (SO 311) (3 cr.)

This course is intended to provide students with an overview of social work as a helping profession. Beginning with a preliminary understanding of the historical development of social work, students learn how changes in social work theory and practice reflect larger societal changes. Course work familiarizes students with important social work issues and concepts and discusses their application in diverse social service and human service settings. Major or minor in gerontology, sociology, criminal justice or psychology and at least junior standing. Prerequisites: two courses from SO, GT; Every Year, Fall

GT 315 Case Management (SO 315) ( 3 cr.) Case management is a process used widely throughout health and social services as a means of assessing, planning, coordinating, monitoring and evaluating the services needed to respond to an individual's health and/or service needs to attain the dual goals of quality and cost effective care. Students in gerontology, sociology, psychology, and criminal justice are likely to encounter the various roles or models of case management practice as they pursue careers in human services. This course provides a foundation for case management practice in various social service settings. Prerequisites: two courses from SO, GT; Every Year, Spring

GT 318 Therapeutic Recreation (SO 318) ( 3 cr.) This course of study includes the principles and practices of program planning for therapeutic recreation. The course covers analysis, assessment, design, implementation and evaluation of activities. Emphasis is on intervention, gerontological terminology, documentation, record keeping and resources. Prerequisites: two courses from SO, GT; Every Other Year

## GT 325 Counseling Older Clients (SO 325) (3 cr.)

 Students are introduced to theories and models of effective communication with select members of an elderly population. Topics include practical aspects of communication of social service workers with older clients, older parents, older patients and the terminally ill; interview and counseling techniques; and the role of social service workers, past and present. Prerequisites: two courses from SO, GT; Every Other YearGT 381 Research Methods (SO 381) (3 cr.) This course studies the research methods used to evaluate the effectiveness of organizations and programs in meeting their social service goals. Methods of research are examined in depth and students become acquainted with the components of meaningful evaluations. For majors only, second semester junior or above. Every Year, All

## GT 382 Studying Social Issues with Statistics

(SO 382) (3 cr.) In this course, students learn basic introductory-level statistics and quantitative reasoning skills necessary for careers in sociology (including social services and health-related fields) and gerontology. Through hands-on application, students learn research design, basic statistical data collection and data analysis. For majors only, junior or above. Prerequisite: GT 381; Every Year, All

GT 385 Senior Capstone (SO 385) (3 cr.) This senior seminar is designed as the capstone course for students majoring in sociology and gerontology. Students research a sociological or aging-related topic of their choosing and write a thesis based on their work. All senior theses represent a culmination of majors' academic experiences in the department. For majors only in the senior year. Every Year, All

GT 392 Internship in the Community ( 3 cr.) For gerontology majors in their junior or senior year only. Students complete 120 hours of supervised fieldwork in a community agency that provides services to the elderly. They also spend one hour per week in the internship seminar class. Throughout the course, students demonstrate the connection between their academic course work and work in the field through reflections on disciplinary concepts such as: organizational structure and culture, power, diversity and social policy. In addition to the seminar requirements, students are required to adhere to strict standards of professionalism, confidentiality and responsibility at their internship site. Every Year, All

## GT 394 Advanced Internship in the Community

 (3 cr.) A required second internship for gerontology majors in their junior or senior year only. Students complete 120 hours of supervised fieldwork in a community agency that provides services to the elderly. They also spend one hour per week in the advanced internship seminar class. Throughout the course, students build upon the knowledge gained from their first internship experience to deepen their understanding of social structures, broaden their experience with diversity, and refine their personal sense of responsible citizenship. Students also assess their interpersonal strengths and weaknesses through written and oral reflection in preparation for graduate school and/or future employment. In addition to the seminar requirements, studentsare required to adhere to strict standards of professionalism, confidentiality and responsibility at their internship site. Prerequisite: GT 392; Every Year, All

## Courses offered as needed <br> GT 300 Special Topics in Gerontology ( 3 cr.)

GT 302 Women, Health and Aging (SO/WS 302)
( 3 cr.) Prerequisite: GT 263 or SO 263
GT 310 Elder Law (LE 310) (3 cr.) Prerequisite:
GT 263 or SO 263

## Global Public Health (GPH)

## GPH 201 Introduction to Global Public Health

( 3 cr.) Health is an essential human right, but much of the world still does not have access to basic public health services. The course explores how health is measured and the conditions that particularly affect the poor. Principles of public health, major global communicable diseases (e.g., HIV/AIDS, malaria and tuberculosis), and maternal-child health and noncommunicable conditions are reviewed. Strategies in control of disease and achieving global health are explored. Essential elements of study design, epidemiology and biostatistics also are taught. Course instruction includes textbooks, medical literature, popular writings and film, group work. This course is the required introductory course for GPH minor students. Non-GPH minor students need prior approval. Every Year, All

## GPH 301 Capstone in Global Public Health

( 3 cr .) This capstone course in global public health consists of a senior seminar during which students synthesize and reflect upon their academic, service and international experiences throughout the GPH minor. Through a series of readings, discussions, writing and presentations, students review key aspects of GPH and formulate their own responses and conclusions. During the capstone seminar, students also integrate the work they have done throughout the minor. This could include narrative writings, photographs and research results. The final course requirement is a paper and/or presentation that reports on and analyses the student's GPH theme or focus and demonstrates successful completion of the minor's learning objectives. Available only to students who are minoring in global public health. Prerequisite: GPH 201; Every Year, Spring

## Health Management (HM)

HM 404 Legal Aspects of Health Care Delivery ( 3 cr.) Students explore fundamental aspects of the law and the American legal system and their effects on our health care system. The course also examines the legal responsibilities and liabilities of an institution's governing board, administrators and clinical staff; and
the legal and ethical rights of patients, including the patient's right to informed consent, confidentiality and commitment. Every Year, All

## Health Science (HSC)

HSC 203 Interprofessional Community-based
Service Learning Seminar: Children and Youth (SL: Service Learning) (1 cr.) This seminar course has a community experience component (8-10 hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of communitybased practice and the focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a community-based service learning project for children/youth. The classroom/service learning schedules will be determined. Cross listed with HSC 503 for graduate students. Every Year, All

HSC 204 Interprofessional Community-based Service Learning Seminar: Young Adult (SL: Service Learning) ( 1 cr .) This seminar course has a community experience component ( $8-10$ hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of community-based practice and the focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a communitybased service learning project for young adults. The classroom/service learning schedules will be determined. Cross listed with HSC 503 for graduate students. Every Year, All

[^1]focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a community-based service learning project for older adults. The classroom/service learning schedules will be determined. Cross listed with HSC 503 for graduate students. Every Year, All

## HSC 214 Care and Prevention of Athletic Injuries

(AT 214) ( 3 cr .) This course is designed to provide an overview of the athletic training profession with an emphasis on the basic fundamentals utilized by the athletic trainer in prevention, recognition, care, treatment and rehabilitation of athletic injuries. Students who take AT 201 cannot also receive credit for AT 214. Prerequisite: BIO 102, BIO 102L or BIO 151; Every Year, Fall

HSC 215 Complementary Alternative Medicinea Health Science Perspective ( 3 cr .) Beneficial for any student who is planning on working in health care, this course explores the history of Complementary Alternative Medicine (CAM), which the National Institutes of Health Center reports is currently being used by 40 percent of Americans. This course familiarizes the student with the more common forms of CAM and the rising trend of integrative medicine departments in hospitals in the U.S. Comparisons are made between conventional medicine and CAM. Specific evidence-based CAM therapies are reviewed. Prerequisite: BIO 102 or BIO 151; Every Year, January Term

HSC 220 Health Care Essentials: Structure, Policy and Professionalism ( $\mathbf{3} \mathbf{~ c r}$.) This course provides prehealth care professional students with an overview of the structure, systems and policies of health care delivery in the United States. Health care delivery includes discussions of the underlying values and political influences on quality, access and finance. Considerations are made to other nation's health care systems and how these systems address societal need. Other topics include professionalism and current trends in health care systems. The goal of this course is to increase students' knowledge and abilities to analyze and address health care issues from the perspective of all stakeholders. Every Year, Fall and Spring

## HSC 221 Introduction to Health Care (2 cr.)

Designed for health science studies majors in their first or second year of study, this course broadens the student's understanding of the many careers in health science. It introduces key concepts necessary to work in various health care professions, develops valuable skills to improve their employability and lays a foundation for
further advanced studies in the major. Prerequisite: BIO 101 or BIO 150; Every Year, Fall and Spring

HSC 225 Writing in the Health Professions ( 3 cr.) This course reviews different aspects of written communication in the health science professions. Beginning with a review of general mechanics of good writing, students examine published samples from various health science disciplines. Based on answers taken from a patient's history, students rate the patient's level of health literacy and then compose a written tool to educate that patient about his or her health condition. Next, students learn how to best find reliable medical information through valid online resources and apply those references to the writing of a case study about the patient. This course is designed for BMS and SSTDY (health science studies) students. Prerequisites: BIO 102 or BIO 151; EN 102, EN 102; Every Other Year, Spring Online

HSC 250 Communication Disorders (3 cr.) This course provides information regarding a variety of communication and swallowing disorders. Information regarding potential causes of disorders as well as intervention methods is presented. The various health care professions that work together on cases of speech, language, hearing, and swallowing disorders are discussed. Prerequisite: BIO 101 or BIO 151; Every Year, Fall

## HSC 261 (UC) Scientific Study of Mummies (3 cr.)

 This distance learning course explores the field of mummy science, placing the study of mummies within a cultural and global context. Students discover what can be learned, how it can be learned and how data should be used to create new knowledge regarding mummified human remains. Course content challenges students to apply experimental design to mummy science questions. Students create hypotheses, design experiments, analyze collected data and determine the significance of the findings. The significance of mummy studies to current populations also is discussed. Every Year, Summer Online
## HSC 262 Nutrition in Health and Illness ( 3 cr.)

This elective course focuses on the fundamentals of human nutrition in relation to disease prevention and treatment. This course applies practical nutrition concepts as vital tools for members of a health care team to achieve optimum patient care. Emphasis is placed on the science of nutrition, nutrition throughout the life cycle and clinical nutrition. Prerequisite: BIO 102, BIO 151 or SCI 161; Every Year, All

HSC 270 Pillars of Public Health: Saving the World on a Population Level ( 3 cr .) This course defines the concept of public health, examining its foundations and historical context. Students learn about the relationship between public health and infectious diseases, including the classical epidemiology that founded the field.

The course addresses the six public health foundational areas: biostatistics, epidemiology, environmental health, sociomedical science, health policy and management, and population and family health. Additional topics include the biomedical basis of public health, some historical developments of public health, the relationship between public health and medicine (and other fields such as engineering and politics), the future challenges to public health, and an introduction to special topics in public health including: HIV/TB/Malaria, emerging infectious diseases, global health and careers in public health. Prerequisite: BIO 102 or BIO 151; Every Year, Spring

## HSC 301 Health Care Challenges and Team-based

Solutions ( $\mathbf{1} \mathrm{cr}$.) This interactive seminar focuses on common challenges in health care. Each week multidisciplinary teams facilitate the seminar focusing on common health challenges and how those challenges may be more effectively met utilizing a team approach to health care. The common health challenges are different each week and explore the challenges that students may experience in their own personal, family, or college life. The central outcomes of this course are: 1) to recognize how a health care team can work together; 2) to develop strategies to react responsibly and ethically to health care issues (social intelligence); 3) to develop ideas for community action as a citizen, and 4) to identify the influence of all aspects of diversity on health care delivery. Every Year, Fall and Spring

HSC 305 Emotional/Social Intelligence for the Health Sciences (2 cr.) This course provides the student with an appreciation and understanding of the role of emotional/social intelligence in everyday living and especially in the health sciences. Topics include how emotional intelligence differs from IQ, anatomy of emotions and the mind-body connection, education for and development of emotional literacy, assessing one's own social intelligence level, applying social intelligence skills to one's personal and professional lives. Personal assessments, small group experiential activities, case studies, journaling and project development are the essential methodology for this course. Prerequisite: Only open to students who have completed 7 credits of UC Science. Every Year, Fall and Spring

HSC 315 Bioethical Issues in the 21st Century ( 3 cr .) Students gain a solid understanding of bioethical principles and examine ethical dilemmas in medicine and the moral arguments that accompany them. Controversial bioethics issues such as assisted-suicide, stem-cell research, medical marijuana, organ donation and designer babies are explored though research, contemporary media and the students' own moral compasses. They study the role of public policy on bioethics and investigate cases that shaped the way modern medicine is practiced today. The course
stimulates discussion leading to final group debate projects. Every Year, Fall and Spring

HSC 320 The Environment and Human Health ( 3 cr .) This course examines the connection between our environment and human health and disease. Topics covered in this course include an overview of: toxicology, carcinogenesis, risk assessments, precautionary principle and bioaccumulation. Environmental connections to infectious diseases, emerging viruses, food production practices, loss of biodiversity, endocrine disruptors, also are discussed along with bioethical concerns of these topics. The course touches on health policies and regulations addressing environmental health issues. Students apply critical thinking skills to current environmental situations affecting our health as well as exploring the role individuals and professional health organizations have in accountability. Prerequisite: BIO 102 or BIO 151; Every Year, Fall Online

HSC 322 Health Care Law (LE 322) (3 cr.) This course provides an overview of the legal issues faced by health care providers and patients. Students explore various topics arising from the organization and financing of health care, provider liability, bioethics and public health. The course focuses on the way in which law impacts the delivery of health care in the United States. Prerequisites: two courses from LE; Every Other Year, Spring

## HSC 330 Leadership: Creating Adaptive Cultures

( 3 cr .) In this course, students explore leadership theory and practice. This is a problem-based learning course that requires students to develop new insights around leadership and leading from the literature and from each other. Students spend the first week defining the term, and the subsequent weeks applying and refining their ideas through case-method vignettes and biographies. The culminating project of the course is to create a simple leadership development workshop, one that might be used by health care professionals. Prerequisites: one group: BIO 101, BIO 102; BIO 150, BIO 151; Every Year, Summer Online

HSC 351 General Medical Conditions and Treatment (AT 351) (3 cr.) This course enables the student to recognize, evaluate and differentiate common systemic diseases, understand appropriate pharmacological interventions, understand the principles of pharmacology and common issues that arise when specific pharmacological agents are employed. Prerequisites: one group: BIO 211/211L, BIO 212/212L; BIO 227/227L, BIO 228/228L; Every Year, Spring

HSC 375 Immunology ( 3 cr.) This immunology course examines topics related to the immune system, particularly the human immune system. The immune system is designed to differentiate self and non-self in order
to prevent infection, disease and/or death. Students examine and discuss the current understanding of the immune response and discover why we are not sick all the time and how the body's immune system remembers enemies that it has seen in the past. This course covers the innate immune system, plus the two arms of the adaptive immune system-humoral immunity and cellular immunity. Immunodeficiencies, immunopathologies and immunotherapies also are discussed. Students may receive credit for BMS 375 or HSC 375, but not both. Prerequisite: BIO 102 or BIO 151; Every Year, Fall and Summer Online

HSC 378 Vaccines and Vaccine Preventable Diseases ( 3 cr .) This Immunology course involves the topics of vaccines and vaccine-preventable diseases (VPDs). Students examine and discuss the current understanding of vaccinations, as well as the historical and current implication of VPD. By the end of the semester, the student should understand how vaccines work, how they are made, who recommends vaccines, when they should be given, if they are still necessary, and most importantly, if they are safe. Students may only take one BMS 378, HSC 378 or BMS 525 for credit. Prerequisite: BIO 102 or BIO 151; Every Year, All

## HSC 397 Prehealth Professions Clinical Affiliation

 ( 3 cr .) This apprenticeship program pairs an undergraduate student who displays maturity, dedication and sensitivity with a health professional in his or her field of interest for a 12 -week period. The affiliation is designed to provide the student with the opportunity to observe social, ethical and medical issues in a clinical setting. Professional dress is required. Students may register for the course according to the following criteria: permission of faculty; completion of a minimum of three semesters at Quinnipiac; satisfactory GPA. Prerequisites: BIO 211, BIO 212; Every Year, Fall and SpringHSC 460 Advanced Nutrition (AT 460) (3 cr.) This advanced-level food and nutrition course examines the composition and physiological role of nutrients and their relationships to health and the body. Macronutrient metabolism as well as a detailed examination of the role of vitamin and mineral metabolism are explored. Current nutrition issues of supplement use, weight management, sports nutrition, nutritional ecology and the application of nutrition directly to food and its preparation also are addressed. Prerequisite: AT 230, AT 330, SCI 105, SCI 161 or HSC 262; Every Year, Spring

## Hebrew (HBR)

HBR 101 Introduction to Modern Hebrew (3 cr.) This is an introductory course in modern Hebrew. Students begin to achieve basic proficiency in reading, writing, speaking and comprehending modern Hebrew. Students
are introduced to the Hebrew alphabet and use Hebrew script. They learn elementary conversational skills and basic Hebrew grammar. Every Other Year, Fall

HBR 102 Introduction to Elementary Modern
Hebrew II ( 3 cr .) This course is a continuation of Hebrew 101. Students review and expand their grammatical study leading to deeper comprehension of style and usage. Students learn the fundamentals of grammar and syntax as well as idioms and special expressions. Emphasis is given to all four communicative skills (speaking, reading, listening and writing). The semester covers the study of the present tense, basics of the past tense, and some of the future tense in most of the conjugation models as well as numbers, colors, daily life situations, etc. Prerequisite: HBR 101; Every Other Year, Spring

## History (HS)

HS 111 (UC) The Rise of the West (3 cr.) Beginning with the origins of Western civilizations in the ancient Near East, students examine the development of Western culture and society from its beginnings through the 16th century, with emphasis on the nature and values of three successive polities: the classical world of Greece and Rome, the Middle Ages, and the origins of the modern world in the Renaissance/ Reformation. Consideration is given to the idea of the West and its interaction with and contact with nonWestern cultures and peoples. Every Year, All

HS 112 (UC) The West in the World (3 cr.) Beginning with the emergence of the modern state in the 16th century, students examine the social, political, economic and cultural developments of Western civilization and its interaction with the rest of the world. Emphasis is on the growth of science and technology in the 17th century, the emergence of the Enlightenment in the 18th century, the age of industrialization, nationalism and imperialism, social upheaval in the 19th century, the domination of the West over the worlds and challenges to that domination during the 20th century. Every Year, All

HS 122 (UC) Modern World History (3 cr.) This course examines key developments in world history beginning in roughly 1300 with the rise of the Tur-co-Mongol Empires and ending with the nationalist and independence movements of the 20th century. Students examine and analyze major events that occurred in the non-Western world. Special attention is paid to South Asia, East Asia, Africa and the Middle East. Students gain a better understanding of the history and culture of these regions, as well how the non-Western world has impacted the global community, both past and present. Every Year, All

HS 131 (UC) U.S. History to 1877 (3 cr.) This course traces the formation and expansion of the American nation from Colonial settlement through Reconstruction using selected episodes. Themes explored include the development of a national identity, models of citizenship, the role of government, and divisions based upon gender, ethnicity, race and class. Every Year, All

## HS 132 (UC) U.S. History Since Reconstruction

( 3 cr .) This course explores the evolution of the American people and their nation through the major political, social and economic changes of the late 19th century to the present. Key themes include changing expectations of governance, the quest to achieve the full promise of the Declaration of Independence and the U.S. ascent to global hegemony. Every Year, All

HS 202 Introduction to Public History (3 cr.)
This course provides an introduction to the field of public history. There are a variety of opinions on what constitutes public history, but generally it is considered to be the presentation of history to broad audiences outside the traditional classroom setting. The practice and presentation of history along these lines usually takes the form of museum exhibition, historic preservation, cultural/historic resource management, public programming, documentary film and oral history, but it is hardly limited to these areas. This course aims to introduce students to these exciting possibilities, and to appreciate the ever-widening scope of the public historian in the new media age. Every Year, Fall

## HS 208 (UC) Twentieth-Century World History

 ( 3 cr .) This course covers the history of the world since the 19th century focusing on the experiences and perspectives of the non-Western world. Students study the rise of nationalism, the disintegration of empires, and the growth of communal and ethnic strife across the globe in the 20th century. Prerequisites: one group: FYS 101; one course from HS level 100; Every Year, All
## HS 209 (UC) Twentieth-Century Europe (3 cr.)

Events in Europe during the 20th century radically transformed the world. The century began, and perhaps ended, in periods of vibrant intellectual, social and cultural development and optimism. In between these eras, however, Europe was at the center of the two bloodiest wars humanity has ever known and the rise of brutal totalitarian states. Students examine the complex cross currents in European society during the period roughly from the 1890s to the present, focusing on the political, social, intellectual and economic developments in European society that helped shape this turbulent century. Students also learn about the impact of nonEuropean peoples, particularly those of Africa and Asia,
on internal European developments. Prerequisites: one group: FYS 101; one course from HS level 100; Every Year, All

HS 210 (UC) Contemporary America (3 cr.) This survey of American history from 1945 to the present focuses on both social and political matters. Students study topics including the McCarthy era and the nuclear age, the civil and women's rights movements, Nixon and the Watergate crisis, gay liberation, the Reagan revolution and end of the Cold War, and the era of American global dominance and its challenges. Particular attention is given to the impact of the diverse cultures and peoples that have emerged in contemporary American society. Prerequisites: one group: FYS 101; one course from HS level 100; Every Year, All

## HS 211 Popular Culture in American History

( 3 cr .) This course focuses on an interpretation of American history through popular culture. Samples of popular culture materials in various historical periods are examined with special attention to music, film, television, and sports. Prerequisite: one course from HS level 100; Every Other Year, All

HS 220 American Environmental History (3 cr.) This course examines American society's interaction with nature since the arrival of Europeans in the 15th century. Students consider the intentions and values that guided the use of America's natural resources and the transformation of its landscape. While this historical legacy is most apparent in America's agricultural, industrial and conservation activities, it has been equally profound in the rise of America's environmental movement, tourism, recreation, ecological research and global environmental awareness. Since we are located in the New England/Mid-Atlantic region, this course occasionally departs from the broad survey of American environmental history and treats issues that are particularly germane to the region. Prerequisite: one course from HS level 100; Every Other Year, All

## HS 227 Russian Cultural and Intellectual History

( 3 cr.) Students are introduced to changing concepts of authority and the role of reason in the ordering of social and cultural values, the cultural mission of Russian Orthodoxy, the growth of a secular cultural elite, and the modern struggle to define individual and community and values in literature. This course includes readings in Russian thought and literature. Prerequisite: one course from HS level 100; Every Other Year

HS 228 Twentieth-Century Russia ( 3 cr.) This course considers Russian politics, society and culture in the 20th century, the Soviets in world affairs, and changing American views of the former Soviet Union. Prerequisite: one course from HS level 100; Every Other Year

HS 229 (UC) Irish History ( 3 cr.) This examination of Irish history from the pre-Christian Celtic era to modern times focuses on the changing character of Irish culture reflected in literary, political and religious documents. Special consideration is given to the origins of modern political and sectarian conflicts through a consideration of the history of Anglo-Irish relations, particularly the ramifications of the Tudor conquest, the Great Hunger and the rise of Irish nationalism. Prerequisite: one course from HS level 100; Every Year, Spring

## HS 235 History of Modern China/Asian Studies

( 3 cr .) Students are introduced to the political and social institutions of China, schools of thought, legal and moral concepts and literary, artistic and intellectual developments, elements of stability and change and international contacts to recent times. Prerequisite: one course from HS level 100; Every Year, All

HS 236 History of Modern Japan/Asian Studies (3 cr.) This course considers the historical background of modern Japan; period of seclusion; restoration of a centralized monarchy; economic and political developments, establishment of an empire and World War II and postwar period. Prerequisite: one course from HS level 100; Every Year, All

## HS 241 African American Experiences to Recon-

 struction ( 3 cr .) This course examines the history of the United States by looking at African American experiences up to the end of the 19th century. Using a wide array of primary materials from songs to autobiographies to speeches, in print and audiovisual forms, students explore how people of African descent conceptualized and constructed their identities and navigated their struggles against inequalities. A central theme is that people of African descent living in America created themselves under circumstances of inhumanity, exploitation and oppression. Prerequisite: one course from HS level 100; Every Other Year, FallHS 242 African American Experience Since Reconstruction (3 cr.) Although emancipation and reconstruction amendments ended a particular set of oppression and exploitation, the legal conferral of citizenship for African Americans neither ended institutional racism nor secured the redistribution of resources that had hitherto entrenched inequalities, prejudices and the denial of opportunities to black people. In this course, students examine how African Americans cultivated, expressed and debated the possibilities of, and alternatives to, equal inclusion and participation in American democracy and society in the last three decades of the 19th century and throughout the 20th century. Prerequisite: one course from HS level 100; Every Other Year, Spring

HS 254 Colonial Latin America (3 cr.) This course offers an introduction and examination of the history of Latin America and its people from Pre-Columbian times through independence. The course focuses on both the indigenous and European peoples and the many consequences of their interactions. Some areas of examination include European expansion and conquest, the impact on and reactions of indigenous populations, the formation of a colonial society, issues of race, ethnicity, class, and gender, and the establishment of economic and political structures. Prerequisite: one course from HS level 100; Every Year, All

HS 286 Introduction to Medieval Europe ( 3 cr.) This course provides a general overview of the Middle Ages from late Antiquity to the crises of the 14th century. It explores the period of European history that holds the foundations of much of western society. Topics of particular significance include: the Medieval Church, the rise of the university, relations with the East, the Crusades and the growth of towns and trade. Prerequisite: one course from HS level 100; Every Other Year, All

## HS 301 Special Topics II—European History (3 cr.)

 This course focuses on readings and discussion of historical topics of special interest to students enrolled in the course. Prerequisite: one course from HS level 200
## HS 303 Historiography and Historical Methods (3 cr.)

This advanced seminar is intended for majors and other students interested in deepening their knowledge of the techniques of reading, writing, researching and interpreting history. Students get a broad introduction to the concept of historiography and consider the ways in which thinking about the past has changed over time. Students also learn the foundational skills needed for the researching and writing of history, including an introduction to basic research techniques, compilation and organization of primary and secondary source materials, and the practical and theoretical skills necessary to undertake historical writing. Prerequisite: one course from HS level 200; Every Year, All

HS 305 Vietnam (COM 305) ( $\mathbf{3}$ cr.) This course presents a study of the Vietnam Era and draws conclusions about policy for the future. Media coverage of the war and its effect on both national policy and political change are emphasized. Prerequisite: one course from HS level 200; Every Year, All

HS 307 The Holocaust (MSS 307) ( 3 cr.) Through an examination of historical texts, literature and film, this course examines the systematic destruction of 10 million human beings at the hands of the Third Reich. Prerequisites: MSS 101; one course from HS level 200; Every Year, All

## HS 308 U.S. Women's History (WS 308) (3 cr.)

This course covers the experience of women in America before 1900. Women's work in the family and community is stressed. Individual research is required on varied topics, such as women and rural life, women and medicine, women in the professions, women and the charter of institutions, women and human rights, and women and the sea. Prerequisite: one course from HS level 200; Every Year, All

HS 309 Women in America 1920-Present (WS 309) ( 3 cr .) This course covers the experience of women in the 20th-century United States. Women's economic and political roles are stressed, and individual research on a specific topic is required. In past years, topics have included American women and their role in the world and women and rural life. Prerequisite: one course from HS level 200; Every Year, All

HS 312 Ancient Greece (3 cr.) This course examines the political, social and intellectual or cultural history of the ancient Greek world, with special focus on the period from the 8th century renaissance depicted in Homer, through the emergence and growth of city states such as Sparta and Athens, and ending with the 4th century transformation of the Mediterranean world by Alexander the Great. Emphasis is placed on the study of both literary sources, such as Herodotus, Thucydides, and Greek tragedians, and material sources, such as the Parthenon and red and black pottery. Prerequisite: one course from HS level 200; Every Other Year, Fall

HS 316 The European Renaissance (3 cr.) This course provides a topical exploration of the period commonly referred to as the Renaissance. It explores the period known for innovations in art and literature, but also addresses the political and social backdrop of Northern Italy and beyond. Topics of particular importance include changes in literature and education, innovations in art, modes of behavior and the emergence of modern political ideas. Prerequisite: one course from HS level 200; Every Other Year, All

HS 317 The European Reformation (3 cr.) This course explores Western Christendom from the late Middle Ages through the 17th century during the Age of Reformation. The central focus of the course is religion, but since the Reformation did not occur in isolation, it addresses a variety of themes in the study of early modern Europe. The aim of this course is to understand the major figures, movements and ideas that contributed to the division of Western Christendom into numerous confessional communities. Prerequisite: one course from HS level 200; Every Other Year, All

HS 318 European History, 1555-1715 (3 cr.) Students review European civilization from the Peace of

Augsburg to the death of Louis XIV, including the growth of the state, the development of the bureaucracy and diplomacy, the increase in warfare and the political struggle over taxation, the scientific revolution, and the shift toward secular values. Prerequisite: one course from HS level 200; Every Other Year, All

HS 319 European History, 1715-1815 (3 cr.) This course presents a survey of old regime, Enlightenment, French Revolution and Napoleonic eras in European history; movements of thought and culture and their social background; the feudal reaction and middle class protest in France, and national reactions to the French developments elsewhere in Europe. Prerequisite: one course from HS level 200; Every Other Year, All

HS 320 European History, 1815-1914 (3 cr.) Political, social and economic developments in Europe from the Congress of Vienna to the outbreak of World War I are examined. Legitimacy and the Concert of Europe; industrialization, liberalism, revolution, nationalism and imperialism also are considered. Prerequisite: one course from HS level 200; Every Other Year, All

HS 321 European History, 1914-1945 (3 cr.) This course presents a study of World War I and its economic, social, political and ideological consequences. The collapse of the Versailles settlement and interwar period is considered. World War II is covered, as are diplomatic and military consequences for the Cold War era. Prerequisite: one course from HS level 200; Every Other Year, All

## HS 326 Witches and Werewolves in the Early

 Modern World (WS 326) (3 cr.) This course explores the general belief in witchcraft and other supernatural creatures in the larger context of religion and culture in the early modern world. Participants examine how belief in the supernatural led to a widespread fear and persecution of individuals deemed witches or other consorts of the devil. Using the groundbreaking work of historians, and the primary documents of the period, this course examines the origins and processes of the witch trials. Since approximately 75 percent of those in Europe accused of witchcraft were women, the course examines how gender, misogyny and scapegoating shaped the persecution and prosecution of the more vulnerable members of premodern society. More broadly, the class examines how Christianity both affirmed and condemned these beliefs and practices and how people used superstition to make sense of the world around them. Prerequisite: one course from HS level 200; Every Other Year, Spring
## HS 331 The British Empire and Commonwealth

( 3 cr .) Students study the expansion, consolidation, workings and eventual disintegration of the modern

British Empire. The course begins in 1600, with the creation of the English East India Company. Students learn about the growth of the Empire in detail, touching on the colonial experiences of India, the West Indies, China, the Middle East and the African continent. Finally, students examine the emergence of nationalism in the colonized regions and the subsequent collapse of empire in the 20th century. Special emphasis is placed on how the major colonies were affected by British rule, as well as the contributions that subject peoples and cultures made to the unfolding of colonial history and the trajectory of Empire. Students should expect to attend lecture regularly, participate in weekly class discussions, as well as demonstrate mastery over the material in written assignments. Prerequisite: one course from HS level 200; Every Other Year, All

HS 332 History of India (3 cr.) Students examine the history of the South Asian subcontinent between 1500 and 1950, roughly. Beginning with the establishment of the Mughal Empire in approximately 1526, students critically discuss the shift from native empire to British rule in the 1800s, as well as look at the various challenges to British rule and the Indian independence movement of the 20th century and its effects. Along the way, students analyze key historiographical debates on the history of the subcontinent, such as the reasons for the decline of the Mughal Empire, the foundations of British rule, Hindu-Muslims relations, and the impact of the Raj on social and familial relations. Students should expect to attend lecture regularly, participate in weekly class discussions, as well as demonstrate mastery over the material in written assignments. Prerequisite: one course from HS level 200; Every Other Year, All

HS 333 The Middle East, 1300-1919; Critical Issues (3 cr.) Students analyze the economic, cultural and political developments in the Middle East between 1300 and 1919, beginning with the rise of the Ottoman Empire in roughly 1300 through the gradual shift from Ottoman to European influence in the 19th century. Students also discuss the rise of nationalism and the effect of World War I on the political map of the Middle East, paying close attention to events in Saudi Arabia and modern-day Israel. Emphasis is placed on certain critical issues in the study of the Middle East, such as the status of women, terrorism and the place of Islam in Middle Eastern history. Participants take a close look at both contemporary viewpoints and historiographical debates surrounding these issues. Students should expect to attend lecture regularly, participate in weekly class discussions, as well as demonstrate mastery over the material in written assignments. Prerequisite: one course from HS level 200; Every Other Year, All

HS 340 The Colonial Period to 1763 ( $\mathbf{3}$ cr.) Through lectures and discussion of source and secondary
readings, the American Colonial period to the preRevolutionary era is considered in all its aspects: social, political, religious and literary. Emphasis is on the increasing similarity and the approach toward unity of the several colonies. Prerequisite: one course from HS level 200; Every Other Year, All

HS 341 The American Revolution (3 cr.) Through lectures and discussions based on source and secondary readings, this course considers American history from 1763 to 1787, the pre-Revolutionary period, military, political and theoretical aspects of the Revolution, the Confederation, and the writing of the Constitution. Emphasis is on the political thought that culminated in the creation of the Constitution. Prerequisite: one course from HS level 200; Every Other Year, All

HS 342 The Early American Republic (3 cr.) This course considers American history from 1787 to 1848. Emphasis is on the ratification of the Constitution, the administrations of Washington, Adams, Jefferson and Madison; the growth of political parties; and political action stemming from differing theoretical positions. The course also examines culture and society in the era of good feeling and the Jacksonian period, and considers the changing position of the average American citizen. Prerequisite: one course from HS level 200; Every Other Year, All

HS 344 Civil War and Reconstruction (3 cr.) The economic, social and political history of the United States in the mid-19th century is examined with emphasis upon the Civil War. Also explored are long-range and immediate causes for Southern secession, the military, naval and diplomatic conflict; domestic developments North and South, 1861-65; postwar problems and the history of Reconstruction, 1865-77. Prerequisite: one course from HS level 200; Every Other Year, All

## HS 345 The Gilded Age and the Progressive Era

( 3 cr .) This in-depth study of the major developments that influenced the emergence of modern America includes industrial and naval expansion; social, political and religious movements; and the creation of an American empire. The course also considers the impetus to reform that characterized the first two decades of the 20th century. Prerequisite: one course from HS level 200; Every Other Year, All

## HS 346 The United States from WW I to WW II

 (3 cr.) American politics, culture and society during the Great War are examined, as are the prosperous 20s, the Great Depression and the Second World War. Increasing American involvement in world affairs is considered. Differing historical interpretations of the period are studied. Prerequisite: one course from HS level 200; Every Other Year, AllHS 349 American Maritime History (3 cr.) This course examines America's historic activities on the world's oceans, and on the bays, rivers and Great Lakes that are within its national boundaries. Students consider the economic, cultural, political and naval uses of these bodies of water from the 16th century to the present. Within this broad framework, this course considers how Americans used marine and freshwater environments to conduct trade, build communities, engage in war and diplomacy, use nature's bounty and participate in recreational activities. These themes illuminate the value Americans placed on maritime affairs, and provide insight into the American mariner's world, the American maritime community alongshore and the rippling effects of maritime activity throughout wider American society. Prerequisite: one course from HS level 200; Every Other Year, All

HS 361 African History to 1850 ( $\mathbf{3}$ cr.) This course provides an overview of the history of sub-Saharan Africa during the precolonial period, and entails a close inquiry into the major theoretical issues and conceptual questions involved in the study of African history. Classroom study is organized chronologically but focuses on several major themes: the relationship between Africa's linkages to the world and local historical dynamics on the continent; changing political structures and popular agency within them; slavery and economic transformations; gender and social change; shifting constructions of race, ethnicity, and identity; and the stakes of conceptualizing African history in the present. Particular attention is paid to a number of case studies from across the sub-Saharan African continent. Students draw upon a range of materials including secondary historical literature, primary sources and visual arts. Prerequisite: one course from HS level 200; Every Other Year, Fall

HS 362 African History Since 1850 (3 cr.) Students explore the onset of colonialism in the mid-19th century; the process of colonization and the dynamics of colonialism; the roots of national liberation movements throughout the continent, and the complex and contingent process of decolonization. In considering the early postcolonial period, students investigate the economic, social and cultural landscapes of a variety of newly independent countries. They then trace the trajectories of postcolonial states through the later years of the 20th century. Finally, students conclude by reflecting upon the contemporary relevance of this history. Prerequisite: one course from HS level 200; Every Other Year, Spring

## HS 371 Women in the Caribbean from the

 Indigenous Era to Emancipation (3 cr.) In this course, students learn that the past and history are different when viewed from women's perspectives and experiences. This course explores the experiences of women in the Caribbean from the indigenous populations to theend of slavery. Women's lives are explored in the context of larger Caribbean historical events and themes, including: the organization of indigenous societies, European conquest and settlement, the Atlantic slave trade, the slave and sugar plantation, black resistance, abolition and emancipation. Participants also explore experiences and perspectives peculiar to women, distinguishing their histories from men's histories. The class traces larger patterns and identifies shared experiences, but also pays close attention to factors that divided and diversified women's lives. Prerequisite: one course from HS level 200; Every Other Year, Fall

HS 372 Women in the Caribbean since Emancipation
( 3 cr.) Using discussion and reading, this course explores women making Caribbean history as they transitioned from slave to free societies and from colonial to independent states throughout the 18th, 19th and 20th centuries. Through critical analysis of women's memoirs, diaries, oral histories and visual materials, students investigate, speculate, debate and narrate women's experiences, contributions, ideas about and observations of the often tumultuous political, social, economic and cultural transformations across the Caribbean since the ending of slavery. Prerequisite: one course from HS level 200; Every Other Year, Spring

## HS 376 Pirates of the Caribbean ( 3 cr.) Critically

 examining films, historical texts and works of fiction, this class explores the political, social and cultural history of piracy in the Atlantic world. Beginning with the rise of Iberian Empires in Africa and the Americas in the 16th and 17th centuries, students examine the role and importance of privateers in empire building and the struggle for global economic power among European nations. Shifting toward the Golden Age of Piracy in the 18th century, when privateers no longer enjoyed legal status as mercenaries, but were seen as outlaws, we explore merchants and their colonial allies' violent campaigns to eradicate piracy. We also investigate the inner, private worlds of piracy and probe the enduring fascination with piracy in popular culture, and the myths generated about pirates and their worlds. Prerequisite: one course from HS level 200; Every Other Year, Fall
## HS 377 Kinship, Culture and Slavery: Creating an African Diaspora in the Americas (3 cr.) Students

 investigate the transatlantic slave trade as the primary mode by which Africans arrived in the Americas from the 15th to the 19th centuries. This class explores ideas and cultural traditions Africans brought with them to the New World, which provided a framework through which they interpreted, understood and re-created their lives in a new environment. The goal is to uncover how the African past shaped and defined Africans as they were transported across the Atlantic. Using an interdisciplinary approach, participants examinecontinuities and transformations of African structures and cosmology in the Diaspora. Prerequisite: one course from HS level 200; Every Other Year, Spring

HS 380 Historic Preservation ( 3 cr .) This introductory course in the interdisciplinary field of historic preservation aims to equip students with fundamental insight on how to handle and curate architecture, cultural landscapes and other forms of material culture in light of the principal methods, theories and philosophies (historic, social, cultural, technological and economic) that inform historic preservation practice. In sum, the course instructs students in the primary language, issues and research skills of historic preservation. Prerequisite: one course from HS level 200; Every Other Year, Spring

HS 391 Colonizing the Body ( $\mathbf{4} \mathrm{cr}$.) This course takes an in-depth look at the ways in which empire and imperial policies reshaped and reformulated the body of the colonized subject, setting up social categories of difference that corresponded neatly to European imperial notions of biological difference. Using India as a case study, it examines how Indian bodies were scientifically classified, categorized and redefined to underscore and perpetuate European political dominance. The course highlights imperial policies that buttressed certain privileged notions of racial, gendered, economic/occupational and anatomical difference. Every Year, Fall

HS 394 Doctors, Disease, and Death in the Western World (4 cr.) In this course, students learn about the complex and varied history of health, healing, disease and death in the Western world from the time of the ancient Egyptians to modern day. This course is thematic in its focus. Students study various aspects of the history of medicine and through that study come to a better understanding of the biological, social, intellectual, cultural and institutional contexts in which the process of living and dying has been constructed in the Western experience. Every Year, Spring

HS 408 Seminars in History ( 3 cr.) Seminars are taught by members of the department in areas of their special competence. Topics are selected in consultation with juniors in the major. Emphasis is on organization and presentation of research. Open to second-semester juniors and seniors in the major and to other qualified upperclassmen by permission of department and instructor. Prerequisite: HS 303; Every Year, All

Courses offered as needed
HS 111H (UC) Honors The Rise of the West (3 cr.)
HS 112H (UC) Honors The West and the World (3 cr.)
HS 200 Special Topics in History (3 cr.) Prerequisite:
one course from HS level 100
HS 201 Historical Writing (1 cr.)

HS 213 The Roman World ( 3 cr.) Prerequisite: one course from HS level 100
HS 215 American Business History (3 cr.)
Prerequisite: one course from HS level 100
HS 271 History of Southeast Asia 1 (3 cr.)
Prerequisite: one course from HS level 100
HS 272 History of Southeast Asia 2 (3 cr.)
Prerequisite: one course from HS level 100
HS 273 African History and Culture (3 cr.)
Prerequisite: one course from HS level 100
HS 294 American Civilization: Prosperity and Depression in the 1920s and 1930s (3 cr.)
Prerequisite: one course from HS level 100
HS 300 Special Topics in American History (3 cr.)
Prerequisite: one course from HS level 200
HS 302 Special Topics III-World History (3 cr.)
Prerequisite: one course from HS level 200
HS 310 The Ancient Near East ( 3 cr.) Prerequisite: one course from HS level 200
HS 311 The Ancient Hebrews (3 cr.) Prerequisite: one course from HS level 200
HS 313 The Roman World (3 cr.) Prerequisite: one course from HS level 200
HS 314 Europe in the Early Medieval Period, 325-842
( 3 cr.) Prerequisite: one course from HS level 200
HS 315 Introduction to Medieval Europe: Europe in the High Middle Ages (3 cr.) Prerequisite: one course from HS level 200
HS 322 History of World War I ( 3 cr.) Prerequisite: one course from HS level 200
HS 323 World War II ( 3 cr.) Prerequisite: one course from HS level 200
HS 324 History of England to 1688 ( $\mathbf{3}$ cr.) Prerequisite: one course from HS level 200
HS 325 History of England: 1688 to the Present (3 cr.)
Prerequisite: one course from HS level 200
HS 327 Islamic Societies and Cultures to 1300 ( $\mathbf{3} \mathbf{c r}$.)
Prerequisite: one course from HS level 200
HS 330 History of Western Medicine (3 cr.)
Prerequisite: one course from HS level 200
HS 348 The American West to 1900 (3 cr.)
Prerequisite: one course from HS level 200
HS 351 The New South ( 3 cr.) Prerequisite: one course from HS level 200
HS 400 Special Topics in History ( 3 cr.) Prerequisite: one course from HS level 300
HS 409 Honors Essay in History (3 cr.) Prerequisite: HS 408

## Industrial Engineering (IER)

IER 310 Operations Research I ( 3 cr.) This course provides a rigorous introduction to the principles of operations research with a focus on linear programming models and simplex method, duality and sensitivity analysis; transportation and assignment problems; network models; integer and nonlinear programming;
an introduction to queuing theory and Markov Chains. Prerequisite: MA 152 or MA 241; Every Year, Fall

IER 320 Production Systems ( 3 cr .) This course provides an introduction to production systems, classification, general terminology, technical aspects, economics and analysis of manufacturing systems. Students learn the fundamentals of automation and control technologies as well as manufacturing support systems. Sophomore status required. Every Year, Spring

IER 330 Lean Systems Engineering ( 3 cr.) This course provides a comprehensive and hands-on introduction to Lean Systems and its wide applications, with special emphasis on the Toyota Production System. Prerequisite: IER 320; Every Year, Fall

IER 335 Systems Engineering and Management (3 cr.) This course discusses the theory and methods used to design, analyze and manage engineered systems. Students review the principles of system life-cycle management including requirements analysis, system design, functional decomposition, configuration management and systems evaluation. Topics of engineering management emphasizing human relationships, motivational theory and human-systems integration also are addressed. Prerequisites: ENR 210, IER 320; Every Year, Fall

## IER 340 Physical Human Factors and the Workplace

( 1 cr.) This course analyzes the impacts of the physical factors of the human decision makers on workflow and efficiency. Basic concepts of anthropometry, biomechanics, work physiology, stress and workload as well as work measurement are introduced. Special emphasis is placed on the capabilities and limitations of humans, in human-centered design of systems and products. Prerequisite: ENR 110; Every Year, Fall

## IER 350 Facilities Layout and Material Handling

( 3 cr .) The focus of this course is the design of industrial facilities with consideration of work organization and layout. Students study basic design of plant systems, including plumbing, electrical, HVAC, illumination, acoustics and waste handling. The course also provides in-depth coverage of material handling system design and equipment choices. Prerequisite: IER 310; Every Year, Fall

IER 360 Operations Planning and Control ( 3 cr.)
This course focuses on analytical techniques for work scheduling and materials planning in the manufacturing, service and health care industries. The main objective is to develop the ability to use engineering tools for industrial engineering practice in operations and materials management. Topics include forecasting, production and material planning (JIT, MRP, ERP), inventory analysis and scheduling techniques. Prerequisite: MA 285; Every Year, Fall

IER 385 Decision Analysis (3 cr.) The course presents basic techniques of decision making concentrating on both theoretical and modeling aspects. This course integrates the art and science of decision making for single and multiple objective environments to support the decision-making phase of the Systems Decision Process (SDP). The focus of the course is modeling problem structure, uncertainty, risk and preference in the context of decision making. Prerequisite: CSC 110; Every Year, Spring

## IER 410 Designing and Managing the Supply Chain

 ( 3 cr .) This course provides an introduction to the techniques of supply chain management, focusing on logistics, purchasing and product development processes. The main objective is develop competence in quantitative methods for analyzing and solving supply chain problems in a variety of industries that include manufacturing, services and health care. Topics include supply chain performance, network design, product availability and sustainable supply chain management. Prerequisite: IER 360; Every Year, FallIER 430 Statistical Process Control (3 cr.) Topics include: quality improvement philosophies, modeling process quality, statistical process control, control charts for variables and attributes, CUSUM and EWMA, short production runs, multivariate quality control, auto correlation, engineering process control, economic design of charts, fill control, pre-control, adaptive schemes, process capability, specifications and tolerances, gage capability studies, acceptance sampling by attributes and variables and international quality standards. Prerequisite: MA 285; Every Year, Fall

IER 440 Simulation ( $\mathbf{3} \mathbf{~ c r}$.) This course includes a simulation of complex systems with applications in industrial engineering. Topics include modeling and developing custom solutions in one or more highlevel computer packages; input distribution modeling; emphasizing examples, applications and cases. Prerequisite: MA 285; Every Year, Spring

## IER 450 Health Care Systems Engineering (3 cr.)

This course introduces several topics in health care systems engineering, including care cost and quality assessment, patient safety, operations management and process analysis. Students examine the application of industrial engineering to the problems in health care delivery. Prerequisite: IER 335; Every Year, Fall

IER 465 Cognitive Human Factors and the Workplace ( 2 cr .) This course analyzes the impacts of the cognitive factors of the human decision makers on workflow and efficiency. Basic concepts of cognition, as well as sensory systems, such as visual and auditory, are introduced, leading to the analysis of design topics, including displays,
controls, shiftwork and work-rest schedules. Special emphasis is placed on the capabilities and limitations of humans, in human-centered design of systems and products. Sophomore status required. Every Year, Fall

IER 475 Human Reliability ( $\mathbf{1} \mathrm{cr}$.) This course focuses on the principles, methods and tools for the analysis, design and evaluation of human decision making within human-centered systems. The impacts of human perceptual and cognitive factors are analyzed, leading to design principles for error-prevention. This course is complementary to IER 465, Cognitive Human Factors and the Workplace. Sophomore status required. Every Year, Fall

IER 485 System Reliability ( 2 cr. ) This course provides an introduction to failure rates, failure risk analysis and system configurations, such as series, parallel and redundant systems. It also discusses design for reliability and optimal maintenance and replacement policies. Prerequisite: MA 285, MA 142 or MA 152; Every Year, Fall

IER 489 Advanced Independent Study in IE ( 3 cr .)
This is a tutorial course or an individual project in which the student pursues advanced study in systems engineering or engineering management. The scope of the course is tailored to the desires of the student in consultation with a faculty adviser. Communication skills are developed with both written reports and oral presentations. Requires approval of faculty member. Every Year, Fall and Spring

IER 490 Engineering Professional Experience (1 cr.) Students gain at least 240 hours of experience by employing engineering skills in a professional setting under the guidance of practicing engineers. Students must obtain departmental approval and register prior to starting the experience. Prerequisite may be waived with permission of adviser. Prerequisite: ENR 395; Every Year, All

IER 491 Capstone Project I ( 3 cr .) This is the first part of a two-semester capstone design experience for industrial engineering students. It involves analysis and synthesis of unstructured problems in practical settings. Students work in teams to formulate issues, propose solutions and communicate results in formal written and oral presentations. Prerequisites: IER 310, IER 330, IER 335, IER 360, IER 430; Every Year, Fall

IER 498 Capstone Project II (3 cr.) This is the second part of a two-semester capstone design experience for industrial engineering students. It involves analysis and synthesis of unstructured problems in practical settings. Students work in teams to formulate issues, propose solutions and communicate results in formal written and oral presentations. Prerequisite: IER 497; Every Year, Spring

Courses offered as needed
IER 311 Operations Research II (3 cr.) Prerequisite: IER 310
IER 415 Design of Experiments ( 3 cr .) Prerequisite: MA 285
IER 420 Industrial Control Systems ( 3 cr .)
Prerequisite: IER 320

## Interactive Digital Design (IDD)

IDD 110 Design Research and Methods ( 3 cr.) This foundation course in research methods for art and design introduces informed strategies for problem solving and prepares students for upper-level coursework in interactive digital design. Emphasis is placed on the role of critical thinking in the design process. Theoretical models of design analysis are introduced. Practical hands-on methods include visual research, design journals, thumbnail sketches, mind maps, storyboards, comprehensives, diagramming, prototyping, case studies, topic and content development and other forms of conceptualization. Every Year, Fall and Spring

IDD 160 Digital Design I ( 3 cr.) This course presents an introduction to the design process using professional level software for digital image creation and editing, typesetting and typography, page layout and design in preparation for advanced course work. Students produce course projects that demonstrate creativity, design concepts, critical thinking, aesthetic principles and basic technical competence. Every Year, Fall and Spring

IDD 161 Digital Design II (3 cr.) This course is a continuation of IDD 160 and extends the design process using professional level software for the creation of web pages and web design in preparation for advanced course work. Students produce course projects that demonstrate creativity, design concepts, critical thinking, aesthetic principles and basic technical competence. Prerequisites: IDD 110, IDD 160; Every Year, Fall and Spring

IDD 210 Graphic Design History ( $\mathbf{3} \mathbf{~ c r}$.) This course surveys the historical and cultural events, movements and achievements that laid the groundwork for the contemporary practices and products of graphic design. Through lecture, video, discussion, research and studio projects, students are introduced to the visual history, the innovators and the technologies that influenced and transformed the practices of visual communication. Prerequisite: IDD 110; Every Year, Fall

IDD 250 Interactive Narrative Forms (3 cr.) Students read, review and critically analyze select examples from interactive studies literature and interactive multimedia. Students write and create interactive research essays for online distribution. Through reading, research and
practice, students gain a broader understanding of what encompasses an interactive experience. Prerequisites: IDD 110, IDD 161; Every Year, Fall or Spring

IDD 270 Typography I ( 3 cr .) This course enables the student to both understand type and to use it as a design element. Using current computer graphics technology, topics explored include the use of type, page layout, color and the importing of graphics. Using professional page layout software, students create projects that demonstrate both design aesthetics and technical skills. Finished pieces are printed and become part of the student's portfolio. Prerequisite: IDD 110; Every Year, Fall or Spring

IDD 301 Motion Graphics I ( $\mathbf{3} \mathbf{~ c r}$.) This course explores aesthetic, critical and technical topics in motion graphics and 2D animation. Students produce projects that demonstrate knowledge and understanding of 2 D animation and motion graphics used in the field of design. Prerequisites: IDD 110, IDD 161; Every Year, Fall or Spring

IDD 315 Mobile Interaction Design (3 cr.) This course covers practical techniques for researching, designing and prototyping mobile applications and experiences. Some of the topics covered include wireframe creation, user studies and paper and digital prototyping. Prerequisite: IDD 301; Every Year, Spring

IDD 370 Typography II ( 3 cr .) This course picks up where IDD 270 leaves off by instructing in advanced typographic design; the use of grid structures; juxtapositions of type and image; and preparation for offset printing. Using the current computer technology, students create projects that demonstrate both an advanced knowledge of design/typography and current digital production processes. Finished pieces are printed and become part of the student's professional portfolio. Prerequisite: IDD 270; Every Year, Spring

IDD 410 Advanced Interactive Authoring (3 cr.) This course explores advanced aesthetic, critical and technical topics in web site design, development, structure and information architecture. Students use problem-solving methods of design research and analysis combined with authoring and scripting environments to enhance design, interaction, usability and effective communication. Topics include current processes and technologies of web design, web standards and media theory. Prerequisites: IDD 250, IDD 301; Every Year, Fall

IDD 440 Motion Graphics II ( 3 cr .) This course explores advanced aesthetic, critical and technical topics in motion graphics and animation. Topics include typography and motion graphic design and layout, editing digital video, and audio. Students use problem-
solving methods of design research and analysis to produce digital video animations that demonstrate both knowledge and understanding of motion graphics, and that provide them with professional entry into the field. Prerequisite: IDD 301; Every Other Year, Spring

IDD 480 Senior Seminar and Portfolio (3 cr.) In this course, students consider critical issues in interactive arts and prepare a portfolio, web site, resume and other professional materials. For majors or minors in interactive digital design. Senior status is required. Every Year, Spring

IDD 490 Internship (3 cr.) Under the supervision of a faculty member and a participating private company, corporation, institution or community organization, students gain real-world experience working in the field of digital design. For majors or minors in interactive digital design. Junior status required. Every Year, All

Courses offered as needed
IDD 200 Special Topics in IDD (3 cr.)
IDD 205 Visual Thinking: Practice and Process ( 4 cr .)
IDD 300 Special Topics in IDD ( 3 cr .) Prerequisite:
IDD 160
IDD 302 3D Graphics and Animation (GDD 302)
(3 cr.) Prerequisites: IDD 301, IDD 315
IDD 305 Digital Photography (3 cr.)
IDD 400 Special Topics in IDD ( 3 cr .) Prerequisite:
IDD 301
IDD 420 Alternative Interfaces ( $\mathbf{3} \mathbf{~ c r}$.) Prerequisite: IDD 301

## International Business (IB)

IB 105 (UC) International Business Environment
( 3 cr .) This course provides an introduction to the worldwide business environment in which we live and work. The course reviews the cultural, social, political, geographical and economic factors that shape economic institutions and activities in the U.S. and other countries. Global business interactions also are studied. This course is geared primarily toward non-business majors. Every Year, Fall and Spring

## IB 201 (UC) Globalization and International

Business (3 cr.) This course introduces students to issues concerning globalization and international business. Students examine the critical role of foreign exchange, international trade and international investment, as well as the impact of multinational corporations on the globalization process. The role of the business community in reducing the negative effects of globalization while at the same time availing itself of its benefits is considered. Global issues such as poverty, economic development and education, and the
formulation of sustainable, environmentally-friendly development strategies are addressed. Insights are drawn from social sciences disciplines such as economics, political science, sociology and cultural geography. Prerequisite: EC 111 or FYS 101; Every Year, All

IB 311 International Marketing (3 cr.) The course discusses various environmental components of international marketing that affect business. Students also learn about the four P's of marketing (product, price, place and promotion) in a global context. Additional topics include regional integration and emerging markets. The course is intended to provide students with an understanding of global marketing strategies and research methods that are crucial for success in today's globalized world. Prerequisite: IB 201; Every Year, Spring

IB 313 International Marketing Research ( 3 cr.) Students learn to understand and satisfy marketing managers' information needs: demand potential, competition, regulations and accepted procedures in relevant business/geographic areas. Research design, quantitative and qualitative data collection, questionnaire design, data analysis, implications of results and written/ oral reports are included. This methodological course assumes basic understanding of marketing in a global environment. MA 107 prerequisite waived with Math Placement score of 4.0 or higher. Prerequisites: MA 107, IB 201, EC 271; Every Year, Fall

IB 320 Introduction to Global Entrepreneurship ( 3 cr .) This course introduces students to the major topics in global entrepreneurship, including: 1) the critical roles of national governments, multilateral institutions, and international agreements in shaping the rules and conditions that frame global opportunities and challenges; 2) the role of international entrepreneurship in this complex global environment; and 3 ) issues concerning how to identify opportunities, build a start-up, manage its growth and resources in a global environment. The course introduces some basic skills, such as country risk analysis, business model building and valuation of an international business opportunity. The course is taught by lecture, case analysis and experiential projects. Prerequisite: IB 201; Every Year, Fall and Spring

IB 324 Negotiating Internationally ( $\mathbf{3} \mathbf{c r}$.) The course focuses on analyzing the international context of different dimensions of negotiations and related topics, such as communication, conflict, conflict resolution, group, power, influence, persuasion and mediation. Special emphasis is placed on understanding how culture influences the processes as well as styles of negotiation behavior of different nationalities. Prerequisite: IB 201, LE 225 or LE 370; Every Year, Fall

IB 335 International Finance ( $\mathbf{3} \mathbf{~ c r}$.) This course presents a study of the financial management of multinational corporations, including foreign exchange risk management, financing decisions, investment decisions and funds remittance/transfer decisions as firms operate in a competitive global economy and face currency risks, political and regulatory risks. Prerequisites: IB 201, FIN 201; Every Year, Fall and Spring

IB 345 Global Supply Chain ( 3 cr ) This course covers issues related to the global procurement decision making process from multiple perspectives: strategy, tactical and operational. Topics may include, but are not limited to: order processing, quality control, value analysis, warehousing, inventory control, reverse logistics, green supply chain, offshoring and outsourcing, and international transportation, financing, risk, customs and incoterms. Prerequisites: IB 201; MG 211 or IER 360; Every Year, Spring

IB 352 International Management (3 cr.) This course addresses the theory and practice of strategic management and organizational behavior in a global environment with a specific emphasis on international human resource management. The understanding of cultural differences is a major emphasis of this course. The course also addresses cross-cultural communication, selection and management of expatriates, and global leadership skills. In addition, this course introduces the students to the reading and interpreting of international management research articles and highlights some of the special challenges related to conducting and interpreting cross-cultural research. Prerequisite: IB 105 or IB 201; Every Year, Fall

## IB 401 International Strategy and Business Plan

 ( 3 cr .) This course allows students to integrate the knowledge they acquired in the IB core courses into a comprehensive country market-entry project. This includes country assessment, marketing, finance and management dimensions, and sensitivity analysis of the impact of a current event on the recommendations. Participants also discuss how the firm's global strategy affects its operations. This course compels students to think beyond the confines of the home country and to consider the ramifications of offering their product/ service in a host country. Prerequisites: IB 313, IB 320, IB 335, IB 352; Every Year, SpringIB 488 International Business Internship (3 cr.) This internship in international business must be approved by the department chair and the dean in accordance with school regulations. This course is graded on a pass/fail basis. Prerequisite: IB 201; Every Year, All

[^2]IB 355 Advanced Topics in International Financial Management (3 cr.) Prerequisite: IB 335 or FIN 335
IB 362 Cross-cultural Business Research Part 1 (3 cr.) Prerequisite: IB 201
IB 363 Cross-cultural Business Research Part 2 (3 cr.) Prerequisite: IB 362

## Irish Studies

## IRST 101 (UC) Introduction to Irish Studies (3 cr.)

 This course provides an introduction to Irish history and culture from the pre-Celt period to the present day. While the core approach is historical, students are introduced to Irish language, literature, filmography, landscape, music, politics, sports, poetry, theatre, law and more. Students also look at the various methodological approaches for understanding Ireland, past and present. The course is led by Professor Christine Kinealy, but includes sessions with other lecturers involved in teaching Irish Studies at Quinnipiac University and her partner institutions. Requires sophomore class standing. Prerequisite: FYS 101; Every Year, FallCourses offered as needed
IRST 300 Special Topics in Irish History (3 cr.)

## Italian (IT)

IT 101 Elementary Italian I ( $\mathbf{3} \mathbf{~ c r}$.) This course is designed for students who have no previous knowledge of Italian. The course includes instruction and practice in all four language skills: speaking, reading, writing and listening comprehension, with emphasis on communication and oral proficiency. In addition, students explore aspects of Italian life and culture. Students who have three or more years of high school Italian with grades of B or above may not take this course for credit. Every Year, Fall and Spring

IT 102 Elementary Italian II (3 cr.) This course is a continuation of IT 101. Prerequisite: IT 101 or placement into IT 102. Every Year, Fall and Spring

IT 201 Intermediate Italian I (3 cr.) This third-semester course includes instruction and practice in all four language skills: speaking, reading, writing and listening comprehension, with emphasis on communication and oral proficiency. In addition, students explore aspects of Italian life and culture through analysis of selected authentic readings and films. Every Year, Fall

IT 202 Intermediate Italian II ( $\mathbf{3} \mathbf{~ c r}$.) This course is a continuation of Italian 201. Every Year, Spring

IT 301 Advanced Italian I (3 cr.) This course develops oral and written language skills to a high degree of
proficiency, while exploring major social and cultural trends in contemporary Italy. Topics such as politics, popular culture, history and gastronomy are examined through authentic texts and a variety of media. Prerequisite: IT 202; Every Other Year, Fall

IT 302 Advanced Italian II ( $\mathbf{3} \mathbf{c r}$.) This course is a continuation of IT 301. Prerequisite: IT 301; Every Other Year, Spring

## IT 316 Introduction to Italian Literature and

 Culture (3 cr.) This course explores the evolution of Italian literature from its origins to modern day, placing representative texts within an interdisciplinary perspective. Through response papers and presentations in the target language, students further perfect written and oral skills, and develop the necessary foundation for more advanced study in the target language.Prerequisite: IT 302; Every Other Year, Fall
IT 320 Italy's Cities ( $\mathbf{3} \mathbf{~ c r}$.) This course explores the history, literature and visual art of Italy's cities and their unique contribution to Western civilization, while continuing to refine oral and written skills in the target language. Topic city rotates from year to year. Prerequisite: Italian 302 or permission of the instructor. Prerequisite: IT 302; Every Other Year, Spring

## Courses offered as needed

IT 200 Italian: Special Topics (3 cr.) Prerequisite: EN 101 or EN 101

## Japanese (JP)

JP 101 Elementary Japanese I (3 cr.) This introduction to Japanese as a spoken and written language includes intensive drills in the basic structures of the language. Elementary reading materials are used for vocabulary building, analytical exercises and discussion. Students learn about Japanese culture, customs and business practices. Basic Japanese scripts are introduced concurrently with other skills. Every Year, Fall

JP 102 Elementary Japanese II ( $\mathbf{3} \mathbf{~ c r}$.) This course is a continuation of JP 101. Prerequisite: JP 101; Every Year, Spring

Courses offered as needed
JP 200 Special Topics (3 cr.)

## Journalism (JRN)

## JRN 106 Multimedia Production Techniques

(SPS 106) (3 cr.) Students learn the fundamentals of multimedia production, including the use of digital cameras and related equipment, to tell simple stories
and the use of editing software to prepare them for distribution. Students learn the rudiments of videocamera use, composition and lighting, capturing audio, continuity, interviewing, voiceovers, music beds, graphics, and shooting and editing action. Students produce b-roll, features, interviews, location pieces and story packages pertaining to their concentrations or areas of interest. Every Year, All

JRN 160 Introduction to Media Writing (3 cr.) This course provides an introduction to reporting and writing in the media professions. Students learn how to gather information and write news stories, broadcast reports and press releases in an accurate, concise and interesting way. Required for all communications majors. Every Year, All

JRN 260 News Writing and Reporting ( 3 cr .) This course covers news research, writing and reporting with an emphasis on crafting stories for traditional print and online media. Students learn interviewing techniques, discover how to organize complicated material and cover on-campus and off-campus news. Meetings are held with media professionals. Prerequisite: JRN 160; Every Year, All

JRN 263 Broadcast News Writing ( 3 cr.) Students are introduced to the fundamentals of writing for the broadcast media in a professional environment. Topics include writing for radio and television, as well as integrating sound and video into news stories. The course also provides a basic understanding of primary journalistic values such as accuracy and fairness as they apply to broadcast news. Prerequisite: JRN 160; Every Year, All

JRN 291 Reporting for Television I (3 cr.) Students learn the principles of producing television news packages, which they shoot and edit using HD nonlinear equipment. All students cover news and sports primarily off campus. The focus is on writing, news judgment, content, interviewing, use of voice and doing stand-ups. Stories can air on the TV newscast that is broadcast live weekly. Prerequisites: JRN 263; JRN 105, JRN 106, SPS 105 or SPS 106; Every Year, All

JRN 305 Reporting for the Web ( 3 cr .) This course covers the principles and practices associated with researching and producing stories for online interactive media. Students are required to produce stories that include textual, audio, video and interactive elements. Prerequisites: JRN 260 or JRN 263; JRN 105, JRN 106 or SPS 105; Every Year, All

JRN 311 Reporting for Television II (3 cr.) In this course, students produce in-depth television stories. Pieces are longer to allow the student to explore issues
in greater detail. Stories can air on the TV newscast that is broadcast live weekly. Prerequisite: JRN 291; Every Year, All

JRN 315 The Art of Journalistic Interviewing (3 cr.)
Compelling stories don't just happen. They come from strong interviewing skills that tell stories people care about. Students learn how to ask questions that elicit pithy responses, emotion and expertise, using in-class and out-of-class exercises. Students also analyze and critique the interviewing styles used by professional journalists, as well as the work of their classmates. Prerequisites: JRN 160; JRN 105, JRN 106, SPS 105 or SPS 106; Every Year, Spring

JRN 360 Watchdog Reporting ( 3 cr .) In this course, students learn and practice watchdog journalism, helping to inform our communities and keeping public figures and institutions in check. Students cover in-depth news off campus, on topics such as crime, public health, politics, education and the environment. In conversations with working journalists, students learn both innovative and proven strategies for reporting. Students also work individually and in teams to publish stories and multimedia projects based on public data, documents and interviews. Prerequisite: JRN 260 or JRN 263; Every Year, Spring

JRN 361 Sports Reporting (SPS 361) (3 cr.) This course introduces students to coverage of sports for the news media and includes writing game stories and sports profiles. Prerequisite: JRN 260 or JRN 263; Every Year, All

JRN 362 The Story of Football (SPS 362) ( 3 cr.) This course traces the historical trajectory of American football and the coaches, players and media portrayals that transformed the game from a 19th-century collegiate test of manliness to what it is today: a spectator sport of immense appeal whose popularity endures despite more than a century of concerns over the game's debilitating and sometimes lethal violence. Every Year, Fall

JRN 365 Effective Editing ( 3 cr.) Students learn the basics of editing online text, magazines and newspapers, with an emphasis on copyediting, headline writing, composition and story packaging. Prerequisite:
JRN 260; Every Year, All

## JRN 372 Entrepreneurial Media (The MIC Project)

 ( 3 cr .) This course addresses the fiscal and distribution challenges faced by journalists and media professionals and empowers student teams to construct sustainable business models. Students experiment with the latest technology, exchange ideas with some of the industry's most prominent thinkers and developers, and createcontent or products for viable media business ventures. Open to all School of Communications students. Prerequisite: JRN 160; Every Year, Fall

JRN 380 Fundamentals of Online Reporting (3 cr.) This course covers the principles and practices associated with researching and producing stories for online interactive media. Students are required to produce stories that include textual, audio, video and interactive elements. Prerequisites: JRN 260 or JRN 263; FVI 105, JRN 105, JRN 106, SPS 105 or SPS 106; Every Year, All

JRN 395 Broadcast Performance ( 3 cr.) This course explores the variety of skills required to communicate effectively through broadcasting. Students learn and practice on-air presentation techniques for effective delivery and interpretation. The course focuses on voice, voice control and the phrasing interpretation of copy and body language. Study focuses on performance techniques, creativity, writing and analytical skills needed to communicate effectively. Open to broadcast and print students. Prerequisites: JRN 263; JRN 105, JRN 106, SPS 105 or SPS 106; Every Year, Fall

JRN 450 Senior Seminar (3 cr.) This seminar entails an in-depth examination of issues and research perspectives in journalism. Seminar titles vary each term and may include topics such as ethics in journalism, diversity in the newsroom, and international journalism practices. Students should consult the School of Communications course bulletin for information about each semester's offerings. Every Year, All

JRN 470 Narrative Journalism (3 cr.) Students in this class learn to report and write long-form articles suitable for publication in online and print magazines. Over a series of major writing assignments, students apply their research and interviewing skills to produce exhaustively reported and elegantly written articles. Topics in the course include: lead writing, article structure, interviewing, the use of statistics and the application of narrative techniques to journalistic writing. Prerequisite: JRN 260; Every Year, Fall

JRN 495 Advanced Reporting ( 3 cr .) This course stresses individual enterprise reporting, in which students plan, report, write and produce stories suitable for print or multimedia that demonstrate their command of skills acquired during the course of study. Emphasis is placed on the role of the professional journalist as an ethical practitioner who represents and reflects the wider public in its economic, ethnic and racial diversity. Prerequisite: JRN 365; Every Year, All

JRN 496 Producing and Presenting the News (3 cr.) In this course students act as producers, news and sports reporters, writers, editors and anchors as they put on
a live weekly newscast. Newscasts are recorded and critiqued for student portfolios. Prerequisite: JRN 291; Every Year, All

JRN 498 Journalism Capstone ( 4 cr .) In this capstone course for the journalism major, students work on long, in-depth pieces of journalism across platforms. The stories include numerical or statistical information, multiple interviews from a variety of diverse sources, and show the students' command of the techniques used to produce and present news in print, broadcast and digital environments. Senior status required. Every Year, All

Courses offered as needed
JRN 300 Special Topics in Journalism (3 cr.)
Prerequisite: JRN 160
JRN 400 Special Topics in Journalism (3 cr.)

## Law (LW)

LW 121 Business Law and Society ( 3 cr.) The course helps students develop an understanding of the law as an evolving social institution rather than a static body of rules. Students read and interpret legal case reports as a means of keeping abreast of law that affects the business environment. Students learn the economic and social forces that have shaped and are now dictating the evolution of modern contract principles and the Uniform Commercial Code. Ethics and social responsibility are addressed throughout. Minimum grade for accounting majors C-. Every Year, Fall and Spring

## LW 122 The Law of Property, Sales and Negotiable

 Instruments (3 cr.) This course presents a study of the law of property, sales, commercial paper and bank transactions with particular reference to the Uniform Commercial Code along with the nature of personal property and bailments and some examination of the rules pertaining to estates and trusts. The course may include some consideration of credit, secured transactions and Federal Bankruptcy Law. Minimum grade for accounting majors C-. Prerequisite: LW 121; Every Year, Spring
## Legal Studies (LE)

## LE 101 (UC) Introduction to the American Legal

System (3 cr.) Students are introduced to the American system of law and legal structure, and gain an overview of several areas of law. Topics include basic legal concepts, the structure of the American court system, as well as legal theory and procedure. Every Year, All

LE 115 Criminal Law (3 cr.) This overview of the American system of criminal justice includes study of its various institutions, such as the criminal courts,
police, prosecutors and defense attorneys, and jails and prisons. The Fourth Amendment (Search and Seizure) and the Fifth Amendment (Privilege Against Self-Incrimination) are studied. Also explored are schools of thought underlying criminal prosecution and correctional philosophy. Every Year, Fall and Spring

LE 150 Mock Trial ( 1 cr.) This experiential learning course introduces students to law in an applied setting. Students become skilled at trial procedure, legal analysis and oral advocacy. They attend one or more mock trial tournaments during the fall semester in preparation for the American Mock Trial Association Regional Tournament in February. Students are permitted to repeat this course, for a total of 3 credits. Every Year, Fall

## LE 211 Legal Reasoning, Research and Writing I

 ( 3 cr .) This course introduces students to legal research, both in print and online sources, and provides a foundation in legal reasoning, writing and citation in the context of objective, predictive legal documents. Students learn how to move from a fact pattern, through researching and analyzing the controlling law, to presenting the student's legal analysis in the form of formal legal memoranda. Prerequisite: LE 101; Every Year, Fall and Spring
## LE 212 Legal Reasoning, Research and Writing II

 (3 cr.) Building on the skills learned in LE 211, students in this course refine and further develop their analytical, research and writing skills and learn to present their findings in a wider variety of legal documents. Students also are introduced to persuasive legal writing and advocacy. Prerequisites: LE 211, EN 102; Every Year, Fall and SpringLE 224 Sports Law (SPS 224) (3 cr.) Sports law is a growing and evolving area of law, affecting all those who play, officiate or watch sports. Legal issues involve athletes, athletic competition, athletic teams and leagues, fans and sports in general, on the student, amateur and professional levels. Students study the legal concepts surrounding sports, and learn to apply them to the issues that arise. Prerequisite: LE 101; Every Year, Spring

LE 225 Alternative Dispute Resolution (3 cr.)
Students explore the various methods of dispute resolution that are available in the private sector, as alternatives to traditional litigation. Students learn to distinguish the various forms of dispute resolution, determine who participates in each form, how they participate and the advantages and disadvantages of each. Students role play in the various methods to more fully understand the mechanisms of alternative dispute resolution. Prerequisite: LE 101; Every Year, Fall

LE 250 Gender and the Law (WS 250) (3 cr.) This course focuses on legal issues regarding gender, including the differential treatment of women and men in the legal system, and contemporary responses to gender issues in society. Prerequisite: LE 101 or WS 101; Every Third Year, Fall

LE 260 Trial Techniques (3 cr.) This course provides an overview of all aspects of a criminal and civil trial, and prepares students for advanced oral advocacy. Prerequisites: LE 101, EN 102; Every Other Year, Fall

LE 301 Civil Procedures I (3 cr.) This course presents the first half of a comprehensive study of the procedures in civil litigation from the beginning of a conflict to its final resolution, from both a theoretical and a practical approach. Preparation of documents necessary to a civil action is covered. Note: LE 210 can be taken the prior semester or simultaneously with LE 301. Prerequisites: LE 101, LE 208, LE 210; Every Year, Fall

LE 302 Civil Procedures II (3 cr.) This course presents the second half of a comprehensive study of the procedures in civil litigation from the beginning of a conflict to its final resolution, from both a theoretical and a practical approach. Preparation of documents necessary to a civil action is covered. Prerequisites: LE 301, LE 210; Every Year, Spring

LE 309 Advanced Legal Writing (3 cr.) This course reviews and develops the writing, research and analytical skills introduced in LE 208 and 210. Students continue to analyze legal problems and prepare both objective and persuasive documents written in a form that adheres to the conventions of the legal profession. Students improve their ability to write clear prose, edit their own and others' work, and are introduced to persuasive legal writing and appellate advocacy. Prerequisites: LE 208, LE 210; Every Other Year, Spring

LE 311 Administrative Agencies (3 cr.) The workings of, and procedures involved in dealing with, government agencies are introduced. Skills involved in being an advocate are covered. Prerequisites: two courses from LE; Every Other Year, Fall

LE 312 Family Law (3 cr.) This course presents a study of how law relates to the family as a functioning entity, examination of family law practice, and preparation of documents for dissolution of marriage. Prerequisites: two courses from LE; Every Other Year, Spring

## LE 315 Wills, Probate and Estate Administration (3 cr.)

 Legal concepts and statutes pertaining to wills and probate are examined, with special emphasis on preparation of forms necessary in administration of an estate. Prerequisites: two courses from LE; Every Other Year, SpringLE 317 International Law (PO 317) (3 cr.) Students are introduced to the nature and development of international law as part of the global political system. They explore sources of international law from treaties, custom, general principles, judicial decision and scholarly writing. Other topics include the connection between international and national law, dispute resolution using arbitration and national and international court cases, use of law to manage international conflict, negotiation, and legal issues concerning shared resources. Prerequisite: PO 211; two courses from LE; Every Year, Fall

## LE 319 International Law and the Individual

( 3 cr .) This course considers the complex legal issues surrounding private interactions between individuals from different nations. Students explore the sources of law that may apply when a citizen of one country lives and works in another country or simply has dealings on a business or personal level with persons from other countries. Topics include immigration, customs, taxation, banking, family law, traveling, health care, voting and criminal justice. Prerequisites: two courses from LE; Every Other Year, Fall

LE 320 Land Transfer and Closing Procedures ( 3 cr .) This course presents background for the sources of real estate law; land and its elements, the nature of property, the concept of ownership, and land titles and interest in land; procedures for conveying interest in land recording statutes; and searching titles. Emphasis is given to the preparation, coordination and completion of real estate closings. Prerequisites: two courses from LE; Every Year, Fall

LE 322 Health Care Law (HSC 322) (3 cr.) This course provides an overview of the legal issues faced by health care providers and patients. Students explore various topics arising from the organization and financing of health care, provider liability, bioethics and public health. The course focuses on the way in which law impacts the delivery of health care in the United States. Prerequisites: two courses from LE; LE 101, HSC 220; HSC 310; Every Other Year, Spring

LE 328 Employment Law (3 cr.) This course provides an overview of the legal relationship between employer and employee and a basic understanding of employment-related law and its impact on the employer/ employee relationship. Students study both federal and state laws applicable to the employer/employee relationship. Areas covered include the basis for the employer/employee relationship, pre-employment concerns, legal aspects of the employment relationship, diversity and discrimination issues, discrimination actions, termination of the employer-employee relationship, ethical issues in employment law, and
current issues such as telecommuting. Prerequisites: two courses from LE; Every Other Year, Fall

LE 330 Law of Business Entities (3 cr.) In this study of the different types of business entities, including corporations, partnerships and limited liability companies/partnerships, emphasis is given to researching and drafting documents involved in the formation, maintenance and dissolution of business entities. Prerequisites: two courses from LE; Every Other Year, Fall

## LE 340 The Constitution and the Courts (PO 353)

( 3 cr .) The United States Constitution and how it has been interpreted by the Supreme Court are studied in this course. The class examines Supreme Court decisions with focus on analysis and legal reasoning. Prerequisites: two courses from LE; Every Other Year, Spring

## LE 342 Comparative Constitutional Law

 (PO 342) (3 cr.) Students compare the legal structures and fundamental principles typically found in constitutions by studying the constitutions of several different countries. The course explores the structure of government; the distinction between legislative, executive and judicial authority; the incorporation of fundamental human rights; the relationship between church and state; free speech and the press, and social welfare rights. Participants analyze the distinction between constitutional law and domestic law and assess the role of various constitutional frameworks in a global society. Prerequisites: one group: two courses from LE; PO 131; one course from LE level 200; Every Other Year, SpringLE 345 Intellectual Property ( 3 cr .) This course introduces students to the different areas of intellectual property law, including patents, trademarks, trade secrets and copyright law. Intellectual property protects products created by writers, artists and inventors. Preparation of necessary documents is covered. Prerequisites: two courses from LE; Every Other Year, Spring

LE 350 Federal Indian Law and Policy ( 3 cr.) The relationship between the federal government and Native Americans and tribes is considered from a historical and practical perspective, along with current topics in Indian law. Practice applications before the two Connecticut tribal courts are covered as well. Prerequisites: two courses from LE; Every Third Year, Fall and Spring

LE 360 Mediation ( 3 cr .) This course approaches mediation from the mediator's perspective. Students develop a sophisticated understanding of the legal and ethical aspects of mediation and learn to mediate disputes between parties in the context of civil, criminal and family disputes. Students also learn how to use
mediation techniques to resolve disputes in non-legal settings. The course employs mediation exercises, role plays, simulations, self-critique and group discussions to demonstrate and evaluate effective communication skills, bargaining strategies, mediation styles and intervention techniques. Prerequisites: two courses from LE; Every Year, Spring

LE 370 Negotiation ( 3 cr .) This course provides students with a thorough understanding of the theory, strategy and practice of negotiation, both transactional and as a dispute resolution method. Students learn to negotiate to resolve problems and communicate effectively, within an ethical framework. The course uses negotiation strategy, exercises, role plays, group discussions and reflective writing to demonstrate and evaluate negotiation techniques and styles. Prerequisites: two courses from LE; Every Year, Fall

LE 480 Legal Internship Seminar I (4 cr.) Students are placed in a supervised legal internship in a law office, agency or other legal setting for 10 hours a week. During the weekly seminar, students discuss legal ethics and professional responsibility. They also complete a complex legal research and writing assignment incorporating principles from the core legal studies classes. Students discuss issues faced in a legal work environment. For majors only. Prerequisite: LE 302; Every Year, Fall

LE 481 Legal Internship Seminar II (4 cr.) Students continue in a supervised legal internship in a law office, agency or other legal setting for 10 hours a week. During the weekly seminar, students edit and revise their legal research and writing assignment. They discuss the issues faced in a legal work environment, focusing on their transition to a legal career. For majors only. Prerequisite: LE 480; Every Year, Spring

Courses offered as needed
LE 200 Special Topics (3 cr.) Prerequisite: LE 101
LE 300 Special Topics ( 3 cr.) Prerequisites: two courses from LE
LE 310 Elder Law (GT 310) (3 cr.) Prerequisites: two courses from LE

## Management (MG)

## MG 210 Essentials of Management and

Organizational Behavior (3 cr.) This course provides an introduction to the functions and processes of management. It provides a foundation for managerial and entrepreneurial thinking. Emphasis is on the foundations of managing large organizations. Every Year, All

MG 211 Operations Management ( 3 cr .) The nature of competition is not between companies but rather between supply chains. This course focuses on the
operations in a supply chain framework. Students develop a sophisticated understanding of supply chain perspectives and learn to analyze operational decisions using quantitative models. Topics may include, but are not limited to: purchasing, forecasting, inventory, capacity-planning and information technology. Prerequisite: EC 271, MA 206, MA 275, MA 285 or PS 206; Every Year, All

MG 240 Software Applications for Business (3 cr.) The course instructs students in business applications of various widely used software packages including Word, Excel and dBase III + , along with the preparation of instructional materials detailing procedures for use of each type of software for everyday business needs. Prerequisite: MG 210; Every Year, All

## MG 301 Group and Virtual Team Processes ( 3 cr .)

 Students gain advanced knowledge of best practices related to effective group processes. This course provides a hands-on, experiential approach to the development of personal and interpersonal competencies that prepare students to excel at working in crossfunctional as well as multicultural teams. Contemporary issues related to groups such as virtual teaming also are explored. Prerequisite: MG 210; Every Year, SpringMG 302 Human Resource Management ( 3 cr.) This course introduces students to the principles, policies and practices related to human resource management. Students examine various HRM topics such as employee development, engagement, employment relations and law, compensation, recruitment and staffing, which they will likely deal with as future HRM managers and leaders. Prerequisite: MG 210; Every Year, All

## MG 306 Staffing: Recruitment, Selection and

 Placement (3 cr.) In this course, students learn how to design and carry out various staffing activities effectively within labor market and legal constraints. Staffing activities include recruitment (whom to recruit, where and when to recruit, and how to recruit); selection (whom to hire and why); and placement (in which jobs, at what time, and in what career progressions). Prerequisite: MG 302; Every Year, FallMG 311 Advancing Employment Relations (3 cr.) The objective of this course is to enable students to evaluate HR policies against principles of employment law and labor relations. Students learn about laws and policies designed to protect equal employment opportunities (e.g., civil rights, disabilities and family leave) and compensate employees for occupational injuries and illnesses. The impact of management on labor relations and the development of managerial approaches to achieve labor-management cooperation
are discussed using an ethics and social responsibility lens. Prerequisite: MG 302; Every Year, Spring

## MG 312 Sports Management (SPS 312) (3 cr.)

This course offers an opportunity for students to gain information and understanding of the various practices and procedures associated with sport administration and management. Organizational structure, management decisions and challenges, as well as career opportunities at the professional, intercollegiate, interscholastic, youth and community sport levels are explored. The areas of sports tourism, sport management agencies and sport facility and event management are analyzed in terms of their impact on the management and business of sports. Prerequisite: MG 210; Every Year, Spring and Summer

MG 315 Self Management ( 3 cr .) This course presents an intensive assessment of an individual's personal, psychological makeup so as to increase the ability to manage personal and interpersonal experiences. The premise for the course rests on the assumption that effective management of others begins with management of oneself. Prerequisite: MG 210; Every Year, Spring

MG 320 Emotional Intelligence in the Workplace ( 3 cr .) This course provides the student with an understanding and appreciation of the role of emotional intelligence in everyday living and in particular, in the development of the leadership phenomenon. Topics include: 1) Why study emotional intelligence; 2) anatomy of emotions; 3) emotional intelligence and selfmanagement; 4) the role of emotional intelligence in business and in leadership development; 5) education for emotional literacy; and 6) assessing one's own levels of emotional intelligence. Lectures, case studies, personal assessments and small group activities are the essential methodology for this course. Prerequisite: MG 210; Every Year, Fall

## MG 321 Decision Making for Managers (3 cr.)

This course focuses on improving managerial decision making and problem-solving skills through the development and use of qualitative and quantitative methods. Extensive use of Excel is emphasized. Prerequisites: MG 210, MG 211; Every Year, Spring

MG 335 Project Management ( 3 cr.) This course introduces students to the initiation, planning and execution of projects with exposure to critical behavioral issues involving intragroup and intergroup collaboration. Special emphasis is on the use of current project management software. Prerequisites: MG 210, MG 211; Every Year, Fall

MG 340 Supply Chain Logistics and Technology ( 3 cr.) Delivering goods and services in the most efficient and effective way is through supply chain
management. This course provides a detailed view of supply chain management with a focus on logistics. Students develop a deeper skills set needed for decision making in supply chain management. Topics may include: supplier management, logistics, supply chain inventory, risk management, sustainability, supply chain technology (ERP) systems and customer relationships. Prerequisite: MG 211 or IER 360; Every Year, Spring

MG 341 Service Operations Management ( 3 cr.)
This course examines the management of services, focusing on both the strategic and operational aspects of designing new services, assessing and improving service quality, improving the efficiency and effectiveness of service processes, and how new technologies can be integrated into service operations to help achieve these objectives. Prerequisite: MG 211 or IER 360; Every Year, Fall

MG 342 Supply Chain Analytics (3 cr.) This course focuses on several key supply chain functions and provides hands-on learning to help students understand and analyze data that may be available for the supply chain. The design aspect of supply chain is emphasized. Modeling and deriving insights are facilitated through the extensive use of an Excel-based approach. Prerequisite: MG 211 or IER 360; Every Year, Fall

MG 345 Training and Development ( 3 cr.) Today's ever-changing global marketplace is marked by continual advancements in technologies and associated management processes. In response, HR professionals must create learning environments to expand the knowledge-based capacities of organizations. In this course, students learn how to conduct needs assessments, how to design effective training and development programs to meet those needs and how to evaluate the returns to investments in training and development against organizational goals. Prerequisite: MG 302; Every Year, Spring

MG 355 Compensation and Benefits ( 3 cr .) This course provides students with an understanding of compensation and salary administration in both private and public settings. Additional topics include performance management, pay for performance, employee benefits and overall employee satisfaction. This course provides students with the introduction to compensation analysis skills along with an understanding of best practices in implementing an effective total compensation program in an organization. Prerequisite: MG 302; Every Year, Fall

MG 402 Management Senior Seminar (3 cr.) This seminar is the capstone course for all management majors culminating in a senior thesis. The course develops students as whole managers and leaders capable
of integrating and excelling in both behavioral and technical skills. Prerequisites: MG 301, MG 302, MG 321, MG 335; Every Year, Spring

MG 488 Management Internship ( $\mathbf{3}$ cr.) This student-in-residence program includes work experience under the joint supervision of a sponsoring faculty and practicing manager or business owner. Approval of a sponsoring faculty member, the department chair and the assistant dean is required. For juniors and seniors. This course is graded on a pass/fail basis. Prerequisites: MG 301, MG 321; Every Year, All

MG 490 Field Projects ( 3 cr.) Students work individually or in teams under the supervision of a faculty member on a field-based problem or project for a for-profit or nonprofit business. For juniors and seniors; faculty adviser and permission of chair required. Prerequisites: MG 301, MG 321; Every Year, Spring

## Courses offered as needed <br> MG 260 Power and Politics of Leadership ( 3 cr .) Prerequisite: MG 210 <br> MG 300 Special Topics (3 cr.) Prerequisite: MG 210 <br> MG 304 Developing Managerial Competence ( 3 cr.) <br> Prerequisite: MG 210 <br> MG 322 Computer-Aided Production Planning (3 <br> cr.) Prerequisite: MG 321

MG 331 Quality Management ( 3 cr.) Prerequisite: MG 211
MG 350 Organizational Development (3 cr.) Prerequisite: MG 210
MG 370 Advanced Team Development (3 cr.)
Prerequisite: MG 301
MG 390 Benchmarking: Concepts, Skills and Application (3 cr.) Prerequisite: MG 321
MG 392 Business Ethics (3 cr.) Prerequisite: MG 210

## Marketing (MK)

MK 201 Marketing Principles (3 cr.) This course surveys marketing from the decision-making point of view, with emphasis on the conceptual and analytical components of the subject, and a synthesis of new marketing concepts with economics, behavioral sciences and mathematics. Prerequisite: EC 111; Every Year, All

MK 210 Consumer Behavior ( $\mathbf{3} \mathbf{c r}$.) The central role of the consumer in initiating or determining the fate of the firm's marketing effort is emphasized. The course draws on theories from psychology, sociology, anthropology and economics to help understand and anticipate consumer behavior as individuals or groups. Current models of consumer behavior are surveyed. Prerequisite: MK 201; Every Year, All

MK 301 Internet Marketing ( $\mathbf{3} \mathbf{~ c r}$.) This course explores the rapidly evolving world of Internet marketing and examines the strategies and tactics that firms can use to utilize the Internet as an effective marketing tool. Students discuss search engine marketing, social media tools, web site design and Internet advertising. The course also examines the role of the Internet as a channel of distribution Prerequisite: MK 201; Every Year, All

MK 312 Advertising ( $\mathbf{3}$ cr.) Current practices in advertising including strategy and planning, copy and layout, media selection and scheduling, and budgeting are examined. Advertising is considered from the inception of researched ideas and concepts through the completed presentation. Students gain experience in creating advertisements for the major media. Prerequisite: MK 201; Every Year, All

MK 315 Media Planning ( $\mathbf{3}$ cr.) This course considers strategic media planning and its role in advertising and marketing. Emphasis is on the strategic and creative selection, scheduling and evaluation of traditional and non-traditional media vehicles to effectively and efficiently deliver advertising messages to target audiences. Students examine the relative strengths of various media and scheduling options for advertising both goods and services, and learn tools and techniques used to analyze media opportunities (e.g., computerized allocation software and/or other modeling techniques). Students gain hands-on experience through development of a media plan. Prerequisite: MK 201; Every Year, Spring

MK 319 Marketing Analytics (3 cr.) Topics covered in this course include market segmentation, marketing mix analysis, product bundle optimization and social network analysis. Students are introduced to the basics of effective visual presentation of quantitative information. Weekly assignments with real business data allow students to explore a variety of analytic techniques and answer actual problems. Students leave with a knowledge of a variety of advanced techniques, in-demand analytic reasoning skills and an understanding of methodological debates, trade-offs and resource allocation for data projects. Prerequisite: MK 370; Every Year, Spring

MK 324 Business-To-Business Marketing (3 cr.) This course examines the development of marketing strategies of firms that market to other firms or organizations. Integrating characteristics that distinguish business markets from consumer markets throughout the semester, topics include unique aspects of selecting target markets and elements of the marketing mix. Cases, projects, articles and exercises stress the problems facing actual business marketing firms today. Prerequisite: MK 201; Every Year, Spring

MK 332 Integrated Marketing Communications (3 cr.) This course focuses on theory, application and practice associated with the management of marketing communications activities. Students consider strategic implications of integrated communication, and examine promotional tools, such as advertising, special promotions, Internet/mobile, direct marketing, personal selling, public relations, publicity and display. Prerequisite: MK 201; Every Year, All

MK 333 Marketing Channels and Distribution ( 3 cr.) Students are introduced to design, evaluation and management of distribution channels. Topics include channel member roles and behavior; channel performance evaluation; and logistics (e.g., transportation, inventory, materials handling and information management). Prerequisite: MK 201; Every Year, Fall

MK 334 Product and Pricing Strategy (3 cr.) Strategic product planning and new product development within the context of marketing management for marketing new and mature products are examined. Students learn to integrate economic, financial, legal and marketing principles to analyze pricing decisions, and consider the behavioral implications of pricing, and review relationships among the components for the marketing mix. Prerequisite: MK 201; Every Year, All

MK 352 Retail Management (3 cr.) The major elements of retail management and merchandising are introduced. Topics covered are inventory planning, acquisition and control; pricing, sales volume and profit; promotional activities; and store management, including operations, as well as retail mathematics: markup, markdown, turnover, etc. Prerequisite: MK 201; Every Year, Fall

MK 355 Services Marketing (3 cr.) This course examines how marketing principles are applied to the management of service business, including health organizations. Topics include: definition of services, services as products, managing the service encounter, buyer behavior and customer relations, service quality, marketing and human resources management, service accessibility, pricing of services, promotion of services, and international marketing of services. Prerequisite: MK 201; Every Year, Fall

MK 370 Marketing Research ( 3 cr .) Students learn to understand and satisfy marketing managers' information needs: demand potential, competition, regulations and accepted procedures in relevant business/geographic areas. The course covers research design, quantitative and qualitative data collection, data analysis and implications of results. Written/oral reports are expected. This methodological course assumes a basic understanding of marketing in a global environment. MA 107 prerequisite
is waived with a Math Placement score of 4.0 or higher. Prerequisites: EC 271, MK 201; MA 107, MA 118, MA 140 or MA 141; Every Year, Fall and Spring

MK 383 Professional Selling and Sales Management ( 3 cr .) The study and application of skills required to sell products, services or ideas. Emphasis is on the development of an effective sales presentation focusing on the needs of the consumer or organization. The course stresses the importance of knowing the company and its products as well as the selling environment and customer. In addition, the issues involved in managing a sales force are addressed. These include sales planning and forecasting, selection, recruitment, training and compensation of salespeople and integration with other elements of the marketing mix. Prerequisite: MK 201; Every Year, Spring

MK 401 Seminar in Marketing Strategy (3 cr.) This capstone course for seniors is given from the point of view of top marketing executives, who are responsible for integrating marketing activities. Instructional methods such as case analyses, live cases, group projects and simulations may be used. Prerequisite: MK 201; Every Year, Fall and Spring

MK 405 Seminar in Biomedical Marketing Strategy ( 3 cr .) This course explores the unique aspects of marketing strategy in the biomedical industry from the perspective of biomedical firms, hospitals and government agencies. Topics include the purchase decision process, marketing research, product development and pricing strategy. Students gain current biomedical industry knowledge through articles, cases and completion of a marketing plan project in partnership with a biomedical firm. Prerequisite: MK 334; Every Other Year, Spring

MK 450 Marketing History ( 3 cr .) This seminar examines the development of modern marketing in America from the mid-19th century through the 20th century. The course focuses on how pioneering entrepreneurs such as Kellogg, Sears, Heinz, Hershey and others created brands that became household names and in the process revolutionized marketing practice. Students discuss assigned readings, films and field trips. Research assignments and a term paper also need to be completed. Prerequisite: MK 201; Every Other Year, Fall

MK 488 Marketing Internship (3 cr.) This internship in marketing must be approved by the department chair and the dean in accordance with school regulations. Junior/senior status is required. This course is graded on a pass/fail basis. Prerequisite: MK 201; Every Year, All

MK 490 Seminar in Advertising Strategy (3 cr.) The course presents a study of issues involved in strategic planning of advertising and integrated communications
programs for a product, service or institution. The course emphasizes the link between marketing and advertising strategy, and the integration of mass-media communications within a promotional strategy. Elements of brand development strategy, evolving creative themes and media strategy are covered, as well as the planning process itself. A mix of advertising, promotions and integrated communications case studies, simulations and term projects are used as instructional methods. Prerequisite: MK 312 or MK 332; Every Year, Fall

MK 495 Biomedical Marketing Internship (3 cr.) This internship is required of biomedical marketing majors and must be done with a company or institution that is related to biomedical products or services. Prerequisite: MK 201; Every Year, All

MK 497 Advertising Competition (3 cr.) This course is designed for students who wish to participate in the national advertising competition administered by the American Advertising Federation (AAF). Areas covered include marketing situation analysis, media planning, public relations and creative development as part of a complete campaign for a well-known product or service. Prerequisite: MK 201; Every Year, Spring

## Courses offered as needed <br> MK 340 Database Marketing ( $\mathbf{3} \mathbf{c r}$.) Prerequisite: MK 201

## Mathematics (MA)

MA 100 Basic Algebra ( $\mathbf{3} \mathbf{c r}$.) This course reviews basic arithmetic and algebraic skills and introduces mathematical methods to the entering student with little or no mathematics background, with the goal of providing sufficient skill to take course work requiring two years of college preparatory mathematics. Students are expected to participate in four hours of course work per week. MA 100 is for institutional credit and does not apply to graduation requirements. Note: Students may not withdraw from MA 100. Students who fail MA 100 the first time receive a grade of Unsatisfactory. If the student does not pass the second time, then a failure is recorded on the student's record. Every Year, Fall and Spring

MA 107 College Algebra ( 3 cr.) This course reviews the fundamentals of algebra. Students learn about the following topics: the real number system, factoring and expanding polynomials, properties of logarithms and exponentials, linear equations and inequalities, quadratic equations and inequalities, absolute value equations and inequalities, systems of equations and inequalities, functions and their graphs, and algebra of functions, including composition, and inverse
functions. This course is designed for students who need to improve their algebraic skills to prepare for future mathematics courses such as Applied Calculus, Pre-Calculus, or Statistics. MA 107 does not fulfill the Quantitative Literacy requirement. Prerequisite: A math placement level of 2 or above, or successful completion of MA 100. Every Year, Fall and Spring

## MA 110 (UC) Contemporary Mathematics

( 3 cr ) This course introduces students to the study of mathematics as a discipline and also presents topics that are applicable to students' everyday lives. Topics include logic, probability and statistics and financial mathematics. The course also covers two topics from the following list: geometry, set theory, number theory, measurement, problem solving, mathematical systems, scientific applications, history of mathematics. Topics are chosen by the instructor. Students should check the mathematics requirements for their major before selecting their first course in mathematics. MA 110 is not designed to be a prerequisite for any calculus course. Prerequisite: A math placement level of 2 or above, or successful completion of MA 100. Every Year, All

MA 118 (UC) Applied Calculus (3 cr.) Students are introduced to functions and limits, fundamental rules of differentiation and integration of elementary functions, and applications in business and life sciences. A graphing calculator is required; the TI-83 is recommended. Prerequisite: A math placement level of 4 or above or a grade of C- or better in MA 107. Every Year, All

MA 140 (UC) Pre-Calculus ( 3 cr .) This course concentrates on topics that students need to understand profoundly to succeed in calculus. Students learn about the following topics: functions and their graphs, exponents and logarithms and trigonometry. There is a focus on basic concepts and visualization of problems. The material has many real-life applications. Use of a TI-83 or TI-84 calculator is required. Primary emphasis is on developing the following New Synthesis proficiencies: quantitative reasoning and critical thinking and reasoning. Prerequisite: A math placement level of 4 or above, or a grade of C- or better in MA 107. Every Year, All

MA 141 (UC) Calculus of a Single Variable I (3 cr.)
This course covers functions, graphs, limits, continuity, derivatives, applications of derivatives, antiderivatives and definite integrals, as well as the Fundamental Theorem of Calculus. This course significantly advances the following Essential Learning Outcomes: quantitative reasoning, critical thinking and reasoning. A TI-83+ graphing calculator (or the equivalent) is required. Prerequisite: A math placement level of 5 or a grade of C or better in MA 140. Every Year, All

MA 142 (UC) Calculus of a Single Variable II (3 cr.) Students study techniques of integration, numerical integration, applications of the definite integral, improper integrals, differential equations and infinite series. This course significantly advances the Essential Learning Outcomes: quantitative reasoning, critical thinking and reasoning. A graphing calculator is required; the TI-83 or TI-84 is recommended. Prerequisite: MA 141, MA 141H or MA 151; Minimum grade C-,TR; Every Year, All

MA 151 (UC) Calculus I (4 cr.) This course covers functions and graphs, limits and continuity, derivatives, applications of derivatives, antiderivatives and definite integrals, the Fundamental Theorem of Calculus, applications of definite integrals. A graphing calculator is required; the TI-83 or TI-84 is recommended. Prerequisite: A math placement level of 5 or a grade of C or better in MA 140. Every Year, Fall and Spring

MA 152 (UC) Calculus II (4 cr.) This course covers techniques of integration, differential equations, infinite series, parametric equations, polar coordinates, vectors, operations on vectors, and three-dimensional coordinate systems. Prerequisite: MA 151; Minimum grade C-; Every Year, Fall and Spring

## MA 190 Mathematics Freshman Seminar (1 cr.)

This course presents excursions into a variety of areas in advanced mathematics, as well as its applications, history and philosophy. Students also explore career options related to the study of mathematics. Prerequisite: MA 140, MA 141, MA 141H or MA 151; Minimum grade C-; Every Year, Spring

MA 205 (UC) Introduction to Discrete Mathematics (CSC 205) ( 3 cr .) This course introduces students to basic concepts and structures of discrete mathematics. Topics can include propositional and predicate logic, sets and set operations, functions, proof techniques, counting problems, probability and basic number theory. Applications include computer science, biology, social sciences, law and the physical sciences. Prerequisite: CSC 110 or MA 110 or higher; Minimum grade C-; Every Year, Spring

## MA 206 (UC) Statistics for the Behavioral Sciences

( 3 cr .) This course presents a study of statistical procedures pertinent to the work of the social and behavioral scientist. Students are introduced to descriptive procedures, confidence intervals, hypothesis testing, regression and correlation, analysis of variance and non-parametric techniques. Students are not allowed to receive credit for more than one of the following courses: MA 206, MA 275 and MA 285. Prerequisite: A math placement level of 3 or a grade of C- or better in MA 107. Every Year, All

MA 226 (UC) Baseball and Statistics (SPS 226) (3 cr.) This course covers SABRmetrics: the study of standard statistical topics using data derived from baseball records, which, for many students, is more easily understood and more interesting than data from the business or science world. The course looks at both descriptive and inferential statistics along with probability. Descriptive statistics covers measures of central tendency, tables and graphs, the normal and binomial distributions. Inferential statistics explores sampling, confidence intervals, hypothesis testing, chi-square testing, and regression and correlation analysis. Students must possess a basic knowledge of baseball. Prerequisite: A math placement level of 2 or above, or successful completion of MA 100. Every Year, Fall and Spring

MA 229 (UC) Linear Algebra (3 cr.) This course covers the basic concepts of linear algebra, along with an introduction to the language and techniques of formal mathematics. Topics include systems of linear equations, vector spaces, linear transformations, matrices, determinants and eigenvalues. Every Year, Spring

## MA 241 Vector Functions and Geometry of Space

( 3 cr .) This course covers parametric equations, polar coordinates, vectors, operations on vectors, equations of lines and planes, cylinders and quadric surfaces, cylindrical and spherical coordinates, parametric surfaces, vector functions, derivatives and integrals of vector functions, arc length and curvature, and motion in space. Prerequisite: MA 142; Minimum grade C-; Every Year, Fall

MA 242 Multivariable Calculus ( $\mathbf{3}$ cr.) This course covers functions of several variables, limits and continuity, partial derivatives, tangent planes and linear approximations, directional derivatives and the gradient vector, maximum and minimum values, Lagrange multipliers, multiple integration in Cartesian, cylindrical, and spherical coordinates, surface area, vector fields, line integrals, Green's theorem, curl and divergence, surface integrals, Stokes' theorem, and divergence theorem. Prerequisite: MA 241; Minimum grade C-; Every Year, Spring

MA 251 (UC) Calculus III (4 cr.) This course covers vector functions, derivatives and integrals of vector functions, arc length and curvature, motion in space, functions of several variables, limits and continuity, partial derivatives, tangent planes and linear approximations, directional derivatives and the gradient vector, maximum and minimum values, Lagrange multipliers, multiple integration in Cartesian, cylindrical, and spherical coordinates, surface area, vector fields, line integrals, Green's theorem, curl and divergence, surface integrals, Stoke's theorem, and divergence theorem. Prerequisite: MA 152; Minimum grade C-; Every Year, Fall

MA 275 (UC) Biostatistics (3 cr.) Students are introduced to the application of statistical techniques to the biological and health sciences with emphasis on probability laws, sampling and parameter estimation, central limit theorem, test of hypothesis, correlation, regression and analysis of variance. Students are not allowed to receive credit for more than one of the following courses: MA 206, MA 275 and MA 285. Prerequisite: A math placement level of 4 or a grade of C- or better in MA 107. Every Year, All

MA 285 Applied Statistics (3 cr.) This introductory statistics course is intended primarily for students majoring in mathematics, especially those who plan to become high school mathematics teachers or actuaries. Emphasis is on using statistics to answer questions in the physical and social sciences. Topics include: descriptive statistics, probability, point and interval estimation, hypothesis testing, correlation and regression, analysis of variance, chi-square tests and non-parametric methods. Students also learn about time series analysis and forecasting-topics that are important for actuaries. Students are required to analyze real data sets using EXCEL, SAS, SPSS or similar computer programs. Students are not allowed to receive credit for more than one of the following courses: MA 206, MA 275 and MA 285. Prerequisite: MA 141, MA 141H or MA 151; Minimum grade C-; Every Year, Spring

## MA 301 Foundations of Advanced Mathematics

( 3 cr .) This course is an exploration of the language and nature of mathematics. Emphasis is placed on developing the students' ability to construct and write mathematical proofs and helping students read and understand mathematical reasoning. Various techniques of proof are discussed, including direct, contrapositive, induction, contradiction and counterexample. Mathematical content includes elementary logic, quantifiers, set theory, relations, functions and number systems. Other topics are at the instructor's discretion, and may include number theory, graph theory, point-set topology or counting problems. Prerequisite: MA 229; Minimum grade C-; Every Year, Fall

MA 305 Discrete Mathematics (3 cr.) Students study various topics in discrete mathematics, such as proof by induction, recurrence relations, cardinality of a set, the pigeonhole principle, counting techniques, probability, and graph theory. Prerequisite: MA 301 or CSC 205; Minimum grade C-; Every Other Year, Spring

## MA 315 Theory of Computation (CSC 315) (3 cr.)

This course provides an introduction to the classical theory of computer science with the aim of developing a mathematical understanding of the nature of computing by trying to answer one overarching question: What are the fundamental capabilities and limitations of
computers? Specific topics include finite automata and formal languages (How do we define a model of computation?), computability (What can be computed? and How do we prove something cannot be computed?) and complexity (What makes some problems so much harder than others to solve? and What is the P versus NP question and why is it important?). Prerequisite: MA 301 or CSC 205; Minimum grade C--; Every Other Year, Fall

MA 318 Cryptography (CSC 318) (3 cr.) Students study methods of transmitting information securely in the face of a malicious adversary deliberately trying to read or alter it. Participants also discuss various possible attacks on these communications. Students learn about classical private-key systems, the Data Encryption Standard (DES), the RSA public-key algorithm, discrete logarithms, hash functions and digital signatures. Additional topics may include the Advanced Encryption Standard (AES), digital cash, games, zero-knowledge techniques and information theory, as well as topics chosen by the students together with the instructor for presentations. Prerequisite: MA 229, CSC 215 or ISM 301; Minimum grade C-; Every Other Year, Fall

MA 321 Abstract Algebra ( 3 cr .) This course presents a study of topics selected from groups, normal groups, rings, ideals, integral domains, fields, polynominal rings and isomorphism theorems. Prerequisite: MA 229, MA 301; Minimum grade C-; Every Year, Spring

MA 341 Advanced Calculus ( 3 cr.) The concepts of limit, continuity, differentiation and Riemann integration are studied in depth. Also considered are sequences and series, improper integrals, and RiemannStieltjes Integral. Prerequisites: MA 142 or MA 152; MA 301; Minimum grade C--; Every Year, Fall

## MA 365 Ordinary Differential Equations (3 cr.)

Students are introduced to standard methods for solving ordinary differential equations, including Laplace transforms as well as singular solutions, series solutions and the system of linear differential equations. Existence and uniqueness theorems also are introduced, as are geometrical interpretation and applications. Prerequisite: MA 142 or MA 152; Minimum grade C-; Every Other Year, Spring

MA 370 Number Theory ( 3 cr .) Topics include representation of integers, primes, the Fundamental Theorem of Arithmetic, divisibility, modular arithmetic, Fermat's Little Theorem and Euler's Theorem, perfect numbers, and Diophantine equations. Additional topics may include quadratic residues, sums of squares, and Fermat's Last Theorem. Prerequisite: one course from MA level 300; Every Other Year, Spring

MA 371 Mathematical Statistics and Probability I ( 3 cr.) This course covers foundations of probability, random variables and select probability distributions with applications. Topics include sample spaces and events; conditional probability; independence; expected value, variance and other moments; joint densities; and probability distributions including the normal, Poisson, Binomial and other distributions. Prerequisites: MA 242 or MA 251; MA 301; Minimum grade C-; Every Other Year, Fall

MA 372 Mathematical Statistics and Probability II ( 3 cr .) Students are introduced to general principles of estimation and testing hypotheses; small sample distributions; regression and correlation; design of experiments and analysis of variance; nonparametric techniques; and other methods. Prerequisite: MA 371; Minimum grade C-; Every Other Year, Spring

MA 378 Mathematical Modeling (3 cr.) Students develop mathematical models for problems in biology, environment, health sciences and politics. Prerequisites: MA 141, MA 141 H or MA 151; MA 229; Minimum grade C-; Every Other Year, Fall

MA 490 Mathematics Senior Seminar (3 cr.) Students work on a senior-level project, culminating in a written and oral report. For senior mathematics majors. Every Year, Spring

Courses offered as needed
MA 110H (UC) Honors Contemporary Mathematics (3cr.)
MA 141H (UC) Honors Calculus of a Single Var I ( 3 cr .) Prerequisite: A math placement level of 5 or a grade of C or better in MA 140; Minimum grade C-
MA 300 Special Topics (3 cr.)
MA 361 Numerical Analysis (CSC 361) ( 3 cr.)
Prerequisites: MA 142 or MA 152; MA 229;
Minimum grade C-
MA 399 Independent Study ( 3 cr .)
MA 400 Special Topics in Math (3 cr.)
MA 421 Advanced Algebra ( 3 cr .) Prerequisite: MA 321; Minimum grade C-
MA 441 Complex Variables ( 3 cr .) Prerequisites: MA 242 or MA 251, MA 301; Minimum grade CMA 451 Elements of Point-Set Topology (3 cr.) Prerequisite: MA 341; Minimum grade C-

## Mechanical Engineering (MER)

MER 210 Fundamentals of Engineering Mechanics and Design ( 3 cr .) This course and lab provide a foundation in the principles of statics and mechanics of materials. It introduces the engineering design process, which serves as a foundation for further engineering studies. Equilibrium principles are used to analyze
forces on statically determinate rigid bodies and structures. Concepts of stress and strain are introduced under axial loading. Every Year, Spring

MER 210L Fundamentals of Engineering Mechanics and Design Lab (1 cr.) Lab to accompany MER 210. Every Year, Spring

MER 220 Mechanics of Materials (3 cr.) Students study the behavior of materials under normal, shear, torsional, bending and combined loads. Loading, geometry, functional environment and material properties of machine or structural parts are used to relate the forces applied to a body to resulting internal forces and deformations in order to evaluate performance. Practical applications involving the design of mechanical and structural elements under various loading and environmental conditions are emphasized. Prerequisite: MER 210; Every Year, Fall

MER 220L Mechanics of Materials Lab (1 cr.) Lab to accompany MER 220. Every Year, Fall

MER 221 Dynamics (3 cr.) Dynamics examines the motion of particles, systems of particles and rigid bodies under the influence of forces. It focuses on the use of Newton's Second Law, in three major, progressive blocks of instruction from scalar, then vector, treatments of rectilinear and curvilinear motion of single particles; through vector motion of systems of particles; to general three-dimensional motion of rigid bodies. The course also provides brief introductions to energy methods: work-energy and impulse-momentum. Students apply the laws of physics to analyze problems and obtain a solid understanding of the relationship between force and acceleration in a dynamic environment. Prerequisite: MER 210; Every Year, Fall

MER 230 Engineering Materials (3 cr.) This course explores the relationship between the microscopic structure and macroscopic properties of materials used in engineering applications. The origin of mechanical and physical properties is studied. Emphasis is placed on an understanding of the fundamental aspects of atomic and microstructural concepts for proper materials selection and enhancement of engineering properties. Materials studied are metals, ceramics, polymers, composites, nano-sized/structured materials, biomaterials, smart materials and semi- and superconductors. Laboratory exercises are incorporated throughout the course to provide practical experience in making decisions concerning material composition and processing to optimize engineering properties. Prerequisites: MER 220, CHE 110; Every Year, Spring

MER 230L Engineering Materials Lab (1 cr.) Lab to accompany MER 230. Every Year, Spring

MER 250 Computer Aided Design (3 cr.) Students explore the use of computer methods as an aid to solving engineering problems. Computer techniques are studied in a variety of engineering contexts. Topics include 3D solid modeling, engineering analysis, engineering computer programming and graphical presentation of information. Students learn to apply a variety of engineering-related programs or routines. Students write, document and use programs of their own in design scenarios. Considerable emphasis is placed on use of the computer as a tool in the engineering design process. Prerequisites: MA 142 or MA 152; MA 229; Every Year, Fall

MER 310 Thermal-Fluid Systems I ( 3 cr.) This course focuses on fluid mechanics while introducing and integrating corresponding topics of thermodynamics. Properties of fluids and hydrostatics as well as conservation principles for mass, energy and linear momentum are covered. Principles are applied to incompressible flow in pipes, external flows, Bernoulli's equation, dimensional analysis, Navier-Stokes, boundary layer development, lift and drag. Laboratory exercises are incorporated into classroom work. Prerequisites: MA 242 or MA 251; PHY 121; Every Year, Fall

MER 320 Thermal-Fluid Systems II (3 cr.) This course focuses on thermodynamics, while incorporating and building upon fluid mechanics topics covered in MER 310. It applies conservation principles for mass, energy and linear momentum as well as the second law of thermodynamics. Principles are applied to power generation systems, refrigeration cycles and total air conditioning. Thermodynamic principles also are applied to the automotive system to examine engine performance (Otto and Diesel cycles) and to high performance aircraft to examine the Brayton cycle. Laboratory exercises are incorporated into classroom work. This class includes completion of a comprehensive, out-of-class design and analysis project. Prerequisites: CHE 110, MER 310; Every Year, Spring

MER 330 Introduction to Circuits ( 3 cr.) Students are introduced to circuits, controls and mechatronics. The course also includes an introduction to electrical engineering to prepare students for the Fundamentals of Engineering exam as a part of professional licensure. Students learn the language, tools and problem-solving techniques used in electrical circuits. Prerequisites: MA 241 or MA 251; PHY 122; Every Year, Spring

MER 330L Circuits Lab (1 cr.) Lab to accompany MER 330. Every Year, Spring

## MER 340 Manufacturing/Machine Component

Design (3 cr.) This course introduces machine component design and manufacturing machines, relating
fundamental engineering science to machine components. It covers load, stress and strain analyses and fatigue. The course progresses to the study of machine component design to include mechanical components such as linkages, fasteners, springs, bearings, gears and shafts. The course culminates in team-oriented design and manufacture of a mechanical engineering product using the techniques, tools, machines and equipment that were developed and taught throughout the course and its associated lab (MER 340L). Prerequisites: MER 220, MER 221; Every Year, Spring

## MER 340L Manufacturing/Machine Component

 Design Lab (1 cr.) Lab to accompanying MER 340. Students gain a safe, hands-on experience with manufacturing machines and equipment. They work on mechanical manufacturing machines common in machine shop and production environments. The equipment includes: a mill lathe, grinder, drill press and bandsaw. Every Year, Spring
## MER 350 Mechanical Engineering Design (3 cr.)

This course introduces mechanical engineering design as an iterative decision-making process. It also introduces engineering economics and ethics. One engineering design problem reinforces the design process instruction and culminates in a student competition. Students begin an integrative capstone design experience that applies the mechanical engineering design process to a realworld engineering problem addressing social, political, economic and technical issues. Students begin capstone assignments early in the course and continue their projects with MER 498. Prerequisites: MER 250, MER 340; Every Year, Fall

MER 360 Heat Transfer (3 cr.) The three modes of heat transfer-conduction, convection and radiation-are studied in detail, and applications are made to various engineering systems. The principles of conduction and convection are used to study the mechanisms of heat transfer during boiling, condensation and the design of heat exchangers. Prerequisite: MER 310; Every Year, Spring

MER 387 Introduction to Applied Aerodynamics ( 3 cr .) The fundamental laws of fluid mechanics are used to develop the characteristic forces and moments generated by the flow about aerodynamic bodies. Lift, drag and aerodynamic moments are studied for airfoils (2D) and finite wings (3D) in the subsonic and supersonic flow regimes. Aircraft performance and design parameters are developed in both the classroom and laboratory sessions. The laboratory sessions include low-speed wind tunnel testing. Prerequisites: MER 221, MER 310; Every Year, Spring

MER 388 Helicopter Aeronautics (3 cr.) This course examines the aerodynamics of helicopter flight in relation to hover, translating and partial power flight. Theory and experimental results are used to predict aircraft performance. The course analyzes the dynamic response of the rotor system and the performance aspects of the vehicle as a whole. This is followed by a design workshop, during which students complete the initial sizing of a helicopter to meet specific mission requirements. The course includes a laboratory examining rotor power and thrust utilizing a whirl stand apparatus, and one field trip to a commercial helicopter company. Prerequisites: MER 210, MER 250, MER 310; Every Year, Spring

## MER 450 Environmentally Conscious Design and

 Manufacturing ( 3 cr.) Students learn to identify, quantify and reduce environmental impacts caused by products. Impact reduction methods form the course's core subject matter. Such methods include: design for recycling, design for remanufacture, life cycle assessment, pollution prevention biomimetics and others. The course also provides an overview of motivational legislation from North America and Europe such as the Toxic Release Inventory (TRI) and the Waste Electrical and Electronic Equipment (WEEE) directive. Through lecture, discussion, assignments, case studies and potentially a semester project, students achieve a critical understanding of the role environmental issues play in mechanical engineering. Prerequisite: MER 340; Every Year, FallMER 470 Dynamic Modeling and Control (3 cr.) This course covers dynamic modeling and control of linear systems. It includes an overview of classical control theory as the foundation for control applications in electrical, mechanical and aeronautical systems. Topics include system modeling using Laplace transform, frequency domain and state variable methods. Mathematical models are developed for electrical, mechanical, aeronautical, chemical and other physical control systems. Control systems analysis and design techniques are studied within the context of how each system is physically controlled in practice. Laboratory exercises include feedback design and system identification. Computer design exercises include dynamic modeling and control of various engineering systems. Prerequisites: MA 365, MER 330; Every Year, Fall

## MER 470L Dynamic Modeling and Controls Lab

 (1 cr.) Lab to accompany MER 470. Every Year, Fall
## MER 472 Energy Conversion Systems (3 cr.)

This course provides an overview and examines the historical evolution of both classical and state-of-the-art energy conversion technology. It includes advanced analysis of energy conversion hardware, air
conditioning and refrigeration as well as fossil fuel combustion processes using concepts of energy. Major methods of direct energy conversion are covered, including thermoelectricity, photovoltaics, thermionics, magnetohydrodynamics, and fuel cells. The current state of national and world energy is presented, and alternatives including renewable energy and a hydrogen economy are explored with reference to economic, political, environmental and technological factors. Prerequisite: MER 330; Every Year, Spring

MER 475 Mechatronics ( 3 cr .) This course presents a comprehensive introduction to the field of mechatronics. Mechatronics is the crossroads in engineering where mechanical engineering, electrical engineering, computer science and controls engineering meet to create new and exciting real-world systems. Knowledge of mechanical and electrical components, controls theory and design are integrated to solve actual physical design applications. Every Year, Fall

MER 475L Mechatronics Lab (1 cr.) Lab to accompany MER 475. Prerequisite: MER 470; Every Year, Fall

MER 481 Aircraft Performance/Static Stability ( 3 cr .) The course applies the principles developed in applied aerodynamics to develop the equations of motion for a rigid aircraft in steady state level flight, maneuvering flight, and during takeoff and landing. These equations are analyzed to determine such performance characteristics as maximum range, endurance, turning rate, climb rate, etc. Pistonprop, turbo-prop and jet aircraft are considered. The equations of motion are then analyzed to develop static stability criteria and investigate steady state control characteristics. Prerequisites: MER 330, MER 387; Every Year, Fall

MER 486 Vibration Engineering ( 3 cr.) In this course, students develop a foundation in the analysis and design of free and forced single and multidegree-of-freedom systems. Applications include modeling, damping, resonance, force transmissibility, vibration absorbers, matrix formulation and modal analysis. Emphasis is placed on vibrations examples from several engineering fields. Out-of-class design problems provide students with the opportunity to apply principles taught in the classroom to realistic problems encountered by practicing engineers. In-class demonstrations supplement the theory development. Prerequisites: MER 221; Every Year, Spring

## MER 489 Advanced Study in Mechanical

Engineering (3 cr.) The student pursues advanced study of a topic in mechanical engineering on an individual or small-group basis, independent of a formal classroom setting. Similar to graduate level research, the scope
of the selected project is tailored to the interests of the student, based on resources and in consultation with a faculty adviser. To develop research skills, the student is integral in all phases of project completion by defining objectives, studying fundamentals and background material, outlining the approach, conducting analysis and communicating results. Requires permission of the instructor. Every Year, Fall and Spring

MER 490 Engineering Professional Experience (1 cr.) Students gain experience by employing engineering skills in a professional setting under the guidance of practicing engineers. Students must obtain departmental approval and register prior to starting the experience. Prerequisite may be waived with permission of adviser. Prerequisite: ENR 395; Every Year, All

MER 491 Biomedical Engineering ( 3 cr .) In this introductory course to biomedical engineering, students analyze biomedical implantable devices and explore topics such as biocompatibility, biomechanical properties of biological tissue, device design, as well as factors that go into medical device development and testing. Handson labs are incorporated into the course to provide a more in-depth immersion into specific course topics. Prerequisite: MER 220; Every Year, Spring

## MER 492 Power Trains and Vehicle Dynamics (3 cr.)

 This course provides an introduction in ground vehicle theory with emphasis on analysis, testing and evaluation of automotive power trains and dynamic systems to understand the underlying principles affecting vehicle design. Clutches, transmissions (manual and automatic), differentials, wheels and tires, as well as braking, steering and suspension systems are studied in detail to include their effect on vehicular or other system performance. High-speed, tracked vehicle application of the above systems also is covered. Theory is verified with hands-on experience in the laboratory. Component design problems are interspersed throughout the course. Prerequisites: MER 221, MER 320; Every Year, FallMER 498 ME Capstone Design (3 cr.) This course integrates math, science and engineering principles using a comprehensive engineering design project. Open-ended, client-based design problems emphasize a multidisciplinary approach to total system design. Design teams develop product specifications, generate alternatives, make practical engineering approximations, perform appropriate analysis to support technical feasibility, and make decisions leading to designs that meet stated requirements. System integration, human factors engineering, computer-aided design, maintainability and fabrication techniques are addressed. This course provides an integrative experience that supports the overarching academic program goal. Prerequisite: MER 350; Every Year, Spring

## Media Studies (MSS)

MSS 101 Media Industries and Trends ( 3 cr.) This course introduces students to the structure, function and social impact of the communications media and the ways they inform, entertain and influence media consumers. Students develop an understanding of issues related to media ownership, regulation, ethics, diversity, globalization and social media use. Additionally, students learn to distinguish among academic, trade and journalistic sources for media-related research, and to work in teams to create and deliver a presentation about challenges facing media practitioners. Every Year, Fall and Spring

MSS 119 Sign Language Workshop (1 cr.) The course presents an introduction to basic sign language, its basic vocabulary, sentence structure and grammar. Students gain practice in reading and execution of signs. Every Year, Spring

MSS 220 (UC) U.S. Media History (3 cr.) This course examines two central questions: How have the media shaped American culture over the years? How has American culture shaped the media over the years? This class traces the evolution of the U.S. media over the course of roughly 200 years and considers how the media construct our contemporary understanding of historical eras and events. Students are introduced to archival research and learn to recognize history as a useful frame for understanding the present. Additionally, students demonstrate the ability to think critically, clearly and creatively about media history and to express those views in writing and in oral presentations. Prerequisite: EN 102; Every Year, All

MSS 231 Media and Society ( $\mathbf{3} \mathbf{~ c r}$.) The objectives for this course are twofold: to foster an understanding of the social context within which media professionals work and to provide an environment in which students develop analytical skills required for effective and ethical participation in our media-saturated culture as citizens and potential media professionals. Students create a mock proposal for a media project in which they address how different cultural, political, economic and technological structures create constraints and leave open the possibilities for media practitioners, users and audiences. They also work in teams to critique contemporary social media issues. Prerequisites: MSS 101, JRN 160; Every Year, Spring

MSS 311 Diversity in the Media (WS 311) (3 cr.) This course examines the role of media in the construction of social categories such as gender, race, class and sexual orientation. Students learn about the media as one of a number of social institutions-including religion, education and family-that influence our understanding of cultural difference. The course presents a variety of per-
spectives that address diversity in relation to both print and electronic media, emphasizing popular culture. Media diversity issues are analyzed in relation to ownership, representation, audience reception and the media workforce. Junior status required. Prerequisites: MSS 101, JRN 160 and MSS 220; Every Other Year

MSS 332 Media Research Methods ( 3 cr .) The course introduces students to a variety of media research methods through readings and hands-on exercises. Goals include helping students become knowledgeable and critical readers of media-related research produced in both industry and academic settings, and teaching students fundamental aspects of conducting media research and leading-edge strategies for effectively communicating research findings. Students perform original research using techniques including interviews, focus groups, content analysis and surveys. They also learn about statistics, social media tracking and research ethics. Junior status required. Prerequisites: MSS 101, JRN 160, MSS 220, MSS 231; Every Year, Fall

## MSS 340 Communications Law and Policy (3 cr.)

This course helps students to develop an awareness and understanding of laws, regulations and professional standards of practice that apply to the work of communications practitioners. Attention is given to First Amendment guarantees, libel, privacy, journalist's privilege, copyright, media and advertising regulation. Selected cases are highlighted as examples of opinions handed down by state and federal courts. Junior status is required. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

MSS 345 Media Users and Audiences (WS 345) (3 cr.) This course considers popular, institutional and academic perspectives on media users and audiences in the U.S. and abroad. Students develop an understanding of how people choose and interpret media content, how marketers and media producers perceive audiences, how social media use blurs boundaries between audiences and producers and popular assumptions about media effects on audiences. Students develop and apply critical thinking and written and oral communication skills in assignments that address contemporary debates surrounding audiences and media users, including an in-depth analysis of fan cultures. Junior status required. Prerequisites: MSS 101, JRN 160 and MSS 220; Every Year

MSS 346 Global Communication ( $\mathbf{3} \mathbf{c r}$.) The course analyzes the roles information media and popular culture play in modern debates about political power, global economy and cultural identity. The relative influences of different communication technologies in relationships among global, transnational and local cultures also are examined. Prerequisites: MSS 101, JRN 160, MSS 220; Every Other Year

MSS 348 Song and Dance ( 3 cr.) Music plays a major role in all media where sound is a component. This course explores the nature of music and elements such as rhythm, harmony, resonance and entrainment. Through a series of texts and films, participants seek to understand the power music brings to the world of communication. Using a nontechnical approach, they examine principles that underlie music's status as the universal language and enable it to speak to the mind, heart and soul of humanity. Junior status required. Every Year

## MSS 420 Sports, Media and Society (SPS 420) (3 cr.)

 This course examines the social, political, economic and historical significance of the intersection of sports, media and society. Participants examine such questions as: What role have sports played in shaping cultures throughout history? What is the relationship between sports and media? How do sports, through the media, influence U.S. culture today? What is the role of sports media professionals in U.S. culture? Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, SpringMSS 450 Senior Seminar (3 cr.) This seminar includes an in-depth examination of issues and research perspectives in media studies. Topics vary each term, focusing on the different media and current literature in the field. Senior status required. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

## MSS 495 Media Trend Forecasting and Strategy

( 3 cr .) In this media studies capstone course, students analyze the various forces impacting media industries, professionals and users, tracking current trends and forecasting future influences. Students study the issues facing media producers/users and strategize creative responses to the challenges of operating in an ever-changing media environment, applying critical thinking, research and creative problemsolving skills to real-world situations. Students also are expected to demonstrate professional oral and written communication skills. Senior status required. Prerequisites: MSS 231, MSS 332; Every Year, Spring

Courses offered as needed
MSS 200 Special Topics (3 cr.)
MSS 300 Special Topics ( 3 cr .)
MSS 320 Communication Technologies: Evolution and Impact (3 cr.) Prerequisites: MSS 101, JRN 160, MSS 220
MSS 349 Political Communication (PO 348) (3 cr.) Prerequisites: MSS 101, JRN 160, MSS 220
MSS 350 Issues in Media Studies ( 3 cr.) Prerequisites: MSS 101, JRN 160, MSS 220
MSS 400 Special Topics ( 3 cr .)
MSS 491 Research Project ( 3 cr .) Prerequisite: MSS 332

## Music (MU)

MU 110 (UC) Private Music Lessons (1 cr.) Music lessons give Quinnipiac students the opportunity to study the piano, voice or the harp with a highly skilled musical professional. In private music lessons, students develop an understanding of the fundamental elements of playing a musical instrument. These include: musical notation, proper technique, music theory and performance. No prior musical training is required as lessons are tailored by the instructor to be appropriate for any level of study. Students may choose to perform in program recitals that are held each semester. Every Year, All

MU 130 (UC) Understanding Music (3 cr.) Students study elements of musical form and style in an effort to discover how music works. This course investigates the most important figures from the history of Western music as well as some world music and contemporary composers. Every Year, All

MU 140 (UC) Applied Guitar (1 cr.) Students study the guitar as an orchestral instrument. The plectrum (use of a pick) style of playing is emphasized. The students follow a systematic method for gradual and technical development. Students attend an arranged weekly lesson during the scheduled time for the class, and are expected to practice 30 minutes each day. Every Year, All

## MU 190 (UC) Quinnipiac University Singers

( 1 cr. ) This workshop in music is devoted to the study, singing and presentation of choral music from a variety of periods. The course focuses on specific vocal and ensemble techniques. Students of every experience and ability level are encouraged to attend. Every Year, All

## MU 191 (UC) Hamden Symphony Orchestra at

Quinnipiac (1 cr.) Students perform chamber music and orchestral compositions. A wide variety of styles including classical, film and popular music are performed. All instruments are used and students of every experience and ability level are encouraged to attend. Every Year, All

MU 194 (UC) Jazz Ensemble (1 cr.) Students explore and perform literature written for the big and small ensemble. A wide variety of styles, composers and arrangers are covered. Students of every experience and ability level are encouraged to attend. Every Year, All

MU 211 (UC) History of Jazz ( $\mathbf{3}$ cr.) This course covers the origins and history of the jazz idiom from its early beginning through present avant-garde forms. Basic jazz literature is surveyed with style analysis of important soloists, small jazz groups and large ensembles. Every Year, All

MU 211H (UC) Honors History of Jazz (3 cr.) This course covers the origins and history of the jazz idiom from its early beginning through present avant-garde forms. Basic jazz literature is surveyed with style analysis of important soloists, small jazz groups and large ensembles. Every Year, All

MU 213 (UC) Music of the 20th Century ( $\mathbf{3}$ cr.) This course examines the many transformations that have taken place in art music from the late post-romantic era up to the present time. The course presents a diverse spectrum of musical styles, and explores how popular forms, world music, and changes in society have impacted musical culture here and abroad. Prerequisite: MU 130; Every Year, Spring

MU 230 (UC) Music Theory I ( 3 cr .) This course is specifically designed to give the student a solid and practical basis for appreciation or participation in musical experience. Emphasis is placed on development in three areas: 1) music theory (rhythm, melody, harmony, modes, scales, key signatures, intervals, etc.); 2) its direct application through exercises in dictation; and 3) sight reading. Prerequisite: MU 130; Every Year, Fall

MU 240 (UC) Applied Guitar II (2 cr.) Students develop an appreciation for the vast library of music for the guitar. Students learn both the plectrum style of play (use of a pick) and the classical style of play (finger style). The course follows a systematic method for gradual and technical development. Class time includes guitar ensemble playing along with individual lessons. Students are expected to practice 45 minutes each day. Prerequisite: MU 140 or MU 230; Every Year, Fall

MU 330 (UC) Music Theory II (3 cr.) This course studies the range, timbre, transposition and uses of various instruments in consort. Fundamental techniques of arranging, vocal and instrumental are considered. Prerequisite: MU 230; Every Year, Spring

MU 340 (UC) Applied Guitar III (3 cr.) This course is a continuation of MU 240. Students practice the plectrum and classical styles of playing and participate in individual lessons and guitar ensemble playing as they increase their knowledge of the library of music for the guitar with an emphasis on classical and jazz guitar music. Each student must write a piece demonstrating the elements of musical composition and play that composition or another piece at a recital. Prerequisites: MU 240; Every Year, Spring

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## Nursing (NUR)

NUR 300 Core Concepts in Nursing (3 cr.) This course introduces students to core concepts in nursing, and focuses on assessment and nursing interventions to support and protect health. The delivery of safe, evidence-based, holistic, patient-centered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Fall

## NUR 302 Nursing Science and Information

 Literacy ( $\mathbf{3} \mathbf{c r}$.) This course examines historical and contemporary nursing science. Students are introduced to patterns of knowing, clinical reasoning and select disciplinary and interdisciplinary concepts and theories useful in nursing practice. This course also focuses on information literacy and information management in the delivery of quality patient care. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, FallNUR 304 Health Promotion and Wellness (3 cr.) This course focuses on health promotion, wellness, and disease and injury prevention across the lifespan. Individual prevention strategies and health interventions are explored. Knowledge, attitude, and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Fall

NUR 306 Health Assessment ( $\mathbf{3}$ cr.) This course focuses on health assessment of individuals across the lifespan. Students are introduced to a holistic approach to assessment taking into consideration bio-psycho-social-spiritual, environmental and cultural aspects. Knowledge, attitude, and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Fall

NUR 307 Core Nursing Practicum (2 cr.) This clinical practicum is taken concurrently with NUR 300, 302, 304, 306 and 330L. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Fall

## NUR 322 Care of Women, Children and Families

 ( 4 cr .) This course examines topics related to nursing management for women, children and families, and emphasizes health promotion, wellness and the illness states of the child bearing and child-rearing family. The delivery of safe, evidence-based, holistic, patientcentered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Spring and SummerNUR 323 Women, Children and Families Practicum ( 2 cr .) This clinical practicum is taken concurrently with NUR 322. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Spring and Summer

NUR 324 Care of Adults with Complex Health Needs I (4 cr.) This course examines concepts of nursing management for adults with complex health care needs. The delivery of safe, evidence-based, holistic, patientcentered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Spring

NUR 325 Adult Care Practicum I (2 cr.) This clinical practicum is taken concurrently with NUR 324. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Spring

NUR 326 Pathophysiology and Pharmacotherapy I ( 2 cr ) This course integrates pathophysiology and pharmacotherapy relevant to concurrent junior spring semester nursing courses. Students are introduced to medications used for health maintenance and the treatment of illness. Legal, ethical and regulatory issues also are examined. Every Year, Spring

NUR 330L Holistic Nursing Integration Lab I (2 cr.) This integrated campus laboratory experience provides the opportunity to develop nursing knowledge and attitudes, and to practice skills relevant to concurrent junior fall semester nursing courses. Students participate in learning modalities such as guided practice, clinical simulation and problem-based learning activities to develop clinical reasoning. ( $5 \mathrm{hrs} . / \mathrm{week}, 70 \mathrm{hrs}$./ semester) Every Year, Fall

## NUR 340L Holistic Nursing Integration Lab II

 (2 cr.) This integrated campus laboratory experience provides the opportunity to develop nursing knowledge and attitudes, and to practice skills relevant to concurrent junior spring semester nursing courses. Students participate in learning modalities such as guided practice, clinical simulation, and problem-based learning activities to develop clinical reasoning. ( 5 hrs ./ week, 70 hrs./semester) Every Year, SpringNUR 364 Complementary and Alternative Therapies ( 3 cr .) This elective course examines complementary and alternative therapies in current use. Emphasis is placed on the theories, applications, validity and efficacy of a wide range of treatment modalities. Elective. Open to health science, non-nursing majors. Every Year, Fall and Spring

NUR 380 Health Promotion and Wellness (3 cr.) This course focuses on health promotion, wellness
and disease and injury prevention across the lifespan. Individual prevention strategies and health interventions are explored. Open to RN-BSN students only. Every Year, Fall Online

## NUR 382 Nursing Science and Information Literacy

 ( 3 cr.) This online-only course examines historical and contemporary nursing science. Students are introduced to patterns of knowing, clinical reasoning and select disciplinary and interdisciplinary concepts and theories useful in nursing practice. This course also focuses on information literacy and information management in the delivery of quality patient care. Open to RN-BSN students only. Every Year, Spring OnlineNUR 390 Special Topics in Nursing ( 3 cr.) Because these are unique course offered on a term basis, course descriptions are not available until scheduled.

## NUR 400 Psychiatric-Mental Health Nursing (3 cr.)

 This course examines concepts of nursing management for individuals with psychiatric-mental health needs across the lifespan. The delivery of safe, evidencebased, holistic, patient-centered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Spring and SummerNUR 401 Psychiatric-Mental Health Practicum (2 cr.) This clinical practicum is taken concurrently with NUR 400. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Fall and Summer

## NUR 408 Research and Evidence-Based Nursing

 Practice (2 cr.) This course focuses on research related knowledge, attitudes, and skills necessary for evidence based decision making in clinical practice. Students learn the basic elements of research, and further develop scientific literacy, and enhance information fluency. Every Year, Fall and Spring
## NUR 424 Care of Adults with Complex Health

 Needs II ( 3 cr .) This course examines concepts of nursing management for adults with complex, highacuity health care needs requiring sophisticated patient care technologies. The delivery of safe, evidencebased, holistic, patient-centered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Fall and SummerNUR 425 Adult Care Practicum II (2 cr.) This clinical practicum is taken concurrently with NUR 424. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Fall and Summer

NUR 426 Pathophysiology and Pharmacotherapy II ( 2 cr .) This course integrates pathophysiology and pharmacotherapy relevant to concurrent senior fall semester nursing courses. Students are introduced to medications used for health maintenance and the treatment of illness. Legal, ethical and regulatory issues also are examined. Every Year, Fall and Summer

## NUR 428 Community and Public Health Nursing

( 3 cr .) This course focuses on concepts of community and public health nursing. Emphasis is on primary, secondary and tertiary prevention and nursing management for individuals, groups and populations with health problems in community settings. The delivery of safe, evidence-based, holistic, patientcentered care is emphasized. Knowledge, attitude and skill acquisition opportunities are provided in campus lab and applied in clinical practicum. Every Year, Spring

NUR 429 Community and Public Health Nursing Practicum (2 cr.) This clinical practicum is taken concurrently with NUR 428. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Spring

## NUR 430L Holistic Nursing Integration Lab III

 ( 2 cr .) This integrated campus laboratory experience provides the opportunity to develop nursing knowledge and attitudes, as well as to practice skills relevant to concurrent senior fall or summer semester nursing courses. Students participate in learning modalities such as guided practice, clinical simulation and problembased learning to develop clinical reasoning. (5 hrs./ week, 70 hrs./semester) Every Year, Fall and SummerNUR 432 Contemporary Issues and Roles in Nursing ( 3 cr .) This course analyzes trends and issues in contemporary health care and their effect on the consumer, the nursing profession and society. It incorporates social intelligence, diversity awareness, creativity and sensitivity required for leadership roles and management functions in dynamic health care environments. Knowledge, attitude and skill opportunities are provided in campus lab and applied in a variety of health care settings. Every Year, Spring and Summer

NUR 433 Capstone Practicum ( 2 cr .) This capstone practicum facilitates the transition from nursing student to professional nurse. Synthesis of knowledge from all course work is integrated into the delivery of safe, evidence-based, holistic, patient-centered care. Students participate in 84 hours of supervised clinical practice in a variety of health care settings. Every Year, Spring and Summer

NUR 434L Capstone Seminar Lab (1 cr.) This capstone seminar provides the opportunity for students
working in small faculty-mentored groups to complete a capstone project that demonstrates synthesis of program learning outcomes, University Essential Learning Outcomes and American Association of Colleges of Nursing Essentials of Baccalaureate Education for Professional Nursing Practice. Students participate in 35 hours of a seminar lab in which they create and disseminate evidence-based capstone projects. Every Year, Spring and Summer

NUR 440L Holistic Nursing Integration Lab IV ( 2 cr .) This integrated campus laboratory experience provides the opportunity to develop nursing knowledge and attitudes, and to practice skills relevant to concurrent senior spring or summer semester nursing courses. Students participate in learning modalities such as guided practice, clinical simulation and problem-based learning activities to develop clinical reasoning. Students also prepare for the nursing licensure examination (NCLEX-RN ©) with emphasis on content review, and computer-simulated test taking using web-based technology. (5 hrs./week, 70 hrs ./ semester) Every Year, Fall and Summer

NUR 475 Practice Experience I (1 cr.) This course facilitates the student's ability to synthesize knowledge learned in concurrent semester course work. Students demonstrate competency by developing, implementing and evaluating an outcomes-based project in a clinical setting. Open to RN-BSN students only. Every Year, Spring Online

NUR 477 Practice Experience II (1 cr.) This course facilitates the student's ability to synthesize the knowledge learned in concurrent semester course work. Students demonstrate competency by developing, implementing and evaluating an outcomes-based project in a clinical setting. Open to RN-BSN students only. Prerequisites: NUR 484; Every Year, Fall Online

## NUR 478 Research and Evidence-Based Nursing

Practice (2 cr.) This course focuses on research-related knowledge, attitudes and skills necessary for evidencebased decision making in clinical practice. Students learn the basic elements of research, further develop scientific literacy and enhance information fluency. Open to RN-BSN students only. Prerequisites: NUR 382; Every Year, Spring Online

NUR 479 Practice Experience III (1 cr.) This course facilitates the student's ability to synthesize the knowledge learned in concurrent semester course work. Students demonstrate competency by developing, implementing and evaluating an outcomes-based project in a clinical setting. Open to RN-BSN students only. Every Year, Spring Online

NUR 480 Interprofessional Practice and Quality Improvement (3 cr.) This course describes and applies quality improvement methods to address problems identified in practice and actions needed to effect a positive change for care. The process and significance of interprofessional practice and collaboration in the delivery of patient care and in engagement with performance improvement are described. Open to RN-BSN students only. Every Year, Summer Online

## NUR 482 Health Disparities in Vulnerable

Populations ( 2 cr .) Students analyze the impact of social determinants of health and health disparities on selected vulnerable populations. Health policy and advocacy for vulnerable populations also are examined. Open to RN-BSN students only. Every Year, Summer Online

NUR 484 Community and Public Health Nursing (3 cr.) This course focuses on concepts of community and public health nursing. Emphasis is on secondary and tertiary prevention and nursing management for individuals, groups and communities with health problems in community settings. The delivery of safe, evidence-based, holistic, patient-centered care is emphasized. Open to RN-BSN students only. Every Year, Fall Online

NUR 486 Contemporary Issues and Roles in Nursing Practice ( 3 cr .) This course analyzes trends and issues in contemporary health care and their effect on the consumer, the nursing profession and society. It incorporates social intelligence, diversity awareness, creativity and sensitivity required for leadership roles and management functions in dynamic health care environments. Open to RN-BSN students only. Prerequisites: NUR 480; Every Year, Spring Online

NUR 490 Special Topics in Nursing (3 cr.) Because these are unique course offered on a term basis, course descriptions are not available until scheduled.

## Courses offered as needed

NUR 360 History of Health Care and Modern Nursing (3 cr.)
NUR 366 Communication Skills in Clinical Practice ( 3 cr .)
NUR 367 Summer Clinical Internship (1 cr.) NUR 461 Community Health Internship (3 cr.)

## Occupational Therapy (OT)

OT 111 Fundamentals of Occupational Therapy ( 1 cr .) This course provides the student with a basic knowledge of the fundamentals of occupational therapy practice. Topics include defining occupational therapy, historical development of the profession, introduction to current and emerging practice arenas, and application of professional terminology. Students complete a self-study in medical
terminology. This course also is offered online during winter intersession. Every Year, Fall and Summer

OT 112 Occupation-Based Activity (1 cr.) This course introduces students to therapeutic observation. Lecture and learning experiences allow for the development of observation skills across the life span, and in all areas of occupation. Interpretation of observations and relationship of observation to occupational performance are emphasized. Students complete a self-study in medical terminology. Every Year, Spring and Summer

OT 210 Therapeutic Use of Self (SL: Service Learning) ( 2 cr .) This course develops the skills surrounding the use of self as a therapeutic entity. These skills are necessary in both dyadic as well as group relationships and are cornerstones of the profession. The integration of service learning in community settings with people with disabilities allows students to practice their client-centered communication skills. Every Year, Fall and Summer

OT 212 Group Leadership (SL: Service Learning)
( 2 cr.) This course involves lecture and experiential skills in the use of groups in occupational therapy intervention. Theory of groups, and specific group leadership training and practice are utilized. Prerequisites: OT 111, OT 112, OT 210; Every Year, Spring and Summer

OT 322 Functional Anatomy and Kinesiology I (3 cr.) This course is a comprehensive, two-part series designed to provide students with foundational expertise in human biomechanics. Students examine the musculoskeletal system in conjunction with principles of kinetics and kinematics as the basis of practice in physical rehabilitation. The course includes a corequisite laboratory to develop competency in basic biomechanical safety and assessment (goniometry and manual muscle testing). The series culminates by merging all aspects of human movement as the basis for engaging in everyday occupational activities. Prerequisites: BIO 211, BIO 212, PHY 101; Every Year, Fall

OT 322L Functional Anatomy and Kinesiology Lab I (1 cr.) This lab, which accompanies OT 322, provides the opportunity to learn in the Human Anatomy Lab, Clinical Skills Lab, Rehabilitation Science Lab and the Model Apartment as students develop proficiency with basic biomechanical safety and assessment (goniometry and manual muscle testing). This variety of laboratory settings serves to enhance content delivered in the classroom; students are guided to first visualize human anatomy via donor dissection and then apply that learning in the simulated clinical settings. Students are alternately scheduled among spaces weekly and in accordance with progression of region in the human body. (2 lab hrs.) Prerequisites: BIO 211, BIO 212, PHY 101; Every Year, Fall

OT 323 Functional Anatomy and Kinesology II
( 3 cr .) This course is part two of a comprehensive series designed to provide students with foundational expertise in human biomechanics. Students continue their examination of the musculoskeletal system in conjunction with principles of kinetics and kinematics as the basis of practice in physical rehabilitation. The series culminates by merging all aspects of human movement as the basis for engaging in everyday occupational activities. Prerequisite: OT 322; Every Year, Spring

OT 323L Functional Anatomy and Kinesiology Lab II (1 cr.) This lab, which accompanies OT 323, provides an opportunity to learn in the Human Anatomy Lab, Clinical Skills Lab, Rehabilitation Science Lab and the Model Apartment as students develop proficiency with basic biomechanical safety and assessment (goniometry and manual muscle testing). This variety of laboratory settings enhances content delivered in the classroom. Students are guided to first visualize human anatomy via donor dissection and then apply that learning in the simulated clinical settings. Students are alternately scheduled among spaces weekly and in accordance with progression of region in the human body. (2 lab hrs.) Prerequisite: OT 322L; Every Year, Spring

## OT 325 Principles Human Development and

 Occupation (3 cr.) This course explores normal development and its impact on age appropriate occupations. The age span is from conception through early adulthood. The course provides a foundation for evaluation and intervention in human occupation. Every Year, Fall
## OT 326 Principles of Human Development/Older

 Adults (3 cr.) This course builds on the developmental concepts from OT 325 to explore normal development and its impact on age appropriate occupations. The age span is from early to late adulthood. The course provides a foundation for evaluation and intervention in human occupation as well as a foundation in performance patterns, skills and context. Prerequisite: OT 325; Every Year, SpringOT 335 Functional Neuroanatomy (3 cr.) This course provides a comprehensive study of neuroanatomy including the structures, functions and physiology of neural systems key to normal human health and function. The course provides a strong foundation for future study on neural substrates of health conditions and occupational performance. Every Year, Fall

OT 336 Functional Neurobehavior (3 cr.) This course builds on functional neuroanatomy as it examines the interrelationships of neuroanatomical structures, subsystems and neurophysiologic processes involved in human behaviors, which are the foundation for occupational performance. Specifically, students learn the neural substrates and mechanisms of motor
behaviors, sensory-perception, emotions, language, attention, memory and learning. The course also introduces basic screening procedures to identify neurobehavioral dysfunctions. Every Year, Spring

## OT 345 Theory, Occupation and Wellness (3 cr.)

This course highlights topics about health promotion and illness prevention for the theoretical application to occupational therapy practice. Foundational concepts from public health, behavioral and social science literature, and practice-based models help students to appreciate the role of occupational therapy in health and well-being. Every Year, Fall

OT 345S Theory, Occupation and Wellness Seminar (1 cr.) This integrative course highlights content from the OT 345 (lecture) and Service Learning lab experience (OT 355L). Using the Socratic teaching method, students actively discuss the role of occupational therapy in community practice, integrating learned content and professional experiences. Every Year, Fall

## OT 355 The Occupational Therapy Framework

( 2 cr .) This course focuses on the definitions, applications and synthesis of the terms occupation, activity and purposeful activity. The dimensions of occupation as they apply to work, self-care, care of others, leisure and education are explored through theory, simulation and real life. The Occupational Therapy Framework document is analyzed and applied to case studies and videotapes. Class discussions reflect on service learning and its relationship to occupation. Every Year, Fall

## OT 355L OT Community Experience Lab (1 cr.)

The OT Framework course has a two-three hour-perweek community experience component during which the student is able to observe and, as appropriate, apply the concepts of occupation and purposeful activity in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of community-based practice and the focus of learning activities for students to be engaged as active learners. Every Year, Fall

## OT 356 Documenting OT Practice and FWI (2 cr.)

This course is an introduction to the philosophy, concepts and clinical reasoning that support the documentation of occupational therapy practice. The course integrates ethical, legal and pragmatic considerations of documentation throughout the occupational therapy process in major practice settings. The course includes a level I fieldwork component for two hours per week that introduces students to requisite psychomotor and cognitive skills in documentation including reviewing client records, developing subjective and objective impressions from observations, and recording data and anecdotal information. Every Year, Spring

OT 356F Documenting OT Practice Fieldwork (1 cr.) Fieldwork to accompany OT 356 . This course provides structured fieldwork observation in various settings and allows the student to observe and explore the documentation process utilized in occupational therapy. Students also have the opportunity to read documentation, compare documentation to observations, and record data and anecdotal information, utilized within the various models such as health care, education, community and social systems. The settings utilized are equipped to provide clinical application of principles learned in the OT curriculum. Students have the opportunity to reflect on this experience within the lecture course and seminar component of this course. Fieldwork is two hours every other week with a seminar on alternate weeks. Every Year, Spring

## OT 357 Professional Seminar in Occupational

Therapy (1 cr.) This course addresses various core skills needed for success in subsequent curricular courses. Participants are introduced to foundational skills in the areas of organization and student skills, professional development and evidenced-based practice. Students partake in various activities to improve student and entry-level practitioner skills such as developing a professional web page, and initial evaluations of occupational therapy research. Every Year, Spring

## OT 364 Problem-Based Learning: Risk Factor

 Human Occupation (1 cr.) The purpose of this problem-based learning lab course is to facilitate student directed learning through the use of cases, scenarios, vignettes and videos that focus on the risk factors that may impact human occupation through the lifespan. Every Year, SpringOT 415 Health Conditions I ( 6 cr.) This course presents a study of health conditions of individuals between 0-18 years of age, which may limit participation in meaningful occupations. A thought process model approach is used for comprehending and analyzing the general indicators of disease as well as the impact of health conditions on one's daily occupations. Learning opportunities occur through activities such as structured diagnostic case review, differential diagnosis, clinical reasoning activities, decision making and critical inquiry. Every Year, Fall

OT 416 Health Conditions II ( 6 cr.) This course presents a study of health conditions of individuals from age 18 to adulthood, which may limit participation in meaningful occupations. A thought process model approach is used for comprehending and analyzing the general indicators of disease as well as the impact of health conditions on one's daily occupations. Learning opportunities occur through activities such as structured diagnostic case review, differential diagnosis, clinical
reasoning activities, decision making and critical inquiry. Every Year, Spring

OT 420 OT Evaluation Process ( 6 cr.) This course provides a comprehensive overview of the evaluation process used in occupational therapy. While opportunities are provided to learn specific assessment tools, emphasis is placed on the clinical reasoning process used with clients seeking occupational therapy services. Application of frames of reference and appreciation of cultural context as they relate to the evaluation process are highlighted. Every Year, Fall

OT 420F Evaluative Process Fieldwork (1 cr.) Two hours per week the student observes elements of the occupational therapy evaluative process in local medical, educational, social and community locations. Every Year, Fall

OT 420L Evaluative Process Lab (1 cr.) The student is provided opportunities for experiential learning within the evaluation process as discussed in lecture. Application of frames of reference and appreciation of all contexts as they relate to the evaluation process are highlighted. (2 lab hrs.) Every Year, Fall

OT 421 Intervention Strategies ( 6 cr .) This course focuses on basic intervention approaches across the age span and diagnostic areas according to the OT Framework document. The lecture reviews the theory and evidence-based data supporting the intervention, the process for implementing the intervention, and how to measure the effectiveness of the intervention. Every Year, Spring

OT 421F Intervention Strategies Fieldwork (1 cr.) This course provides structured fieldwork observation in various settings and allows the student to observe and explore the intervention process utilized in occupational therapy. Students also have the opportunity to see, observe and report on the variety of intervention strategies utilized within the various models such as health care, education, community and social systems. Students develop an appreciation for the frame of reference used in various models of practice as a guide to intervention selection. The settings utilized are equipped to provide clinical application of principles learned in the OT curriculum. Fieldwork is two hours per week. Every Year, Spring

OT 421L Intervention Process Lab (1 cr.) The lab portion of this class provides the opportunity for experiential learning and documenting the interventions as discussed in OT 421 lectures. (2 lab hrs.) Every Year, Spring

OT 445 Applied Theory in OT ( 3 cr .) This course is a comprehensive review of theoretical approaches to
various dimensions of health and health conditions used in occupational therapy practice. Students learn the elements of many traditional, contemporary and emerging frames of reference including their basic assumptions; historical, philosophical and scientific orientation; domains of concern; views of the function-dysfunction continuum; postulates of change; and their application toward the occupational therapy process including evaluation and intervention. Every Year, Fall

OT 446 Group Process ( 3 cr .) This course prepares students for the OT 500, Level II fieldwork experience in psychosocial and/or mental health settings. Best practice methodologies in mental health are taught with foundations in group dynamics theory. Students also learn specialized skills for mental health practice and develop professional behaviors that promote a therapeutic use of self. A culminating Group Protocol project facilitates integration of theory, best practice and research. Every Year, Spring

OT 446L Group Process Lab (1 cr.) This lab provides interactive peer experiences that allow students to apply content taught in lecture. Students lead various mental health interventions with supervision of faculty facilitators to promote knowledge, skills and attributes needed for direct practice. Learning tools include selfreflection of leadership abilities and direct feedback to enhance therapeutic use of self as an occupational therapist. (2 lab hrs.) Every Year, Spring

## OT 467 PBL Health Conditions and Occupation

 II (1 cr.) The goal of the fourth year is to study human health conditions and their impact on the evaluative and intervention process. Students work collectively to research health conditions, evaluations, and interventions and to synthesize information from previous courses and outside resources in order to solve problems related to complex health conditions. Critical thinking and group process are emphasized with frequent self-reflection in this PBL lab-based course. Every Year, Spring
## Philosophy (PL)

## PL 101 (UC) Introduction to Philosophy (3 cr.)

This course introduces students to a number of central questions in philosophy through critical exploration of ideas from selected great philosophers. It engages students in the close study of several fundamental issues that have arisen in the course of the development of the philosophical tradition-such as free will, our knowledge of the external world, and the meaning and value of truth and justice-giving students the basic tools for further work in philosophy. Every Year, All

PL 202 (UC) Logical Reasoning (3 cr.) This course teaches students to recognize and evaluate logical patterns that recur in all language intended to persuade by reason. Students learn proof techniques for logical pattern evaluation, techniques to recognize and evaluate fallacies, and ways of understanding logical patterns in longer, extended passages. The goal of the course is to improve students' natural ability to think clearly and critically by learning to apply logic to arguments in public, academic and private life. Every Year, Fall

## PL 217 Contemporary Social and Political Philosophy

(PO 217) (3 cr.) This course introduces students to major contemporary debates about the nature of membership in a national community and in a global community. Potential topics include the relationship between an individual and a state, the nature of political authority, the problem of distributive justice, the nature of universal human rights, the ethics of global development, immigration, the problem of environmental justice, postcolonialism, the politics of identity, philosophy of race, and the morality of warfare. Prerequisites: FYS 101, PL 101 or PO 215; Every Other Year, Spring

## PL 220 (UC) Ethics and Human Values (3 cr.)

This course explores the meanings of such normative distinctions as good/bad, right/wrong, and good/evil. Students critically examine theories of morality such as egoism, utilitarianism, deontological ethics, divine command theory, natural law theory, sentimentalism and virtue ethics, as well as a challenge to all ethical theorizing: the case for moral relativism. Students focus on the practical implications of theory: understandings are brought to bear on various real-life ethical issues such as war, poverty, racism, abortion, and substance abuse. Prerequisite: PL 101 or FYS 101; Every Year, Spring and Summer

PL 222 Bioethics ( 3 cr.) Students analyze complex ethical issues in contemporary bioethics using relevant technical vocabulary and methods from philosophy, in partnership with information from the contemporary biosciences and the health care professions. Ethical theories covered include deontology, utilitarianism, virtue-based approaches to ethics, Virginia Held's ethics of care and Theddeus Metz's reconstruction of an African moral theory. Ethical issues addressed may include: stem cell research, human subjects research, human enhancement, reproductive medicine, euthanasia, advance directives and end-of-life care, resource allocation, organ transplantation, the right to health care and global health. Prerequisite: PL 101 or FYS 101; Every Year, Fall

## PL 234 Philosophies of Health, Healing and <br> Medicine (3 cr.) Students examine the concept of

health and the assumptions, values and consequences involved in some of the more important ways of defining, preserving and restoring it. This leads to explorations of some of the significant understandings of medicine in relation to healing and to health. Among the understandings considered are: the Western scientific model; ancient models that are seen as offering provocative alternatives-Ayurvedic, Chinese, aboriginal; more recent alternatives developed within the West-Naturopathy, Homeopathy, Reiki, etc.; and faith-based approaches-Christian science, miracle cures, etc. Although focused on health, healing and medicine, this course ultimately deals with the nature of the good society and welcomes all who are concerned with this perennial question. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 235 Philosophy of Science ( 3 cr.) Students consider the history and nature of, and assumptions and values involved in, the scientific method; the logic of scientific explanation and theory construction; philosophical and ethical problems in selected natural, social and human sciences. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 236 Philosophy of Language ( 3 cr.) This course focuses on the attempt to understand the nature of language and its relationship with speakers, their thoughts and the world. Students explore such questions as: What is language? How do we understand one another? Can we think without language? What is the connection between words and the objects to which they refer? What is meaning? What determines the truth and falsehood of our statements? Do we have innate linguistic abilities or do we learn to speak by observing the behavior of other speakers? Various philosophical theories about language are attempts to answer such questions. These are discussed, along with their far-reaching consequences for other areas of philosophy. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 237 Philosophy of Mind (3 cr.) Are minds physical or non-physical? Is free will real or an illusion? Is consciousness computational? Can we build artificial minds? How can we explain phenomena such as emotions, delusions and pain? What are we, and where is the boundary between ourselves and our environment? In this course, students explore these and other issues in the contemporary philosophy of mind, focusing on questions that emerge at the intersection of philosophy, psychology, psychiatry, neuroscience and artificial intelligence. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 238 Philosophy of Technology and Social Transformation ( 3 cr.) What is technology? How do science and technology relate to human values? What
role should technology play in our everyday lives? Do technological developments result in greater freedom? How should technology shape our cities and the natural environment, now and in the future? Students in this course critically examine these and other related issues, using a range of philosophical texts, science fiction and film. Prerequisite: PL 101 or FYS 101; Every Other Year, Fall

PL 240 Philosophy of Sport (SPS 240) (3 cr.) This course is a philosophical study of sport. Students consider the purpose, meaning and value of different sports, of various involvements in sport and of different levels in sport. The course pays particular attention to what philosophers have to say about sport, and what the study of sport can contribute to philosophy and to the human quest for the loving, the true, the good, and the beautiful. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 250 Philosophy of Art ( 3 cr .) What is beauty? What does it mean to experience something-perhaps art or nature-aesthetically? What is art? What is the nature of artistic inspiration? What is-or what should be-the purpose of art? How does one determine the value of art? Is some art worthless? What is the relationship between art and truth? Should artistic expression ever be censored? How have racism, sexism and consumerism impacted the art world? These are some of the questions to be discussed as we consider aesthetic experience and artistic expression-in the visual arts, but also in music, dance, film, drama and other forms. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

## PL 265 (UC) Living Religions of the World (3 cr.)

Students explore the phenomenon of religion, the idea of a god, the holy or the divine, and the main religions and related questions of today. Focus is placed on aboriginal religion (Native American), Hinduism, Judaism, Buddhism, Christianity and Islam; with prior instructor approval, students also may consider other past or contemporary religions, including atheism. Visits to two traditions other than your own and presentations by practicing members of the religions considered are included. Prerequisite: PL 101 or FYS 101; Every Year, Fall

PL 266 Diverse Global Philosophies (3 cr.) In this course, students explore global traditions in philosophy developed by people from diverse cultures, beyond Europe and the United States. Participants devote particular attention to insights and questions raised with regard to possible relationships or contrasts between diverse global philosophies and our existing assumptions, beliefs and values. Potential topics and course materials may include both classical and contemporary sources from Australia, Africa, the

Caribbean, China, India, Japan, the Muslim world, the Pacific Islands and Latin America. Owing to the breadth of the field, the focus of the course shifts, reflecting the interests and work of the instructor in any particular semester. Prerequisite: PL 101 or FYS 101; Every Other Year, Fall

## PL 267 Philosophy of Religion (3 cr.) Religious

 language, religious experience and religious institutions make up a significant part of life in both traditional and modern cultures. This course analyzes the concepts and terms that are used in religious discourse, including God, holiness, redemption, idolatry, creation, eternal life and sacrifice, among others. Such analysis leads to questions regarding religious statements such as God exists, The cow is holy, and If you fast, you will be redeemed and their relationship with ordinary, everyday experience, as well as with science and with morality. Most important is the fundamental philosophical question what is religion?; answering it means moving beyond philosophy to anthropology, sociology, and of course psychology. Prerequisite: PL 101 or FYS 101; Every Other Year, SpringPL 312 Philosophy of War and Peace (PO 312) ( 3 cr.) This course draws on what philosophers, legal scholars and political scientists have written about the nature, limits and morality of warfare. Students study the general frameworks for evaluating warfare in the theories of realism, pacifism and just war, and then turn to the evaluation of historical case studies concerning when it is just to initiate war, how war is to be conducted justly once it is initiated, and the obligations of combatants following war. Readings include both historical authors, such as Thucydides and Thomas Aquinas, and contemporary theorists, such as Michael Walzer and Jeff McMahan. Prerequisite: FYS 101, PL 101, PO 211 or PO 215; Every Other Year, Spring

## PL 320 Thought and Work of Albert Schweitzer

 (SL:Service Learning) (3 cr.) Albert Schweitzer (18751965) made significant, often controversial contributions in several areas: music, philosophy, religion, medical care, service to human need, animal rights and ecological awareness. In 1952 Schweitzer was awarded the Nobel Peace Prize for his many decades of humanitarian work at his jungle hospital in West Africa. In his 80s, he became one of the most active voices in the struggle against the testing of nuclear weapons. Because Schweitzer considered his philosophy to be primarily one of action and service (My life is my argument) Service Learning is an important component of the course. Quinnipiac's Albert Schweitzer Institute offers students many kinds of projects and activities reflecting Schweitzer's many areas of involvement. In this course, students critically explore Schweitzer's life, thought and work and their application to some of the moral problems and cultural and politicalissues we face today. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

## PL 330 Philosophy and Gender (WS 330) (3 cr.)

Students investigate the notions of sex and gender and the debate over social versus biological underpinnings of expressions of masculinity and femininity. The relevance of historical views on sex, gender and relations between the sexes to current patterns and developments are considered. Issues facing men and women, as well as policies and reforms designed to address them are examined. Participants also consider the intersection between sex/ gender and race, ethnicity, class and sexual orientation. Finally, the impact of gendered perspectives on contemporary philosophy, especially epistemology, ethics and social and political philosophy, is considered. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 331 Philosophy of Humor (3 cr.) Historically, many thinkers have viewed humor with scorn while others have not considered it a topic worthy of philosophical investigation. This course explores the nature and value of humor in our daily lives and examines humor critically as a virtue that can help us take ourselves less seriously and live better lives. Students analyze the major accounts of humor such as the superiority, incongruity and relief theories highlighting the strengths and weaknesses of each theory. Adopting a critical philosophical lens, students also explore some important connections between humor and aesthetics, ethics and education. Prerequisite: PL 101 or FYS 101; Every Other Year, Fall

PL 332 Ancient Philosophy (3 cr.) This course explores Greek and Roman philosophy through a focus on the concepts of erôs and philia or love and friendship. Students examine how Epic poetry, Greek tragedy, Plato, Aristotle, Epicurus, Stoicism and Lucretius reflected on the place of love and friendship in a life well-lived. Prerequisite: PL 101 or FYS 101; Every Year, Fall

PL 333 Modern Philosophy (3 cr.) From the mid16th through the 18th century, movements such as the Renaissance, the Reformation, the development of the modern sciences and increasing international trade and colonization introduced a new era of philosophy. Students explore human understanding, critically analyzing issues that potentially include the mindbody relationship, freedom and determinism, the nature of reality, the existence of God, perception, personhood and personal identity, the scope and limits of knowledge, and the value and limitations of our intellectual heritage from this period. Authors may include Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume and Kant. Prerequisite: PL 101 or FYS 101; Every Year, Spring

PL 334 Medieval Philosophy (3 cr.) This course focuses on the history of medieval philosophy. Students discuss figures from the Christian, Islamic and Jewish traditions, including Augustine, Boethius, Ibn Sina, Al-Ghazali, Ibn Rushd, Maimonides, Aquinas, Scotus and Ockham. Particular attention is given to examine the manner in which these philosophers confronted and assimilated Aristotelian philosophy and how they anticipate certain dimensions of modern philosophy. Prerequisite: PL 101 or FYS 101; Every Third Year, Spring

PL 335 Contemporary Philosophy (3 cr.) Students explore dynamic philosophical movements in 19thand 20th-century philosophy, and consider their contributions to humanism and diversity today. Potential topics may include Marxism, pragmatism, existentialism, phenomenology, logical positivism, feminism, poststructuralism, postcolonialism and philosophy of race. Potential material includes work by Hegel, Marx, Nietzsche, James, Dewey, Russell, Wittgenstein, Ayer, Du Bois, Sartre, de Beauvoir, Merleau-Ponty, Arendt, Foucault, Fanon, Biko, Derrida and Butler. Owing to the breadth of the field, the course focus each year reflects the interests and expertise of the instructor. Prerequisite: PL 101 or FYS 101; Every Year, Fall

## PL 337 Human Rights: Theory and Practice (PO 337)

 ( 3 cr .) This course provides a rigorous and critical introduction to the foundation, structure and operation of the international human rights movement. It begins with leading conceptual and theoretical discussions, moving on to the institutions and functioning of the international human rights mechanisms, including nongovernmental and intergovernmental organizations. It covers cutting-edge human rights issues-gender and race discrimination, religion and state, national security and terrorism-placing them in the context of current political conflict and human rights discourse. Prerequisite: PL 101 or PO 131; Every Other Year, FallPL 338 Paradoxes ( 3 cr.) Paradoxes have been with us since a Cretan said all Cretans are liars, and Zeno showed us how the tortoise could beat Achilles. Originally considered a problem for logical-and math-ematical-thought, paradoxes run the gamut from logic to mathematics, to language, to science, to art and to ethics. This course presents the definition(s) of paradox, reviews some of the principal paradoxes known to us and asks about their essence: what is paradoxical about paradoxes? It then moves on to examine paradoxes in ethics, thereby asking about the real, paradoxical world of human-psychological and social-behavior. Prerequisite: PL 101 or FYS 101; Every Third Year, Fall

PL 340 Philosophy of Sex and Love ( 3 cr.) This course presents a study of philosophical ideas on sex and love,
the views of both Western and Eastern religions, and a critique of the moral issues concerning different types of sexual and love relationships. The significance of these viewpoints for living well is considered. Prerequisite: PL 101 or FYS 101; Every Other Year, Fall

PL 368 Philosophy of Death and Dying ( 3 cr.) What does it mean to live and what does it mean to die? How do we distinguish life and death, living and dying? Is there a way to die well in the same way that we assume there is a way to live well? How do we justify our beliefs about issues of life and death? Is suicide ethically defensible? Do we have a duty to prevent death? Should we consider death an evil, and could it ever be a good? Should we care about our posthumous reputations? Students in this course explore these and related questions, drawing important insights from a range of relevant philosophical literature and personal narratives on death and dying. Prerequisite: PL 101 or FYS 101; Every Other Year, Spring

PL 395 Critical Game Studies (GDD 395) (3 cr.) In this course, students address current research in game studies, ludology or play theory, to develop critical, conceptual and cultural understandings of narrative, meaning and identity in digital games. The course also addresses the design and development of serious and meaningful games and the aesthetic, social and technological implications of new emerging forms such as digital storytelling, interactive theater, virtual worlds and locative media. Prerequisite: GDD 101, GDD 110 or PL 101; Every Year, Spring

PL 396 Philosophy Internship (1 cr.) This internship aims to promote student growth and exploration in professional fields connected with the philosophy major. Students complete placements and associated activities either off campus with partner organizations, or on campus, working under the direction of a partner organization supervisor and/or a faculty member. 1, 2, or 3 credits (credits, placements and associated activities must be agreed on in advance of the relevant semester by the student and faculty member). This course is graded on a pass/fail basis. Every Year, Fall and Spring

PL 401 Senior Seminar (3 cr.) This is a writing and research seminar for senior philosophy majors. Students engage with philosophical primary and secondary readings in group discussion. They prepare and present a senior thesis on a topic of their choice, with guidance by faculty from the department. Every Year, Spring

## Physical Education (PE)

PE 182 Taekwondo I ( 1 cr .) Taekwondo provides a fun and effective fitness regimen in its diverse aspects as a form of self-defense, as an art form, and as a competitive sport. Classes consist of extensive stretching, the teaching of basics to beginners, forms of self-defense and sparring techniques. Participants use traditional punching, kicking and blocking techniques from ancient martial arts disciplines for self-defense, as well as ancient principles of self-control, focus, balance, oneness and self-discipline. Taekwondo emphasizes the use of the whole body, enhances flexibility and coordination, and increases aerobic capability. Promotional tests are held at the end of each semester. Every Year

## Physician Assistant (PY)

PY 104 Physician Assistant Seminar I—Orientation to the Profession (1 cr.) This course is for ELMPA majors only. Students gain a basic knowledge of the fundamentals of the physician assistant profession and are introduced to the competencies of the PA profession. PA education, role expectations and practice settings are examined. In addition, historical information on the profession is presented. Students must have active AAPA student membership. Every Year, Spring

## PY 204 Physician Assistant Seminar II—The

 Interdisciplinary Team (1 cr.) Students are provided with a basic understanding of the roles of those professionals who are part of the health care team. Experts from a variety of health care fields explore the relationship of the practicing PA in each professional domain. Students must complete the required Direct Patient Contact experience for the ELMPA Program prior to taking this course. Prerequisites: PY 104, PY 397; Every Year, SpringPY 388 Clinical Training I (3 cr.) This course is for ELMPA majors only. It includes classroom and clinical experiences and provides students with an opportunity to develop the knowledge and skills required for Emergency Medical Technician National Certification. Emphasis is placed on patient assessment, clinical signs and symptoms, pathophysiology and the practical skills necessary to manage the pre-hospital care of patients. Clinical rotations on an ambulance service are required. Students are required to meet for two additional practical sessions outside of class time as scheduled by the course instructor. Successful completion of the PY 388-389 sequence and fulfillment of statemandated hours of instruction are required to be eligible for certification. Prerequisite: PY 104; Every Year, Fall

PY 388L Clinical Training I Lab (0 cr.) Lab to accompany PY 388. (3 lab hrs.) Every Year, Fall

PY 389 Clinical Training II ( 3 cr .) This course is a continuation of PY 388. Prerequisite: PY 388; Every Year, Spring

PY 389L Clinical Training II Lab (0 cr.) Lab to accompany PY 389. (3 lab hrs.) Every Year, Spring

## PY 397 Prehealth Professions Clinical Affiliation (3 cr.)

This apprenticeship program pairs an undergraduate student who displays maturity, dedication and sensitivity with a physician assistant for a 12 -week period. The affiliation is designed to provide the student with the opportunity to observe PA practice and the competencies of the PA profession in a clinical setting. Students may register for the course according to the following criteria: permission of faculty; completion of a minimum of three semesters at Quinnipiac; satisfactory GPA; compliance with preclinical health and uniform requirements. This course is for ELMPA students only. Prerequisite: PY 104; Every Year, Spring

## PY 400 Pre-Physician Assistant Clerkship (3 cr.)

Pre-physician assistant students participate in a mentoring program that provides the opportunity to gain knowledge through direct observation. Each student spends time with three physician assistant professionals who specialize in different areas of medicine. This course is for ELMPA students only. Prerequisites: PY 104, PY 397; Every Year, Fall

## PY 401 Introduction to Clinical Problem Solving (3 cr.)

 This course offers the pre-physician assistant student the tools necessary for developing a systematic approach to the patient and his or her medical condition. Students learn to access and evaluate the medical literature for identification of the following: the signs and symptoms of disease presentation, the components of a history and physical, and the understanding of a differential diagnosis. In addition, students are taught the basis for developing a patient assessment plan. EMT Certification required. This course is for ELMPA students only. Prerequisites: PY 104, PY 397; Every Year, Fall
## Physics (PHY)

PHY 101 (UC) Elements of Physics (3 cr.) This course is a survey of basic principles of physics and some important applications. Topics include Newton's laws of motion, gravity, thermodynamics, electricity and magnetism and wave phenomena. Topics in modern physics including quantum theory, atomic structure, radioactivity and relativity are discussed. Must be taken in conjunction with PHY 101L. This course is suitable for both science and nonscience majors. Students who
have credit for SCI 101 may not receive credit for PHY 101. Prerequisites: PHY 101L; Math placement score of 3 or higher or completion of MA 107 with a grade of C or higher; Every Year, Fall and Spring

PHY 101L (UC) Elements of Physics Lab (1 cr.) Lab must be taken with PHY 101. (2 lab hrs.) Every Year, Fall and Spring

PHY 110 (UC) General Physics I (3 cr.) Students consider phenomena that examine the fundamental nature of the physical universe as well as the theories of the nature of the universe. Topics include kinematics and dynamics of motion, momentum, energy and equilibrium of rigid bodies and fluids, and thermal properties of matter. This course uses algebra and trigonometry. Must be taken in conjunction with PHY 110 L . This course is designed primarily for science majors. Prerequisites: PHY 110L; Math placement score of 3 or higher or completion of MA 107 with a grade of C or higher; Every Year, Fall and Summer

PHY 110L (UC) General Physics I Lab (1 cr.) Lab must be taken with PHY 110. (2 lab hrs.) Every Year, Fall and Summer

PHY 111 (UC) General Physics II ( 3 cr .) This course continues the examination of physical phenomena including vibrations and waves, sound, light, optics, electricity and magnetism including D.C. and A.C. circuits, and some elements of modern physics. This course uses algebra and trigonometry. Must be taken in conjunction with PHY 111L. This course is designed primarily for science majors. Prerequisites: PHY 110, PHY 110L; Every Year, Spring and Summer
PHY 111L (UC) General Physics II Lab (1 cr.) Lab must be taken with PHY 111. (2 lab hrs.) Every Year, Spring and Summer

PHY 121 University Physics (4 cr.) This calculus-based physics course examines classical Newtonian physics from kinematics, the study of motion, to dynamics, the study of why motion occurs. Topics include Newton's laws, conservation of energy and momentum, torque, equilibrium of static bodies and fluids, and thermal properties of matter. Through experimentation, computer modeling and group problem-solving, students apply these principles to predict the outcome of a number of reality-based and open-ended problems. (6 studio-lab hrs.) Prerequisite: MA 141, MA 141H or MA 151; Every Year, Fall and Spring

PHY 122 University Physics II (4 cr.) This calculusbased physics course examines physical phenomena including vibrations and waves, sound, light, optics, electricity and magnetism including the study of
D.C. and A.C. circuits and some elements of modern physics. Through experimentation, computer modeling and group problem-solving, students apply these principles to predict the outcome of a number of reality-based and open-ended problems. (6 studio-lab hrs.) Prerequisite: PHY 121; Minimum grade C-; Every Year, Fall and Spring

## Political Science (PO)

PO 101 (UC) Issues in Politics (3 cr.) Students explore issues of current relevance in local, domestic and international politics. Each individually-themed seminar provides an introduction to the systematic analysis of power relations in relevant local, national or global spheres of life. Students approach the seminar's theme in a way that develops an understanding of the major political ideologies, the behavior of relevant social actors and governmental institutions, and the capacity to engage as responsible citizens. Every Year, All

PO 131 (UC) Introduction to American Government and Politics ( 3 cr .) This course covers the development of the constitution, the nature of Federalism, the state and the national government. Students explore the duties and powers of the President, Congress, the Supreme Court and administrative agencies. Political parties, the nominating process, elections and electoral behavior as well as political interest groups and public opinion are considered. Every Year, Fall and Spring

## PO 205 Public Policy and Administration (3 cr.)

Students in this introductory course develop not only an ability to understand, evaluate and design public policy, but also a capacity for ethical and effective leadership, particularly in the public sector. Students explore questions such as: What is the role of government in our lives? How is public policy made, and what are the forces that shape public policy? What public policies should government implement? How can public policies be implemented and evaluated? Prerequisite: PO 101, PO 131 or FYS 101; Every Year, Fall

PO 206 Ethics and Public Leadership ( 3 cr .) In this seminar, students grapple with ethical dilemmas and tradeoffs in public policy and politics. The seminar focuses primarily on leadership issues in the public policy realm, as distinct from those found in public administration or business management. Topics include lying and secrecy by public officials, health care, the use of violence, treatment of minorities, poverty, gender equity, whistleblowers, conflict of interest and governmental codes of ethical conduct. Students with background interests in political science, journalism, business and the sciences are welcome. Course readings emphasize classic works on ethics and political theory, as well as detailed ethically challenging cases from past
and present. Students explore these cases through role playing, papers and classroom discussion. Prerequisite: PO 131 or FYS 101; Every Year, Spring

PO 211 (UC) Introduction to International Relations
( 3 cr .) Students are introduced to the study of politics on the global level. The course focuses on the nature of the international system of nation-states, including the importance of state sovereignty, the political interactions between states, and the causes of war and peace. Additional topics include understanding the domestic bases for foreign policy decisions, the different tools available for state action in the international realm (diplomacy, espionage, military intervention), the increasing importance of international economic relations, and the function and evolution of international law and organizations. Prerequisite: PO 101, PO 131 or FYS 101; Every Year, Fall and Spring

PO 215 (UC) Political Theory (3 cr.) In this course, students survey political philosophy, from Aristotle and Plato through Mill and Marx. Students use these thinkers as a way to explore issues such as the nature of society, the nature of government, and the nature of freedom, justice and the law. Prerequisite: PO 131 or FYS 101; Every Year, Fall and Spring

## PO 216 (UC) American Political Thought (3 cr.)

Students are introduced to major ideas of social justice and political power in America from colonial New England to the modern American state. Special emphasis is on major debates on social issues in American history, including slavery and race, church and state, industrialism and technology, civil rights and citizenship, and democracy and reform. Major authors and readings include Winthrop, Jefferson, Paine, the Federalist Papers, Lincoln, Dewey, Roosevelt and M.L. King. Prerequisite: PO 131 or FYS 101; Every Other Year, Spring

## PO 217 Contemporary Social and Political

 Philosophy (PL 217) (3 cr.) This course introduces students to major contemporary debates about the nature of membership in a national community and in a global community. The first half of the course focuses on the relationship between an individual and a state, for instance the nature of political authority, the relationship between liberty and the state, cultural pluralism and the problem of distributive justice. The second half of the course focuses on the nature of global citizenship, for instance the nature of universal human rights, the ethics of global development, immigration, the problem of environmental justice and the morality of warfare. Readings include contemporary philosophers such as John Rawls, Michael Sandel, Carole Pateman, Will Kymlicka and Thomas Pogge. Prerequisite: FYS 101, PL 101 or PO 215; Every Other Year, SpringPO 219 Women in Political Thought (3 cr.) Students explore different approaches to explain the status of women. Theoretical perspectives that students consider may include: liberal feminism, radical feminism, Marxist/socialist feminism, feminism of care, conservative feminism and global feminism, among others. Students critically evaluate political concepts such as freedom, equality, rights and oppression, as well as learn about how different thinkers have conceptualized gender, politics, power and the role of the state. The course requires careful reading, intensive class discussion and multiple writing assignments. Prerequisite: PO 101, PO 131, PL 101, PS 101, SO 101 or WS 101; Every Other Year, Spring

## PO 221 (UC) Introduction to Latin America

( 3 cr .) This is the transdisciplinary introductory course for the minor in Latin American studies. Various disciplines, including history, anthropology, economics and languages, are interwoven in an exploration of concepts, behaviors and traditions associated with Latin America. A survey of Latin American regions spanning the Revolutionary period to the present, with a focus on the past 50 years, is utilized to focus the content. Prerequisite: PO 101 or FYS 101; Every Other Year, Fall

PO 225 American Political Movements (3 cr.) In this class, students explore key movements in American political society over the past 150 years, and analyze how social groups have organized to demand political change in the U.S. Students study political movements organized around race, gender, social class and sexual identity/preference. Prerequisite: PO 101, PO 131 or FYS 101; Every Year, Fall

PO 227 The Politics of Intimacy ( 3 cr.) How do our thoughts about inclusion and citizenship shape our ideas about sexual and political freedom? In what ways has the democratic process sought to affirm American values by limiting individual choices? In this course, students explore the ways that intimacy has been regulated, through a thematic investigation of legal and political challenges in areas such as trans/interracial adoption, same-sex marriage, interracial marriage, sex and race in the American South, statutory rape, sexual violence, sex education and reproductive rights. Prerequisite: PO 131 or FYS 101; Every Other Year, Fall

## PO 231 (UC) Elections and Political Parties

(SL: Service Learning) (3 cr.) This course offers an intensive analysis of elections and parties in the U.S. and other nations. Special emphasis is placed on the development of competitive political party systems as vital to the success of democracy. Topics include the history of elections and campaigns, the role of gender, ethnicity and class in modern political parties, voting behavior, party strategies, campaign advertising,
fundraising, and media coverage of elections. The course includes classroom visits by party leaders and candidates, and requires students to participate in direct observation as participants in an election campaign. Prerequisite: PO 131; Every Other Year, Fall

## PO 245 (UC) International Political Economy (3 cr.)

This introduction to the analysis and understanding of the international economy from a political perspective centers on the increasing internationalization, or globalization, of the capitalist market economy. This is analyzed from three perspectives, each of which raises different political issues and strategies: neoliberalism, economic nationalism (neomercantilism), and Marxism. Current issues dealing with international trade and finance, the environment, third world development and marginalization, and gender/race issues in the international economy are discussed. Prerequisite: PO 211 or EC 111; Every Third Year, Spring

PO 247 (UC) Actors and Processes in U.S. Foreign Policy ( $\mathbf{3}$ cr.) This introduction to U.S. foreign policy and how it is made combines a study of world politics, American political processes and current events. The course focuses on actors and policy processes, including the role of Congress, the President, interest groups, the mass media and public opinion (among others), and the influence of ideology on U.S. foreign policy. The course examines several 20th-century international crises, asking: what lessons were learned by these experiences, and how do these episodes illuminate the formation of foreign policy in the United States? The post-Cold War world is examined as a context of current challenges to American foreign policy. Prerequisite: PO 211 or PO 131; Every Other Year, Spring

PO 270 State and Local Government (3 cr.) The role of states in the federal system is analyzed. Structure and problems of state and local governments are examined.
Prerequisite: PO 131; Every Year, Spring

## PO 297 Simulating International Organizations

(1 cr.) Students prepare to participate in various external simulations of the activities of the United Nations, African Union, North Atlantic Treaty Organization, European Union and other international organizations. Students are trained in the preparation of mock resolutions and they learn the essentials of international diplomacy and proper protocol at international meetings to enable them to successfully compete in model meetings across the U.S. and elsewhere. Every Year, Fall

## PO 301 Critical Thinking About Politics (4 cr.)

This course introduces students to the fundamentals of critical and analytic thinking through the study of current issues. Students develop the tools necessary to think critically about political and other issues in their
daily lives in an effort to better explain and understand the world around them. Upon successful completion of the course, students are able to understand and evaluate the structure, content and quality of arguments; locate stated and unstated assumptions in persuasive writing; analyze, evaluate and account for discrepancies among various readings on a topic and explain why two sources might interpret the same facts differently; clearly communicate their positions about issues and support those positions with solid evidence; and understand how critical thinking can be applied to decision making in daily life. Every Year, Fall Online

PO 302 The Global Civic Dilemma ( 4 cr .) In this course, students explore what constitutes an ethical civic life by working from philosophical principles through an understanding of the basis of government on the local, national and international levels, to civic participation. The course is structured around several tensions, as well as the many key concepts in the age-old quest for understanding what makes for the ideal social order: self and other, individual and community, public and private, human agency and social structure; governance, state, society; the political and economic; liberalism and conservatism (and their variants); three main approaches to ethics; and how to arbitrate between ethical standards when they come into disagreement. Every Year, Spring Online

## PO 312 Philosophy of War and Peace (PL 312)

( 3 cr .) This course draws on what philosophers, legal scholars and political scientists have written about the nature, limits and morality of warfare. Students study the general frameworks for evaluating warfare in the theories of realism, pacifism and just war, and then turn to the evaluation of historical case studies concerning when it is just to initiate war, how war is to be conducted justly once it is initiated, and the obligations of combatants following war. Readings include both historical authors, such as Thucydides and Thomas Aquinas, and contemporary theorists, such as Michael Walzer and Jeff McMahan. Prerequisite: FYS 101, PL 101, PO 211 or PO 215; Every Other Year, Spring

PO 315 Democratic Theory and Practice (3 cr.) The relationship between democratic ideas and practices in the formulation of public policy is analyzed. Topics include the nature of the citizen and community, the role of the community in policy making, and the ethics of political choice. Major policy issues include election reforms, racial inequality, the environment, and welfare and human rights in foreign policy. Students are expected to participate in group projects and discussions and do extensive analytical writing. Prerequisite:
PO 215 or PO 216; Every Third Year, Fall
PO 317 International Law (LE 317) (3 cr.) Students are introduced to the nature and development of
international law as part of the global political system. Students explore sources of international law from treaties, custom, general principles, judicial decisions and scholarly writing. Other topics include the connection between international law and national law; the role of states and individuals; dispute resolution using arbitration and national and international court cases; use of law to manage international conflict; negotiation; and legal issues concerning shared resources. Prerequisite: PO 211; Every Year, Fall

PO 319 International Interventions ( $\mathbf{3} \mathbf{c r}$.) Why does the international community intervene in some countries and not in others during periods of civil crisis? What do these variations in the patterns of interventions tell us about the foreign policies of countries and the relations between states in the international system? Students explore answers to these and related questions by investigating the politics, history and dynamics of international interventions to address civil crises since World War II. Students examine select case studies of intervention and nonintervention to understand more fully why and when the world community responds in the context of international law, national interest and the emerging consensus around the protection and promotion of human rights. Prerequisite: PO 211; Every Other Year, Spring

PO 321 Comparative Government ( 3 cr.) This course presents a comparative study of political institutions, forms of governments, leaders, socioeconomic processes, development strategies, cultures and traditions in diverse political systems across time and space. Students learn about governing and political processes that explain important differences or similarities in political outcomes among countries, such as: why some countries are democracies and others are not, why some countries provide universal health care for their citizens while others do not, and why some countries experience war or economic depressions while others do not. Students examine the major theoretical, conceptual and methodological approaches that scholars have employed within the subfield of comparative politics and are trained to employ some of those skills in their own analysis and research. Prerequisite: PO 211; Every Other Year, Spring

## PO 325 Political Psychology and Public Opinion

 ( 3 cr .) Students are introduced to the basics of polling, the social and psychological foundations of political thoughts and attitudes, and elementary techniques in data analysis. Students explore beyond descriptions of what people believe and what ideas they act upon to the psychological processes that explain why they think as they do: How susceptible are people to marketing and political persuasion? Why do people obey or disobey authorities? What are the sources of prejudice, and the triggers that explain political behavior? Students learnto be wise consumers of survey information, gaining skills in distinguishing legitimate public opinion research from pseudopolls, fundraising and soliciting under the guise of survey research. Prerequisite: PO 131; Every Other Year, Spring

PO 334 Topics in African Politics (3 cr.) Students study the broad scope of politics taking place on the African continent, while investigating the unique cultural and historical heritage of African societies including colonialism and the challenges of creating independent states, and the more recent history of conflict that has inhibited development in so many countries. Students also study post-conflict reconciliation and development in the African context, including economic growth and the bright future that is possible if African countries can solve their most serious problems and remain free of conflict. Prerequisite:
PO 211; Every Other Year, Fall
PO 335 Politics of Race and Ethnicity ( 3 cr.) What lessons can be drawn from recent political events such as the election of the first Indian-American governor, the first African-American President, and the appointment of the first Latina to the Supreme Court? The story of American political development has been one of constant invention and reinvention. Central to the story has been the role of individual and collective identities in shaping what it means to be an American citizen. With political history as a context, students examine the political presence of major ethnic and racial communities in the U.S.-Irish, Italian, Asian, Jewish, Native, AfricanAmerican and Latino. Key policy issues such as immigration, education and affirmative action provide the focal point for exploring the processes of group formation, identity and political mobilization as expressed through protest, pop culture, economic development, political participation and the building of community institutions and networks. Prerequisite: one course from PO, PL, HS, SO, LE or AN level 100; Every Other Year, Spring

PO 337 Human Rights: Theory and Practice (PL 337) ( 3 cr .) Students address the philosophical fundamentals of human rights while emphasizing the practical aspects of human rights work, the purpose being to understand the ways in which human rights scholars, activists and international and governmental officials argue about human rights and their implementation. Prerequisite: PL 101 or PO 131; Every Other Year, Fall

## PO 342 Comparative Constitutional Law (LE 342)

( 3 cr.) Students compare the legal structures and fundamental principles typically found in constitutions by studying the constitutions of several different countries. The course explores the structure of government; the distinction between legislative, executive and judicial authority; the incorporation of
fundamental human rights; the relationship between church and state, free speech and the press, and social welfare rights. Participants analyze the distinction between constitutional law and domestic law and assess the role of various constitutional frameworks in a global society. Prerequisite: PO 101 or PO 131; Every Other Year, Spring

PO 348 Political Communication ( 3 cr.) Students investigate the politics of communication in America and the uses of communication in politics. Topics include the technological nature of the mass media in the global and U.S. political economy, implications for democracy of the new communication technologies, the agenda setting function of mass media, political rhetoric and persuasion in the information age, and the role of propaganda in peace and war. Students learn critical analysis of media messages, how to deal with communication from different cultures, and skills in the use of information technology. Students write analytical papers and complete a substantial research project. Prerequisite: PO 131; Every Other Year, Fall

PO 353 American Constitutional Law ( 3 cr.) This course presents an intensive study of the development of constitutional law through the analysis of significant Supreme Court decisions. Topics include: the judicial process and the Supreme Court; Federalism, the states and the division of powers; the basis of national power, taxation, commerce and sovereignty; the separation of powers; the Judiciary, Congress and the Presidency; interstate relations and national supremacy; the electorate; citizenship and the right to vote. Prerequisite: PO 131; Every Other Year, Fall

## PO 362 Presidential Election Campaigns (SL:

Service Learning) ( 4 cr .) This advanced seminar combines intensive campaigning fieldwork and academic study of presidential campaigns and electoral processes. Students evaluate the emerging efforts to reform the electoral process and the campaign financing system, analyze new techniques of communication and persuasion, explore the history of the current presidential nomination and election process, voter behavior and psychology, research new campaign management techniques, and the practical essentials of grassroots activism. As part of the course requirements, students participate in an intensive internship for approximately 15 days in residence at the New Hampshire primary. Students must pay a course fee to cover the cost of the class residency in New Hampshire. Two field trips occur during the semester from Friday to Sunday, and some of the residency occurs during the January term. Prerequisite: PO 131; Every Third Year, Fall

PO 365 Inside Washington, D.C. (3 cr.) In this intensive, two-week seminar in Washington D.C., students
interact with well-known speakers from government, the media and academia to discuss the current major issues confronting Congress and the President. In the second week, students confront dilemmas regarding how the media covers national politics and policy. Students participate in daily site visits, tours and special events. They engage with topics such as the impact of national elections, the nature of conflict and bargaining in political institutions, foreign policy dilemmas, the gatekeeper function of the media, spin and media control, media bias and the rise of new media. Eight-hour days are the minimum expectation over the course of the two-week program. Students must apply and meet University academic achievement standards to be admitted to the seminar. Every Year, January Term

PO 387 Women and Public Policy (3 cr.) Students examine the major public policy issues affecting gender relations in the U.S. today, including: reproductive rights and abortion, labor policy, welfare policy, sexual and domestic violence. Students discover the process by which issues of importance to gender equality have historically emerged on the public agenda, the ways in which policy debate is shaped once an issue becomes a public problem and the competing policy paradigms surrounding these controversial policy issues. Prerequisite: PO 131 or WS 101; Every Other Year, Spring

PO 395 Advanced Internship ( 3 cr .) This advanced internship requires students to complete more than 100 hours of on-site work; keep a field journal; complete a final report that summarizes activities and documents what the internship contributed to student learning in political science; and complete a research paper at least 10 pages in length, based on research relevant to the internship duties and done during the semester of the internship. Prerequisite: PO 131; Every Year, All

PO 401 Political Inquiry ( 3 cr.) This course, designed for political science majors in their junior year, examines the culture of inquiry in political science as a problemsolving discipline and contributes toward political understanding through multiple reading, thinking and writing exercises. Course material focuses on current issues in politics and government and asks how political scientists might respond. The course emphasizes theory development and hypothesis formation; various methodological approaches; and several subdisciplinary perspectives within political science. For political science majors only. Junior status is required. Prerequisite: PO 215; Every Year, Fall and Spring

PO 408 Senior Seminar ( $\mathbf{3 c r}$.) This is a capstone course for senior political science majors. Students prepare and present original research to their peers in the form of a senior thesis, related to a common seminar theme announced each year. The seminar allows
students to apply the knowledge and methodology they have learned in previous courses to a particular project. Prerequisite: PO 201 or PO 401; Every Year, Spring

PO 498 Washington DC Program (6 cr.) Every Year, All

## Psychology (PS)

## PS 101 (UC) Introduction to Psychology (3 cr.)

Students are introduced to the background and breadth of contemporary psychological science. Natural science, social science and applied science form the basis for topics within the course such as psychology's philosophical origins, its research methods, the study of learning, neuroscience, issues in mental illness, child development, and the application of psychology to contemporary social issues. Every Year, All

PS 206 Introduction to Statistics in Psychology (3 cr.) This course covers statistical concepts and procedures as they apply to psychology. Students learn to perform statistical tests using both calculators and SPSS. Topics include: descriptive statistics, Z scores, t -tests, chisquare, correlation, and analysis of variance. For psychology majors only. Minimum grade of C - is required to pass. Taken concurrently with PS 307 and PS 307L. Prerequisites: PS 101; MA 110, MA 118, MA 140, MA 141, MA 142 or MA 151; Every Year, Fall and Spring

PS 210 Human Sexuality (WS 210) (3 cr.) This course focuses on human sexuality as it develops and changes throughout the lifespan, starting with prenatal development and ending with sexuality of the aging. Additional special topics include sexual dysfunction, sexual variance and the law. Prerequisite: PS 101; Every Year, Fall and Spring

PS 232 (UC) The Concept of Personality and Its Development (3 cr.) Personality is viewed from a variety of perspectives, including theories of its formation, social functioning and human evolution. Certain theories are examined, as are philosophical implications underlying diverse models of the nature of personality. Prerequisite: PS 101; Every Year, All

PS 233 Cognitive Psychology ( 3 cr .) Cognition is studied from a multi-method perspective with an emphasis on information-processing. Topics include models of memory, memory distortion, perception, expertise, cognitive neuroscience, imagery, problem solving, language and cognitive development. The interrelationship between applied and basic research is emphasized. Prerequisite: PS 101; Every Year, All

## PS 236 Child and Adolescent Developmental

 Psychology ( 3 cr.) Prenatal period, infancy, early child-hood, middle childhood and adolescence are surveyed in terms of an individual's physical, cognitive and social/ emotional development. Students learn about the major theories and research methods used by developmental psychologists. Results of research studies are used to think about real-world applications. Prerequisite: PS 101; Every Year, All

PS 242 School Psychology (3 cr.) Theoretical and pragmatic concerns of the school psychologist are considered. Topics include child development, psychoeducational assessment, applied behavior analysis, special education legislation, and the role of the public schools as a social institution. Identification and treatments of various school-related exceptionalities such as learning and intellectual disabilities, speech and language disorders, autism, ADHD and giftedness are investigated. Prerequisite: PS 101; Every Other Year, Fall and Spring

PS 251 Introduction to Conditioning and Learning ( 3 cr .) This course introduces students to the history, philosophical bases and contemporary issues in respondent and operant conditioning in particular and in learning in general; surveys current applications of basic theory and research including behavior modification; and examines the social controversy generated by applications. Prerequisite: PS 101; Every Year, Fall and Spring

PS 252 Physiological Psychology (3 cr.) This course is an introduction to the interactions between biological and psychological processing that are the basis for emotion, cognition and behavior. Topics include research methods, brain structure and function, neural plasticity, sleep, learning, memory, reproduction, drug action, sensation, perception and psychological disorders. Prerequisite: PS 101; Every Year, All

PS 261 (UC) Social Psychology ( 3 cr.) This course examines the effect of social forces on the individual, and the role of the situational context in human behavior. Topics include aggression, altruism, attribution, issues in social cognition, group behavior, attitude change and aspects of social psychology and law. Prerequisite: PS 101; Every Year, All

PS 261H (UC) Honors Social Psychology (3 cr.) This course examines the effect of social forces on the individual, and the role of the situational context in human behavior. Topics include aggression, altruism, attribution, issues in social cognition, group behavior, attitude change and aspects of social psychology and law. Prerequisite: PS 101; Every Year, Fall and Spring

PS 262 (UC) Psychology of Women (WS 262) (3 cr.) This study of the female sex and feminine gender emphasizes the distinction between the two. Survey of issues of women's development: socialization, menstru-
ation, self-concept, menopause; and women's roles, productive and reproductive; and the changing conceptions of femininity, masculinity and androgyny. Prerequisite: PS 101; Every Year, Fall and Spring

## PS 265 Industrial/Organizational Psychology ( 3 cr.)

This course examines the application of psychological principles and practices to business, industrial and organizational settings. Covered are such issues as personnel selection, job analysis, training, accident prevention, morale, performance appraisal, worker motivation, leadership and organizational communication. Prerequisite: PS 101; Every Year, All

PS 272 (UC) Abnormal Psychology (3 cr.) Historical, philosophical and pragmatic conceptions of normality are explored as well as causes, description and classifications of abnormal behavior and mental illness; historical and contemporary approaches to understanding and treatment; and theories of psychopathology. Prerequisite: PS 101; Every Year, All

PS 307 Methods I: Introduction to Research Methods in Psychology ( 4 cr .) This course provides an introduction to the tools, methods and findings of classic and contemporary experimental and non-experimental psychology. Topics include logical reasoning, statistical inference, research ethics, research design and APA style report writing. Must be taken with PS 307L taught by the same professor. For psychology majors only. Minimum grade of C- is required to pass. Taken concurrently with PS 206. Prerequisites: PS 101; Every Year, Fall and Spring

PS 307L Methods I Lab (0 cr.) Lab to accompany PS 307; Every Year, Fall and Spring

## PS 308 Methods II: Advanced Research Methods in Psychology ( 4 cr .) This course introduces students to

 advanced experimental and non-experimental research methods, including multivariate statistical analyses. Students design, conduct and formally present a major piece of psychological research, including statistical analysis. Must be taken with PS 308L taught by the same professor. For psychology majors only. Minimum grade of C- is required to pass. Prerequisites: PS 206, PS 307; Every Year, Fall and SpringPS 308L Methods II Lab ( 0 cr .) Lab to accompany PS 308. Every Year, Fall and Spring

PS 309 History of Psychology ( 3 cr .) This is a required course for advanced psychology majors. It covers philosophies dating back to ancient Greece. Participants review the history of scientific thought and of brain science. They trace the emergence of the science of psychology and the development of different systems of thought
or theoretical perspectives within psychology. Students compare and contrast psychological perspectives in terms of how they have both deepened and limited our understanding. This course is taken in the senior year. Prerequisite: PS 307; Every Year, Fall and Spring

## PS 311 Tests and Measurements in Psychology

 ( 3 cr .) This course covers principles of test construction, standardization and validation; survey of commonly used measures of personality, psychopathology, aptitudes, interests and achievement, particular emphasis on the relationship between the testing movement and the social, political and economic context in which it is embedded. Prerequisite: PS 206; Every Other Year, SpringPS 325 Health Psychology ( 3 cr.) The application and contribution of psychological research and practice to the promotion and maintenance of health and the prevention and treatment of illness are explored. Topics covered include stress and illness, psychological aspects of pain, management of chronic and terminal illness, obesity, smoking and other addictive behaviors, sleep disturbances, personality factors in illness and patient-practitioner interaction. Prerequisite: one course from PS level 200; Every Year, Fall and Spring

PS 352 Animal Behavior (3 cr.) Species-specific behavior in vertebrates and invertebrates is explored with particular emphasis on comparative analysis of various social behaviors. Topics include instinct, critical periods, imprinting, reproductive behavior, aggression, learning, sleep, communication and biological clocks. Prerequisite: one course from PS level 200; Every Year, Fall and Spring

PS 354 Sensation and Perception (3 cr.) This course considers the sensory systems as gateways to the mind. Psychological mechanisms of vision, audition, taste, smell, pain and other senses are explored, as well as the psychophysics, anatomy and physiology of these sensory systems. Prerequisite: PS 233 or PS 252; Every Year, Fall and Spring

PS 357 Drugs, Brain and Behavior (3 cr.) This course introduces students to the effects and mechanisms of action of psychoactive drugs. Drugs used in the treatment of psychological disorders as well as drugs of abuse are covered. In addition to describing basic principles of neuropharmacology, the course covers theories of tolerance, dependence and abuse in depth. Pharmacotherapy for substance abuse and major mental disorders is described from both a biological and clinical perspective. Prerequisite: PS 252; Every Year, Fall and Spring

PS 358 School Age Development (3 cr.) This course is required for five-year MAT students. Students learn
what psychology research reveals about development in children between the ages of 5-14. The class explores the following domains: sensory-motor, neurological, cognitive, language, social and emotion. Students learn about developmental questions that pertain especially to school-aged children, such as whether IQ can change, and about influences that may be particularly powerful, such as exposure to community violence. The facts of development are connected to theories of learning, motivation, intelligence, cognition and cultural psychology and also are applied to education. Prerequisite: PS 236; Every Year, Fall and Spring

PS 366 Advanced Personnel Psychology (3 cr.) This course presents an in-depth exploration of the traditional ideas and innovations of industrial psychology. Topics include, but are not limited to: recruitment and selection of employees, development and implementation of performance appraisal systems, issues involved in training employees, employment law and labor-management relations. Prerequisite: PS 265; Every Year, Fall

## PS 367 Advanced Organizational Psychology (3 cr.)

The history and new developments within organizational psychology are examined closely. Topics include, but are not limited to: organizational theory, research and theories of leadership, leadership development, motivating employees, job attitudes, teamwork, work-family balance and workplace stress. Prerequisite: PS 265; Every Year, Fall and Spring

PS 368 Occupational Health Psychology ( 3 cr.) This course explores the history and development of research and practice in the field of occupational health psychology. Topics include, but are not limited to, stress theories and models, specific stressors and strains, safety, employee health and well-being, work schedules, the work/non-work interface and occupational health interventions. Prerequisite: PS 265; Every Other Year, All

PS 371 Clinical Psychology ( 3 cr.) The principles and practices of clinical psychology are introduced. The course includes a review of legal-ethical issues and the training of clinical psychologists. The course focuses on methods of clinical assessment and the practice of psychotherapy, including extensive use of case studies. Prerequisite: PS 272; Every Year, Spring

PS 373 Positive Psychology (3 cr.) This course reviews and evaluates recent developments in positive psychology. Historical foundations are discussed, including the work of William James and Abraham Maslow. Research on resilience, positive coping and post-traumatic growth are covered, as well as topics such as gratitude, forgiveness, compassion, happiness and mindful meditation. Prerequisite: PS 272; Every Year, Fall and Spring

PS 391 Human Services Seminar (SL: Service Learning) (3 cr.) For psychology majors in the human services concentration only. Professional, theoretical, clinical and ethical issues related to each student's senior fieldwork experience represent the content of the course. Students are simultaneously registered in PS 393. Prerequisite: PS 371; Every Year, Fall

PS 393 Fieldwork in Human Services (SL: Service Learning) (3 cr.) For psychology majors in the human services concentration only. Students are placed in a community service agency to gain supervised experience in human service programs. Placements may include youth counseling agencies, rehabilitation services, mental health clinics, centers for people with mental retardation, psychiatric hospitals, schools for special populations and others. Each course requires a minimum of 12 hours of fieldwork per week. Due to a commitment of services to clients or patients, particularly strict standards of attendance and responsibility are maintained. PS 393 is taken in conjunction with PS 391. All students in PS 393 must plan to take PS 394 in the spring semester. This course is graded on a pass/fail basis. Prerequisite: PS 371; Every Year, Fall

PS 394 Fieldwork in Human Services (3 cr.) For psychology majors in the human services concentration only. Students are placed in a community service agency to gain supervised experience in human service programs. Placements may include youth counseling agencies, rehabilitation services, mental health clinics, centers for people with mental retardation, psychiatric hospitals, schools for special populations and others. Each course requires a minimum of 12 hours of fieldwork per week. Due to a service commitment to clients or patients, particularly strict standards of attendance and responsibility are maintained. This course is graded on a pass/fail basis. Prerequisites: PS 391, PS 393; Every Year, Spring

PS 409 Senior Seminar in Psychology ( 3 cr.) This seminar is the capstone course for psychology seniors only. It consists of extensive readings of original research and theory on a topic selected by the student under the guidance of the professor. A senior thesis, written according to departmental standards, is a central part of the requirement. As a capstone course, this course must be taken as a seminar during the academic year and cannot be taken as a tutorial. Most sections are offered in the spring. Senior standing required. Prerequisite: PS 308 or PS 353; Every Year, Fall and Spring

Courses offered as needed
PS 200 Special Topics in Psychology (3 cr.)
Prerequisite: PS 101
PS 234 Adult Development Psychology (GT 234) (3 cr.) Prerequisite: PS 101

PS 250 Parenting Science (3 cr.) Prerequisite: PS 101 PS 254 Psychology of Close Relationships (3 cr.) Prerequisite: PS 101
PS 285 Forensic Psychology (3 cr.) Prerequisite: PS 101
PS 300 Special Topics in Psychology (3 cr.)
Prerequisites: two courses from PS
PS 333 Advanced Cognition (3 cr.) Prerequisite: PS 233
PS 336 Cognitive Development (3 cr.) Prerequisite: PS 236
PS 353 Research Methods in Behavioral Neuroscience (3 cr.) Prerequisite: PS 252 or BIO 101
PS 355 Advanced Psychology of Learning ( 4 cr.)
Prerequisite: one course from PS level 200
PS 355L Psychology of Learning Lab ( 0 cr.)
PS 356 Psychology of Language ( 3 cr .) Prerequisite: PS 233 or PS 252
PS 370 Intimate Partner Violence Seminar (WS 370)
( 3 cr.) Prerequisites: two courses from PS, SO, CJ, WS
PS 372 Child Psychopathology (3 cr.) Prerequisite: PS 272
PS 382 Advanced Social Psychology ( 3 cr.) Prerequisite: PS 261 or PS 307
PS 383 Psychology and the Law (3 cr.) Prerequisites: two courses from PS
PS 397 Fieldwork in Industrial/Organizational Psychology ( 3 cr .)

## Public Relations (STC)

## STC 101 Principles of Advertising and Public

Relations ( $\mathbf{3} \mathbf{~ c r}$.) This course introduces students to the field of strategic communication by examining contemporary issues and trends, and analyzing ethical considerations involved in the practice of public relations, advertising and integrated communications. The role of strategic communication in society and business is examined through the lens of basic advertising and public relations theories as well as industry best practices. Students are introduced to critical thinking and reasoning concepts as well as the various professional roles available. Every Year, Fall and Spring

STC 201 Writing for Strategic Communications (3 cr.) Students learn writing techniques for advertising, public relations and various interactive media. Topics include AP style guidelines, search engine optimization, writing formats and writing style. Projects include the creation of blogs, advertising copy, website copy, social media messages, media releases, media pitches and fact sheets. Prerequisites: STC 101, JRN 160; Every Year, Fall and Spring

STC 311 Sports Public Relations (SPS 311) (3 cr.) This class is a comprehensive review of sports management and sports event planning. Students examine such topics as strategic planning, budgeting and time management. Every Year, Spring

## STC 332 Communication Research and Analysis

 ( 3 cr .) This course provides an exploration of the quali-ta-tive and quantitative research methods used to collect and analyze data. Students are introduced to secondary and primary research, as well as basic methods of measurement and analysis. Students learn how to analyze content and audience behaviors on traditional, social and mobile media platforms, and how to interpret their findings to create meaningful communication strategies. Prerequisite: STC 101; Every Year, Fall and SpringSTC 450 Senior Seminar (3 cr.) The senior seminar for public relations majors is Crisis Management. The course examines institutional crisis communication from a management perspective with an emphasis on crisis prevention, planning and response. Senior-level students in STC 450 apply skills they have learned throughout the program to crisis case studies. Students are called on to demonstrate oral and written communication skills along with proficiencies in such areas as critical thinking, reasoning and creative thinking. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

STC 495 Public Relations Campaigns ( 3 cr.) This course is the capstone for students preparing for a career in public relations. Students develop the mindset of a strategic communicator through case analyses and problem-solving exercises. Attention is focused on the public relations planning process. Student teams develop strategic public relations plans for actual clients. Students are expected to demonstrate oral and written communication skills as well as proficiencies in critical thinking, reasoning, creative thinking and quantitative reasoning. Prerequisites: STC 201, STC 332; Every Year, Fall and Spring

Courses offered as needed
STC 341 Corporate Public Relations (3 cr.)
Prerequisite: STC 201
STC 343 Nonprofit Public Relations (3 cr.) Prerequisite: STC 201
STC 344 International Public Relations (3 cr.) Prerequisite: STC 201
STC 345 Investor Relations ( 3 cr.) Prerequisite: STC 201
STC 346 Health Care Public Relations (3 cr.) Prerequisite: STC 201
STC 347 Fundraising (3 cr.) Prerequisite: STC 201
STC 348 Public Relations Event Planning ( 3 cr.)
Prerequisite: STC 201
STC 400 Special Topics (3 cr.) Prerequisite: STC 201

STC 401 Bateman Competition Research (1 cr.)
Prerequisites: STC 332 and instructor approval STC 402 Bateman Competition Campaigns ( 2 cr .) Prerequisite: STC 33

## QU Seminars (QU)

QU 201 (UC) National Community (3 cr.) This interdisciplinary seminar builds on experiences and learning from QU 101 and focuses on the major themes and concepts that structure life in the cultures of the pluralistic American community. The topics can range from social media to spirituality, from bioethics to refugee narratives, depending on the specialty of the instructor. All sections address the common course questions: 1) What is the meaning of community in a national context; 2) What is the effect of individualism on our concept of national community and citizenship; and 3) What is the effect of our pluralistic and multicultural heritage on our concept of national community and citizenship? Every Year, All

QU 301 (UC) Global Community ( 3 cr.) This interdisciplinary seminar builds on experiences and learning from QU 101 and QU 201 and focuses on the political, social, cultural, ecological and economic systems that define the global community. Topics can range from the Middle East to Oceanic America, from health care to understanding and combating poverty, depending on the specialty of the instructor. All sections address the common course questions: 1) What is the global community? 2) What is our investment in the global community? and 3) How do we balance personal allegiances or affiliations with membership in the global community? Prerequisite: QU 201; Every Year, All

## Sciences (SCI)

## SCI 101 (UC) Survey of Physical Science I (3 cr.)

This introduction to the methods of science is designed to make students aware of the scientific implications of the problems facing the world today. Topics include the metric system, force and motion, heat and work, sound, light, electricity and magnetism. Must be taken in conjunction with SCI 101L. This course is designed for non-science majors. Students may not earn credit for both SCI 101 and PHY 101. Every Year, Fall

SCI 101L (UC) Survey of Physical Science Lab (1 cr.) Lab must be taken with SCI 101. (2 lab hrs.); Every Year, Fall

SCI 102 (UC) Survey of Physical Sciences II (3 cr.)
This introduction to the methods of science emphasizes chemical principles, nuclear reactions and their applications, weather, earth science and astronomy.

Must be taken in conjunction with SCI 102L. This course is designed for non-science majors. Every Year, Spring and Summer

SCI 102L (UC) Physical Sciences II Lab (1 cr.) Lab must be taken with SCI 102. (2 lab hrs.) Every Year, Spring and Summer

SCI 161 (UC) Nutrition: An Investigative Experience ( 3 cr .) This course embodies investigative experiences within the lecture. Students study the fundamental chemistry and nutritional role of food components including carbohydrates, fats and proteins, as well as the importance of vitamins and minerals in the diet. Students learn about recent developments in nutrition and how nutrition research is conducted. Students have an opportunity to apply these concepts to analyze and improve their own diets. Every Year, All

SCI 162 (UC) Consumer Chemistry (3 cr.) Students are introduced to the methods of science by studying the chemistry of the Earth's environment. Topics include the atmosphere and chemical pollutants, the ozone layer and its interaction with light waves, the implications of consumer products upon global warming, the chemistry of Earth's water supply, the chemical nature of acids, bases, pH and the causes of acid rain. This course is designed for nonscience majors. Every Year, Spring

## Sociology (SO)

SO 101 (UC) Introduction to Sociology (3 cr.) Our society and culture influence who we are, how we feel about ourselves, and how we interact with others. This course investigates the ways in which our social institutions such as the family, the government, politics, religion, health care and others shape our experience. The differences that characterize a stratified society in opportunity, reward, achievement and social class are discussed. Thematic Introduction to Sociology sections may be offered. Every Year, All

SO 201 Sociological Theory ( 3 cr .) This course helps students develop a working knowledge of theory and understand its relevance in other sociological courses they will take. In part, it examines Freud's depiction of the human condition as an epic battle between our individual selfish drives and society's overbearing shame, Marx's claim that revolution is inevitable, Weber's belief that we have sacrificed the human spirit at the altar of efficiency, Mills' claim that we have become cheerful robots in a machine-like society, and Baudrillard's thesis that truth has been murdered in the perfect crime. Prerequisite: SO 101; Every Year, Fall

SO 205 From College to Career (CJ/GT 205) (1 cr.) This course introduces sociology, gerontology and criminal justice majors to the disciplines and fields in which they are majoring. Students meet once a week to discuss the origins, breadth and potential careers in their fields. The course orients the student to the professions within sociology, and gerontology through interaction with departmental faculty, former students and practitioners in the field. For sociology majors only. This course is graded on a pass/fail basis. Prerequisite: SO 101; Every Year, Spring

SO 225 (UC) Social Problems ( 3 cr .) This course explores public issues such as poverty, violence, education and addiction as problems of individual adaptation, as a conflict of interest between groups, and as intractable characteristics of the social system. These models suggest different levels of intervention and solution. Prerequisite: SO 101; Every Year, All

## SO 232 Women in the Criminal Justice System

 (CJ/WS 232) (3 cr.) This course examines the changing patterns of women's criminality, the experiences of women who are processed as crime victims, and the evolution of women's role in law, law enforcement and corrections. Prerequisite: SO 101; Every Year, FallSO 235 American Culture and Society: The 1950s1980s ( 3 cr .) The course examines what it means to be an American. Students explore the structure of American culture and discuss more specific American cultural manifestations in areas such as love, consumerism, childrearing and sport. These topics are covered via an assessment of the health versus pathology of American culture. Course material is rooted in sociological literature within the field of culture and personality. Prerequisite: SO 101; Every Other Year

SO 241 (UC) Racial and Ethnic Groups ( 3 cr.) The impact of ethnic and racial identity in the United States is examined with particular consideration of the processes of prejudice and discrimination, social class identity and mobility, and the distribution and exercise of social, economic and political power. Prerequisite: SO 101; Every Year, All

SO 244 (UC) Social Stratification ( 3 cr.) This course examines systems of inequality and how they grow out of, and are reinforced by, both structural and cultural factors. Topics include: social class, race, ethnicity, gender, sexuality, the interrelationships of all of these as forces of stratification, and how they are manifested in societal institutions such as the economy, the educational system and the criminal justice system. Prerequisite: SO 101; Every Year, All

SO 250 Youth Crime (CJ 250) ( $\mathbf{3}$ cr.) This course deals with youth crime as distinct from adult offending. Students examine development of the juvenile delinquency concept and justification for classifying juvenile offenders as separate from adults. Factors contributing to the onset of juvenile delinquency and relevant research also are examined. The course considers the development and current functions of the juvenile justice system, paying particular attention to the challenges justice officials face daily. A range of widely used treatment strategies for dealing with juvenile offenders is examined. Prerequisite: SO 101; Every Year, Fall

SO 255 (UC) Sociology of Families (WS 255) (3 cr.) In this introductory course, students critically examine families in the U.S., both historically and in the current day. Topics include the ways in which families have evolved over time and the effect of economic and social factors (such as race, class and gender) on family life. Students learn about the diversity of families in other cultures and current issues facing families. Prerequisite: SO 101; Every Year, Fall

SO 260 Social Control and Deviance (3 cr.) This course covers classical and contemporary sociological theories of deviance as well as a discussion on the ways in which sociologists define the concepts of deviance and stigma. Course material covers a variety of social issues, which are situated within the intersection of deviance and race, social class, sexuality and religion. Topics include: privileged/underprivileged deviance, substance abuse and physical violence. Participants also look at the ways in which social behavior is formally and informally controlled through various sanctions and the implementation of public policies. Prerequisite: SO 101; Every Year, Spring

## SO 263 (UC) Sociology of the Aged (GT 263) (3 cr.)

This introduction to gerontology focuses on the myths and realities of aging explored through historic, demographic and sociological analyses of the conditions of elderly people in our society. Students critically examine the diversity of aging experiences in the U.S. The ways in which social and cultural factors enter into the aging process are also considered. Prerequisite: SO 101; Every Year, All

SO 264 Social Welfare Institutions ( $\mathbf{3} \mathbf{c r}$.) Problems of welfare in an industrial society; the system of public and private institutions that evolved to meet these needs; critical evaluation of their adequacy; strategies for change, e.g., community control, welfare rights movements, are explored. Prerequisite: SO 101; Every Year, Spring

## SO 270 Program Planning and Administration

(GT 270) (3 cr.) Program planning and administration of services to the elderly are considered, as well as
models of needs identification, the process of problem analysis, styles of leadership and administrative dilemmas, and elements of grant proposal writing. Prerequisite: SO 101; Every Other Year

## SO 271 Public Order Crimes (CJ 271) (3 cr.)

Approximately two-thirds of the inmates in U.S. correctional institutions have been found guilty of public order crimes, moral crimes, or crimes not likely to have a self-identified victim. This course concentrates on crimes associated with such activities as illegitimate gambling, consensual sex, and the criminal use and sale of both legal and illegal substances. Prerequisite:
SO 101; Every Year, Fall
SO 272 (UC) Education and Society ( 3 cr.) Schools from kindergarten to the university as they relate to the community and the economic and political systems are considered. Also explored are the historical development of education; values imparted through education; the social process in the classroom; contemporary conflicts centering in the schools. Prerequisite: SO 101; Every Year, Spring

SO 280 (UC) Illness and Disability ( 3 cr.) This course examines the ways in which society shapes our understanding, experience and definitions of health, illness and disease. Topics include the social factors related to disease such as age, gender and social class; the social roles of medical practitioners and patients; labeling and treatment/mistreatment of the ill and disabled; changing definitions of illness; and the politics of disability. Prerequisite: SO 101; Every Other Year, Fall

## SO 285 (UC) Protest and Change (WS 285) (3 cr.)

This class presents in-depth explorations of American social movements with an emphasis on understanding the underlying societal factors that influence the emergence of each. The socioeconomic and cultural identities of those involved and the ways in which strategies, tactics, and outcomes are shaped also are addressed. Discussions cover, but are not limited to, the labor, civil rights, women's rights, gay rights, anti-war and environmental movements. Prerequisite: SO 101; Every Other Year

SO 304 Sociology of Gender (WS 304) (3 cr.) This course focuses on how society constructs notions/images of femininity and masculinity and how these influence our lives. Participants look at cultural views of language, body and the media, as well as theoretical approaches to understanding the complexities of gender distinctions in our society. Prerequisites: two courses from SO; Every Other Year

SO 305 Death, Grief and Bereavement (GT 305) (3 cr.) Death is studied from the perspective of social
interaction between the dying person, professional caregivers and family members and loved ones. Attitudes and values about death, cultural components of grief, and the function of bereavement are examined. Particular attention is paid to the social organization of death work and dying in bureaucratic settings, such as hospitals and nursing homes, as opposed to the nonbureaucratic structure of hospice care. Prerequisites: two courses from SO, GT; Every Year, All

SO 306 Masculinities (3 cr.) In this course, students examine the organization, maintenance and understandings of popular and historical conceptions of masculinities within the United States. The class explores the norms, values and beliefs that circulate within the realm of masculinities. Additional topics include media, boyhood, work, health, relationships, sexualities, bodies, families and violence. Students develop an understanding of the ways in which gender is a relational concept that takes on meaning through personal relationships and societal constructs. Prerequisites: two courses from SO; Every Other Year

SO 307 Sociology of Sport (SPS 307) (3 cr.) This course includes the analysis of sport as a social and cultural institution and the interrelations between sport and societal subsystems. Students explore selected sociocultural aspects of sport and exercise, and analyze contemporary problems associated with sport, including race relations, the tradition and emergent role of females, leisure behaviors, aggression and violence, as well as political and economic concerns. Prerequisites: two courses from SO; Every Year, Spring

SO 308 The Immigrant Experience ( 3 cr.) For much of its history, people have come to the U.S. from other countries seeking religious freedom, political asylum or better economic opportunities. Some Americans want to restrict migration, worrying that immigrants might create economic and cultural problems for the U.S. In this course, students explore questions such as: Why do people migrate? How has immigration shaped the U.S. throughout its history? How does immigration impact the American economy and culture? How has immigration policy changed over time? Using a sociological perspective, students learn what shapes the decisions and experiences of immigrants and about the impact of immigration on society. Prerequisites: two courses from SO; Every Year, Fall

## SO 310 Children: Social Issues and Policies (3 cr.)

 This course presents an overview of the social, economic and political factors that have influenced the historical experiences of children. The effects of the changing character of the American family, peer groups, the powers of the media, public intervention and welfare concepts are examined. Prerequisites: two courses from SO; Every Year, FallSO 311 Introduction to Social Work (GT 311) (3 cr.)
This course provides students with an overview of social work as a helping profession. Beginning with a preliminary understanding of the historical development of social work, students learn how changes in social work theory and practice reflect larger societal changes. Course work familiarizes students with important social work issues and concepts and discusses their application in diverse social service and human service settings. Major or minor in gerontology, sociology, criminal justice or psychology and at least junior standing. Prerequisites: two courses from SO, GT; Every Year, Fall

SO 315 Case Management (GT 315) (3 cr.) Case management is a process used widely throughout health and social services as a means of assessing, planning, coordinating, monitoring and evaluating the services needed to respond to an individual's health and/or service needs to attain the dual goals of quality and cost effective care. Students in gerontology, sociology, psychology, and criminal justice are likely to encounter the various roles or models of case management practice as they pursue careers in human services. This course provides a foundation for case management practice in various social service settings. Prerequisites: two courses from SO, GT; Every Year, Spring

SO 317 Religion and Society ( 3 cr .) This course examines religion from a sociological perspective. The class begins with an introduction to Buddhism, Christianity, Hinduism, Islam and Judaism. The remainder of the course examines the relationship between religion and society. Students ask question such as: Are Americans becoming less religious? Do some religions cause more violence than others, and/or face more discrimination than others? How does religion shape attitudes about gender and sexuality? Can religion be a source for protest and social change? Using a sociological perspective, students learn about why religion continues to have a strong influence on social life in the modern world. Prerequisites: two courses from SO; Every Other Year

SO 318 Therapeutic Recreation (GT 318) (3 cr.) This course of study includes the principles and practices of program planning for therapeutic recreation. The course covers analysis, assessment, design, implementation and evaluation of activities. Emphasis is on intervention, gerontological terminology, documentation, record keeping and resources. Prerequisites: two courses from SO, GT; Every Other Year

## SO 325 Counseling Older Clients (GT 325) (3 cr.)

Students are introduced to theories and models of effective communication with select members of an elderly population; practical aspects of communication of social service worker with older clients, older parents, older patients and the terminally ill; interview and
counseling techniques; and the role of social service worker, past and present. Prerequisites: two courses from SO, GT; Every Other Year

SO 330 Perspectives on Violence (CJ 330) ( 3 cr.) This course explores the many ways that violence is viewed in our society. Topics include types of violence, empirical evidence of incidence, characteristics of violent crimes, offender motivation, victim profiles, and sociological and theoretical explanations. Prerequisites: two courses from SO, CJ; Every Year, Fall

SO 333 Drugs, Alcohol and Society (CJ 333) (3 cr.) This analytical discussion-based course explores the use of drugs and alcohol in U.S. society. The emphasis is on drug and alcohol use and abuse as a social phenomenon. Students explore issues such as the relationship of drug use to particular groups in society (age, sex, race/ethnicity), patterns of drug use and abuse, the promotion of drugs by the media, and drug and alcohol abuse in historical perspective. Students also learn about drug categories, drug education, prevention and treatment and drug laws. Prerequisites: two courses from SO, CJ; Every Year, Spring

SO 335 Systems in Criminal Justice (CJ 335) (3 cr.)
This course examines the criminal justice system, including law enforcement, the courts and the correctional system. Each aspect of the system is analyzed in terms of crime statistics, typologies and theoretical application. Prerequisites: two courses from SO, CJ; Every Year, All

SO 355 Crime and Media (CJ 355) (3 cr.) Despite little direct contact with offenders or the criminal justice system people typically hold strong opinions about crime-related issues. The goal of this course is to understand how media sources shape our attitudes and beliefs about crime and how we should respond to it. To this end, participants examine media involvement in constructing the reality of crime and justice. Prerequisites: two courses from SO, CJ; Every Other Year

SO 360 Sociology of Mental Illness (3 cr.) This course examines the ways in which society shapes our understanding of mental illness and mental health. It provides students with an overview of issues affecting the definition, causes, recognition and treatment of mental illness. The course is organized into five sections: 1) the major theoretical perspectives on mental illness; 2) symptoms of selected mental disorders; 3) the epidemiology of mental illness; 4) stigma; and 5) available treatment and lack of treatment for people with mental disorders. Prerequisites: two courses from SO, CJ; Every Year, Spring

## SO 381 Research Methods (GT 381) (3 cr.)

This course examines the logic of social research methodology. Students explore a number of methods
social scientists utilize. By understanding the ways in which social scientists investigate various social phenomena, students are able to explore their own social policy topic by situating it within the context of their methodological training. Must be a second semester junior or above. Prerequisite: SO 244; Every Year, All

## SO 382 Studying Social Issues with Statistics

 (GT 382) (3 cr.) In this course, students learn basic introductory-level statistics and quantitative reasoning skills necessary for careers in sociology (including social services and health-related fields) and gerontology. Through hands-on application, students learn research design, basic statistical data collection and data analysis. For majors only, junior or above. Prerequisite: SO 381; Every Year, AllSO 385 Senior Capstone (GT 385) (3 cr.) This senior seminar is designed as the capstone course for students majoring in sociology and gerontology. Students research a sociological or aging-related topic of their choosing and write a thesis based on their work. All senior theses represent a culmination of majors' academic experiences in the department. For majors only in the senior year. Every Year, All

SO 392 Internship in the Community ( 3 cr.) The student devotes eight hours a week on site in a public or private community agency and one hour a week in class. The position is tailored to the student's preparation and interests and to the needs of the agency. The student learns how an organization actually works, its relation to other organizations in the community, how it serves its clients, and the problems that confront it. Enrollment, limited to majors, is a commitment by the student to adhere to a high standard of attendance and responsibility. For sociology majors in their junior or senior year. Prerequisite: SO 101; Every Year, All

## SO 394 Advanced Internship in the Community (3 cr.)

A second internship for sociology or social service majors in their junior or senior year only. Students complete 120 hours of supervised fieldwork in a community agency along with one hour per week in the advanced internship seminar class. Throughout the course, students build upon the knowledge gained from their first internship experience to deepen their understanding of social structures, broaden their experience with diversity and refine their personal sense of responsible citizenship. Students also assess their interpersonal strengths and weaknesses through written and oral reflection in preparation for graduate school and/or future employment. In addition to the seminar requirements, students are required to adhere to strict standards of professionalism, confidentiality and responsibility at their internship site. Prerequisites:
SO 392; Every Year, All

## Courses offered as needed

SO 200 Special Topics (3 cr.)
SO 230 Government and Business: The Uneasy Partnership (3 cr.) Prerequisite: SO 101
SO 238 Sociology Through Film ( 3 cr.) Prerequisite: SO 101
SO 245 Community: Place, Sentiments, Structure (3 cr.) Prerequisite: SO 101
SO 266 (UC) Population and Society (3 cr.) Prerequisite: SO 101
SO 283 Crime and Society (CJ 283) (3 cr.) Prerequisite: SO 101
SO 300 Special Topics (3 cr.) Prerequisites: two courses from SO
SO 312 Large-scale Organizations (3 cr.) Prerequisites: two courses from SO
SO 320 Sociology of Hip-Hop Culture (3 cr.) Prerequisites: two courses from SO
SO 375 Sociology of the Everyday (3 cr.) Prerequisites: two courses from SO
SO 383 Sociology of Law (3 cr.) Prerequisites: two courses from SO
SO 390 Politics and Urban Change (PO 390) (3 cr.) Prerequisite: SO 101 or PO 131

## Software Engineering (SER)

SER 120 Object Oriented Design and Programming
( 4 cr .) This course serves as an introduction to the principles of design and development using objectoriented techniques such as inheritance, polymorphism and encapsulation. Students apply OO techniques to develop event-driven programs. Code craftsmanship is emphasized. Students also learn to apply and recognize design patterns for OO software and to use standard application development frameworks. Prerequisite: CSC 110; Minimum grade C-; Every Year, Spring

## SER 210 Software Engineering Design and

 Development (4 cr.) This course serves as an introduction to software engineering using object-oriented analysis and design. Students learn modeling notations, such as Unified Modeling Language. The course emphasizes the development of robust and high-quality software systems based on object-oriented principles. Implementations are performed using state-of-the-art programming languages and application development frameworks. Prerequisite: SER 225; Minimum grade C-; Every Year, Spring
## SER 225 Introduction to Software Development

 (CSC 225) (3 cr.) This course presents introductory software development concepts including group development, large-scale project work and theoretical aspects of object-oriented programming. The course expands on material from previous courses. Professionalbehavior and ethics represent an important component of this course. Prerequisite: CSC 111; Minimum grade C-; Every Year, Fall

SER 310 Software Engineering Approaches to Human Computer Interaction (3 cr.) This course covers design and interfacing of computer input and output systems including standard and newer input devices. Prerequisite: SER 210; Minimum grade C-; Every Year, Spring

SER 320 Software Design and Architecture (3 cr.) Students explore software design methodologies, architectural styles, design guidelines and design tools. Prerequisite: SER 210; Minimum grade C-; Every Year, Fall

SER 325 Databases (CSC 325) (3 cr.) Students are introduced to the theory and application of database systems. Topics include data modeling and the relational model, query languages, relational database design, transaction processing, databases and physical database design. Prerequisites: CSC 215, CSC 225; Minimum grade C-; Every Other Year, Spring

## SER 330 Software Quality Assurance and Testing

( 3 cr .) This course acquaints students with various aspects of software quality assurance. Topics include processes for promoting software quality, dynamic analysis approaches, such as testing and fault localization and static analysis approaches, such as inspections and finite-state verification. Prerequisite: SER 210; Minimum grade C-; Every Year, Spring

SER 340 Software Requirements Analysis (3 cr.) This course covers basic concepts and principles of software requirements engineering including techniques, processes and tools for specifying software requirements. Topics include requirements elicitation, requirements management, functional and nonfunctional requirements, semiformal and formal approaches, Agile requirement analysis and requirements tracking. Prerequisite: SER 210; Minimum grade C-; Every Year, Fall

SER 350 Software Project Management (3 cr.) This course covers the basics of project planning, including cost estimation and scheduling. Topics include project management tools, productivity metrics and other factors influencing productivity and success. Students learn to analyze options and risks, as well as how to manage expectations and plan for change. Additional topics include release and configuration management, software process standards and process implementation, software contracts and intellectual property. Students review different approaches to maintenance and longterm software development and discuss case studies of real industrial projects. Prerequisite: SER 330; Minimum grade C-; Every Year, Fall

SER 490 Engineering Professional Experience (1 cr.) Students gain practical experience in applying theory obtained in previous course experiences by employing engineering skills in a professional setting under the guidance of faculty and mentors. Students must obtain departmental approval and register prior to starting the experience. If approved, an internship could satisfy this requirement. Prerequisite may be waived with permission of adviser. Prerequisite: ENR 395; Minimum grade C-; Every Year, All

SER 491 Senior Capstone I (3 cr.) This is the first part of a two-semester, capstone design experience for software engineering students. It involves analysis and synthesis of unstructured problems in practical settings. Students work in teams to formulate issues, propose solutions and communicate results in formal written and oral presentations Prerequisite: SER 340; Minimum grade C-; Every Year, Fall

SER 492 Senior Capstone II (3 cr.) This is the second part of a two-semester, capstone design experience for software engineering students. It involves analysis and synthesis of unstructured problems in practical settings. Students work in teams to formulate issues, propose solutions and communicate results in formal written and oral presentations. Prerequisite: SER 491; Minimum grade C-; Every Year, Spring

Courses offered as needed
SER 489 Advanced Independent Study in Software Engine (3 cr.)

## Spanish (SP)

SP 101 Elementary Spanish I (3 cr.) Spanish as a spoken and written language is introduced in this course, which includes intensive drills in the basic structures of the language. Elementary reading material is used for vocabulary building, analytical exercises and discussion. Students who have three or more years of high school Spanish with grades of B or above may not take this course for credit. Every Year, Fall and Spring

SP 101L Elementary Spanish Lab (1 cr.) This lab is a supplement to SP 101 and SP 102. It is open to any student who is taking or has taken Spanish courses at the elementary level. The lab provides specific support to improve speaking, reading, writing and listening comprehension skills. It also offers cultural materials and can be tailored on demand to individual students with supplementary specialized vocabularies from specific professions. The lab does not count towards fulfilling a language requirement, minor or major. It can be taken twice for credit during different semesters and is graded on a pass/fail basis. Every Year, Fall and Spring

SP 102 Elementary Spanish II (3 cr.) This course is a continuation of SP 101. Prerequisite: SP 102 placement or SP 101. Every Year, Fall and Spring

SP 201 Intermediate Spanish I (3 cr.) This course includes conversational practice and a review of grammar. Students develop the four language skills: listening, speaking, reading and writing. Prerequisite: SP 102 or placement into SP 201. Every Year, Fall and Spring

SP 201L Intermediate Spanish Lab (1 cr.) This lab is a supplement to SP 201 and SP 202. It is open to any student who is taking or has taken Spanish courses at the intermediate level. The lab provides specific support to improve speaking, reading, writing and listening comprehension skills. It also offers cultural materials and can be tailored on demand to individual students with supplementary specialized vocabularies from specific professions. The lab does not count toward fulfilling a language requirement, minor or major. It can be taken twice for credit during different semesters and is graded on a pass/fail basis. Every Year, Fall and Spring

SP 202 Intermediate Spanish II (3 cr.) This course is a continuation of SP 201. Every Year, Fall and Spring

SP 251 Short Story in Spanish (3 cr.) This course presents a study of the short story genre and its development in Spain and Spanish America, especially in modern times, including Chicano literature. A variety of short stories (moral lesson, anecdote, character story and magic realism) are analyzed. Prerequisite: SP 202; Every Third Year, Fall and Spring

SP 301 Advanced Spanish I ( 3 cr.) This course is designed to help the student develop oral and written language skills to a high degree of proficiency. Prerequisite: SP 202 or placement into SP 301. Every Year, Fall and Spring

SP 301 L Advanced Spanish Lab (1 cr.) This lab is a supplement to SP 301 and SP 302. It is open to any student who is taking or has taken Spanish courses at the advanced level. The lab provides specific support to improve speaking, reading, writing and listening comprehension skills. It also offers cultural materials and can be tailored on demand to individual students with supplementary specialized vocabularies from specific professions. The lab does not count toward fulfilling a language requirement, minor or major. It can be taken twice for credit during different semestersand is graded Pass/Fail. Every Year, Fall and Spring

SP 302 Advanced Spanish II (3 cr.) This course is a continuation of SP 301. Every Year, Fall and Spring

SP 312 Advanced Conversation ( $\mathbf{3} \mathbf{c r}$.) This course is designed to improve oral skills for non-native speakers. Prerequisite: SP 302; Every Year, Fall

SP 317 Approaches to Literary Genres ( 3 cr.) This course, taught in Spanish, is designed to familiarize students with general approaches to literature: how to read/ talk about a poem as opposed to a play, etc. Students read and discuss, in Spanish, works from various genres. Prerequisite: SP 302; Every Third Year, Fall

SP 301L Advanced Spanish Lab (1 cr.) This lab is a supplement to SP 301 and SP 302. It is open to any stu-dent who is taking or has taken Spanish courses at the advanced level. The lab provides specific support to im-prove speaking, reading, writing and listening comprehension skills. It also offers cultural materials and can be tailored on demand to individual students with supplementary specialized vocabularies from specific profes-sions. The lab does not count toward fulfilling a language requirement, minor or major. It can be taken twice for credit during different semesters and is graded Pass/Fail. Every Year, Fall and Spring

SP 321 Masterpieces of Spanish Literature (3 cr.) Major literary productions of Spain are studied, including works by or selections from Lazarillo de Tormes, Garcilaso, Cervantes, Galdos and Lorca. Prerequisite: SP 302; Every Third Year, Spring

SP 329 Spanish American Literature from 1880 to Present (3 cr.) Representative selections of Spanish American writings since Modernismo are studied. Works of poetry, fiction and drama are analyzed in terms of their sociopolitical contexts as well as in terms of the dominant literary movements of the period. Prerequisite: SP 302; Every Third Year, Fall

SP 335 Nineteenth Century Literature of Spain (3 cr.) The romantic, realist and naturalist movements are studied. Prerequisite: SP 302; Every Third Year, Spring

SP 343 Culture of Spain ( $\mathbf{3} \mathbf{~ c r}$ ) This course focuses on the broad themes of politics, history, literature, philosophy, regional languages, religion, education, the media, art, music, architecture, ethnic diversity and traditions of Spain. By examining the past and present, students gain deeper insights into the Spanish character and world view. Instruction of this course is in Spanish. Prerequisite: SP 302; Every Other Year, Spring

SP 348 Spanish Drama and Poetry of the Golden Age ( 3 cr .) This course focuses on readings and discussion of the works of Calderon de la Barca, Lope de Vega, and contemporaries. Prerequisite: SP 302; Every Third Year, Spring

SP 370 History of the Romance Languages (3 cr.) Students study the historical linguistic development of Spanish in comparison with the other Romance languages: Catalan, French, Italian, Portuguese, Rhetian, Sardinian and Romanian. Students also compare the modern dialects of Spanish. Prerequisite: SP 302; Every Other Year, Fall and Spring

SP 371 Contemporary Literature in Spanish (3 cr.) The novel, theater or poetry of contemporary Spain and Spanish America are studied. Prerequisite: SP 302; Every Third Year, Fall

SP 373 Latin American Cultures I (3 cr.) Selected topics of Latin American cultures from their Spanish and pre-Columbian roots to the end of Independence are studied. Readings are drawn from history as well as literature. Prerequisite: SP 302; Every Year, Fall

SP 374 Latin American Cultures II (3 cr.) Selected topics of Latin American cultures from the end of Independence to the present are studied. Readings are drawn from history as well as literature. Prerequisite: SP 302; Every Year, Spring

SP 376 The Spanish Caribbean ( $\mathbf{3}$ cr.) This course studies people, history and society as well as artistic and literary expression of Puerto Rico, Cuba and the Dominican Republic. Also, features of the Spanish language as spoken in the Caribbean are considered. Prerequisite: SP 302; Every Other Year, Spring

SP 401 Advanced Spanish Grammar (3 cr.) This culminating course, designed to increase and perfect the knowledge of students who possess a strong command of Spanish grammar, includes instruction in verb tense usage, sentence syntax, lexical choices and idiomatic usage. Exercises to solidify knowledge are used extensively. Prerequisite: SP 302; Every Other Year, Fall and Spring

SP 450 Senior Seminar (3 cr.) This seminar is devoted to an in-depth study of Don Quijote de la Mancha. The novel is read, discussed and analyzed in terms of the sociopolitical context and in terms of the dominant literature of the period. Prerequisite: SP 302; Every Year, Spring

## Special Education

SPED 482 Special Education ( 3 cr .) This course focuses on the characteristics of students with exceptionalities as well as methods of meeting these students' educational needs in the general education classroom. The focus of the course is on providing prospective teachers with an understanding of the growth and development of students with disabilities as well as students with
particular gifts and talents, and the particular needs of students for whom English is a second language. Prerequisite: ED 412; Every Year, Spring

## Sports Studies (SPS)

SPS 101 Introduction to Sports Studies (3 cr.) This course introduces students to the social, historical, cultural, economic and political importance of sport. Students become familiar with the growing role and influence of sport in business, health sciences, and communications on the local, national, and global stage. This course also introduces students to the study of sport and the interdisciplinary research being done by scholars from various fields. This is a required course for the Sports Studies minor. Every Year, Fall

## SPS 106 Electronic News Gathering for Sports (JRN 106) ( 3 cr.) Students are trained in the

 fundamentals of shooting news footage using digital cameras and editing news stories using a computerbased non-linear editing system. Assignments for SPS students are focused on sports. Every Year, All
## SPS 201 Medical Aspects of Sport and Activity

 (AT 201) (3 cr.) This course is geared toward students who want to work in a sports-related field (i.e., coaches, journalists and managers). It provides an overview of a variety of sports medicine-related topics, including common sports injuries, an introduction to sports psychology and current events in sports medicine. Students cannot receive credit for both AT 201 and AT 214. Prerequisites: one group; BIO 101/101L; BIO 105/105L; BIO 106/106L; CHE 101/101L; PHY 101/101L; BMS 110/110L; BMS 117/117L; BMS 118/118L; SCI 101/101L; SCI 102/102L; SCI 105/105L; Every Year, FallSPS 224 Sports Law (LE 224) ( 3 cr.) Sports Law is a growing and evolving area of law, affecting all those who play, officiate or watch sports. Legal issues involve athletes, athletic competition, athletic teams and leagues, fans and sports in general, on the student, amateur and professional levels. Students study the legal concepts surrounding sports, and learn to apply them to the issues that arise. Prerequisite: LE 101; Every Year, Spring

SPS 226 (UC) Baseball and Statistics (MA 226) (3 cr.) This course covers SABRmetrics: the study of standard statistical topics using data derived from baseball records, which, for many students, is more easily understood and more interesting than data from the business or science world. The course looks at both descriptive and inferential statistics along with probability. Descriptive statistics covers measures of central tendency, tables and graphs, the normal and binomial distributions. Inferential statistics explores sampling, confidence
intervals, hypothesis testing, chi-square testing, and regression and correlation analysis. Students must have a satisfactory score on the placement test and possess a basic knowledge of baseball. Every Year, All

SPS 307 Sociology of Sport (SO 307) (3 cr.) This course includes analysis of sport as a social and cultural institution and interrelations between sport and societal subsystems. Students explore selected issues of sociocultural aspects of sport and exercise, and analyze contemporary problems associated with sport, including race relations, the tradition and emergent role of females, leisure behaviors, aggression and violence, as well as political and economic concerns. Prerequisites: SO 101, SPS 101; Every Year, Spring

## SPS 311 Sports Public Relations (PRR 311) (3 cr.)

This class is a comprehensive review of sports event planning and management. Students examine such topics as strategic planning, budgeting and time management. Every Year, Spring

## SPS 312 Sports Management (MG 312) (3 cr.)

This course offers an opportunity for students to gain information and understanding of the various practices and procedures associated with sport administration and management. Organizational structure, management decisions and challenges, as well as career opportunities at the professional, intercollegiate, interscholastic, youth and community sport levels are explored. The areas of sports tourism, sport management agencies and sport facility and event management are analyzed in terms of their impact on the management and business of sports. Prerequisite: SPS 101; Every Year, Spring

SPS 361 Sports Reporting (JRN 361) (3 cr.) This course introduces students to coverage of sports for the news media and includes writing game stories and sports profiles. Prerequisite: JRN 260 or JRN 263; Every Year, Fall and Spring

## SPS 362 The Story of Football (JRN 362) (3 cr.)

 This course traces the historical trajectory of American football and the coaches, players and media portrayals that transformed the game from a 19th-century collegiate test of manliness to what it is today: a spectator sport of immense appeal whose popularity endures despite more than a century of concerns over the game's sometimes lethal and debilitating violence. Prerequisite: SPS 101; Every Year, FallSPS 420 Sports, Media and Society (MSS 420) (3 cr.) This class examines the social, political, economic and historical significance of the intersection of sports, media and society. Some of the questions this course examines include: What role have sports played in shaping cultures throughout history? What is the
relationship between sports and media? How do sports, through the media, influence U.S. culture today? What is the role of sports media professionals in U.S. culture? This course is specifically designed for students interested in sports journalism, production and/or promotion. Prerequisite: SPS 101; Every Year, Spring

SPS 488 Internship (3 cr.) Students have the option to participate in an internship with a sports-related organization. The fieldwork is jointly supervised by the cooperating organization or corporation and the director of the sports studies minor. The internship adheres to standard Quinnipiac University regulations and procedures regarding internships. Requires approval of the sports studies director. Prerequisite: SPS 101; Every Year, All

SPS 490 Newsroom Clinical (JRN 590) (3 cr.) This graduate-level journalism course, open to select SPS seniors, focuses on advanced reporting for multimedia reports, broadcast news, news documentaries and magazine stories. Students produce daily, weekly and longterm stories in their area of expertise for the journalism department's tablet application, among other platforms. While graduate students meet twice a week, undergraduate students would only be required to meet one night a week. Requires senior status and approval of sports studies director. Prerequisite: SPS 101; Every Year, All

## SPS 498 Student Media Independent Study (3 cr.)

This course is designed for SPS minors working for student media groups. Every two weeks, students submit their best work (article, package, game broadcast, etc.) and receive feedback. This independent study is an experiential learning opportunity that includes elements of both an internship, with hands-on experience and supervision, plus a skills class in which students receive feedback on their work. At the end of the semester, students submit their final portfolio as well as a cover letter and resume. Requires approval of the sports studies director. Prerequisite: SPS 101; Every Year, All

Courses offered as needed
SPS 200 Special Topics in Sports Studies (3 cr.)
SPS 300 Special Topics in Sports Studies (3 cr.)
SPS 325 Sports Economics (EC 325) (3 cr.)
Prerequisite: EC 112
SPS 400 Special Topics in Sports Studies (3 cr.)

## University Curriculum

FYS 101 First-year Seminar (3 cr.) The First-year Seminar introduces students to the concept of inquiry as a process that utilizes multiple and diverse perspectives to systematically examine questions or problems. Students learn about inquiry through readings from various disciplines and the investigation of a guiding/ enduring question drawn from the instructor's area of
expertise. By the end of the course, students begin to develop a question that they wish to explore throughout their undergraduate educational experience utilizing the skills and knowledge that they acquired throughout this course. Every Year, All

FYS 101H Honors First-year Seminar (3 cr.) The Honors First-year Seminar introduces students to the concept of inquiry as a process that utilizes multiple and diverse perspectives to systematically examine questions or problems. Students learn about inquiry through readings from various disciplines and the investigation of a guiding/enduring question drawn from the instructor's area of expertise. By the end of the course, students begin to develop a question that they wish to explore throughout their undergraduate educational experience utilizing the skills and knowledge that they acquired throughout this course. Every Year, All

## Women's and Gender Studies (WS)

WS 101 (UC) Introduction to Women's Studies (3 cr.)
This team-taught interdisciplinary course uses lively discussion and compelling readings to consider women's studies in its broad outlines. The participants discuss sexuality, economic and political power, the female body, images of beauty, psychology of gender and the development of feminism through course materials that include novels, short stories, poetry, historical writings and political manifestos. Every Year

WS 210 Human Sexuality (PS 210) (3 cr.) This course focuses on human sexuality as it develops and changes throughout the lifespan, starting with prenatal development and ending with sexuality of the aging. Additional special topics include sexual dysfunction, sexual variance and the law. Prerequisite: PS 101 or PS 133; Every Year, Spring

## WS 219 Women in Political Thought (PO 219)

(3 cr.) Students explore different approaches to explain the status of women. Theoretical perspectives that students consider may include: liberal feminism, radical feminism, Marxist/socialist feminism, feminism of care, conservative feminism and global feminism, among others. Students critically evaluate political concepts such as freedom, equality, rights and oppression, as well as learn about how different thinkers have conceptualized gender, politics, power and the role of the state. The course requires careful reading, intensive class discussion and multiple writing assignments. Prerequisite: PO 101, PO 131, PL 101, PS 101, SO 101 or WS 101; Every Other Year, Spring

WS 232 Women in the Criminal Justice System
(CJ/SO 232) (3 cr.) This course examines the changing
patterns of women's criminality, the experiences of women who are processed as crime victims, and the evolution of women's role in law, law enforcement and corrections. Prerequisite: SO 101; Every Year, Fall

WS 235 (UC) Literature by Women (EN 235) (3 cr.) Virginia Woolf wrote that, for most of history, Anonymous was a woman. The last two centuries have energetically recovered the writings of women and shifted them into equal stature with literature written by men. With the question of what it means to extract a canon of literature defined by gender as its center, this course allows students to consider the ways in which women have contributed a language and form to the literary tradition. In particular, the course explores the process by which this literature, often written from the margins of experience, has shaped how we read today. Varied female authors are discussed, including Woolf, the Brontës, Emily Dickinson, Zora Neal Hurston, Sylvia Plath, Toni Morrison, Sandra Cisneros, Jamaica Kincaid, Leila Abouzeid, and Maxine Hong Kingston, among others. Prerequisite: EN 101 or EN 102H; Every Year, Fall

WS 250 Gender and the Law (LE 250) ( 3 cr.) This course focuses on legal issues regarding gender, including the differential treatment of women and men in the legal system, and contemporary responses to gender issues in society. Every Other Year, Spring

## WS 255 (UC) Sociology of Families (SO 255) (3 cr.)

 In this introductory course, students study families in the U.S. Topics include the ways in which families have evolved over time and the effect of economic and social factors (such as race, class, and gender) on family life. Students learn about families in other cultures and current issues facing families. Prerequisite: SO 101; Every Year, All
## WS 262 (UC) Psychology of Women (PS 262) (3 cr.)

This course presents a study of sex and gender. Issues of women's development are surveyed: socialization, menstruation, self-concept, menopause, productive and reproductive roles and the changing conceptions of femininity and masculinity. Prerequisite: PS 101; Every Year, Fall

WS 285 (UC) Protest and Change (SO285) (3 cr.) This course presents a systematic exploration of the causes and conditions of major social changes. Social movements such as the civil rights and women's movements are studied in terms of their capacity to respond to and generate additional change. Prerequisite: SO 101; Every Other Year

WS 287 Women and Public Policy (PO 287) (3 cr.)
Students examine the major public policy issues affecting gender relations in the U.S. today, including: reproductive rights and abortion, labor policy, welfare policy, sexual
and domestic violence. Students discover the process by which issues of importance to gender equality have historically emerged on the public agenda, the ways in which policy debate is shaped once an issue becomes a public problem and the competing policy paradigms surrounding these controversial policy issues. Prerequisite: PO 131 or WS 101; Every Other Year, Spring

WS 301 Seminar in Women's Studies ( 3 cr.) This seminar provides an opportunity for students to explore a subject (for example: 20th-century women poets, feminist issues from a global perspective) on an advanced level through interdisciplinary readings. Feminist theory is used to analyze materials that cover literature, psychology, history, political science, sociology and communications. Students are encouraged to take responsibility for making decisions about how the material is taught, and for working together to own the experience of scholarship. This course is required of women's studies minors. Junior or senior status is required. Prerequisite: WS 101; Every Other Year, Spring

WS 304 Sociology of Gender (SO 304) (3 cr.) This course focuses on how society constructs notions/images of femininity and masculinity and how this influences our lives. Students look at cultural views of language, body and the media, as well as theoretical approaches to understanding the complexities of gender distinctions in our society. Prerequisites: two courses from WS; Every Year

## WS 308 U.S. Women's History (HS 308) (3 cr.)

This course covers the experience of women in America before 1900. Women's work in the family and community is stressed. Individual research is required. Every Year, All

## WS 309 Women in America: 1920-Present (HS309)

( 3 cr .) This course covers the experience of women from the beginnings of the jazz age to the end of the century. Every Year, All

WS 310 Cross-Cultural Perspectives on Gender, Sex, and Sexuality (AN 310) (3 cr.) This course introduces students to the social and cultural constructions of gender, sex and sexuality around the world. Students discover the way anthropologists approach these topics. They explore the constructions as they relate to notions of biology, family, households, work, migration, inequality/ inequity, economics and class status, violence, and race and ethnicity. Discussions focus on what gender, sex and sexuality are, what they mean and how they theoretically and practically matter as categories. Prerequisites: two courses from AN, SO; Every Year, Fall

WS 311 Diversity in the Media (MSS 311) (3 cr.) This course examines the role of media in the construction of social categories such as gender, race, class and sex-
ual orientation, focusing primarily on the first two. Students learn about the media as one of a number of social institutions including religion, education and family, which influence our understanding of cultural difference. The course presents a variety of perspectives that address diversity in relation to both print and electronic media, emphasizing popular culture. Media diversity issues are analyzed in relation to ownership, representation, audience reception, and the media workforce. Junior standing required. Prerequisites: WS 101, MSS 101 or JRN 160; MSS 220; Every Year, Spring

WS 326 Witches and Werewolves in the Early Modern World (HS 326) ( 3 cr .) This course explores the general belief in witchcraft and other supernatural creatures in the larger context of religion and culture in the early modern world. Participants examine how belief in the supernatural led to a widespread fear and persecution of individuals deemed witches or other consorts of the devil. Using the groundbreaking work of historians, and the primary documents of the period, this course examines the origins and processes of the witch trials. Since approximately 75 percent of those in Europe accused of witchcraft were women, the course examines how gender, misogyny and scapegoating shaped the persecution and prosecution of the more vulnerable members of premodern society. More broadly, the class examines how Christianity both affirmed and condemned these beliefs and practices and how people used superstition to make sense of the world around them. Prerequisite: one course from HS level 200; Every Other Year, Spring

WS 330 Philosophy and Gender (PL 330) ( 3 cr.)
Students investigate the notions of sex and gender and the debate over social versus biological underpinnings of expressions of masculinity and femininity. The relevance of historical views on sex, gender and relations between the sexes to current patterns and developments are considered. Issues facing men and women, as well as policies and reforms designed to address them are examined. Participants also consider the intersection between sex/gender and race, ethnicity, class and sexual orientation. Finally, students consider the impact of gendered perspectives on contemporary philosophy, especially epistemology, ethics and social and political philosophy. Prerequisite: PL 101 and Junior standing (or department approval). Every Other Year, Spring

## WS 335 Images of Women in Psychology and

 Literature (EN 335) (3 cr.) This seminar considers the ways in which psychology and literature depict the female experience. Using readings in both traditional and feminist psychological and literary theory, the course analyzes literary texts by and about women. Topics include: gender and genre, female identity formation and the minority experience. Prerequisites: PS 101; one course from EN level 200; Every Other Year, FallWS 338 American Literature by Women of Color (EN 338) ( 3 cr .) This course presents a study of the diverse literary traditions, themes and narrative strategies employed by non-traditional American women. The ways race, ethnicity and gender affect form, content, language and style of the literature are examined. Writers include: Silko, Erdrich, Morrison, Walker, Angelou, Giovanni, Tan, Kingston, Yamamoto, Cisneros and Viramontes. Prerequisite: one course from WS level 200; Every Other Year, Spring

WS 345 Media Audiences (MSS 345) (3 cr.) This course examines popular, institutional and academic perspectives on media audiences in the U.S. and abroad. Central topics include how people choose and interpret media content, how marketers and media producers perceive audiences and how media researchers attempt to understand audiences. The course also considers popular assumptions about media effects on audiences and includes an in-depth analysis of fan cultures. Prerequisite: junior standing and either WS 101 or MSS 101, JRN 160 and MSS 220; Every Other Year, Fall

Courses offered as needed
WS 315 Women Artists (AR 325) (3 cr.) Prerequisite: AR 102, AR 103, AR 104 or AR 105
WS 370 Intimate Partner Violence Seminar (PS 370) (3 cr.) Prerequisites: two courses from SO, WS, PS, CJ level 200

## Graduate Courses

## Accounting (AC)

AC 613 Financial Statement Analysis (3 cr.) In this course, students gain an additional understanding of the accounting numbers that appear in financial statements for accounts such as receivables, deferred revenue and leases. Topics include revenue recognition, income-statement geography, short-term liquidity, working-capital efficiencies, solvency, cash-flow analysis and quarterly reporting. Also considered are the many reporting choices given to firms and how their use of different accounting methods for similar economic events creates challenges for analysts. Instances of questionable financial reporting and strategies that can aid in their discovery are addressed. Firms' filings of financial statements and note disclosures with the SEC on Form $10-\mathrm{K}$ are examined throughout the course. In addition, the usefulness of governance disclosures contained within firms' proxy statements is considered. Every Year, Fall

AC 620 Financial and Managerial Accounting for Decision Making (MBA 620) (3 cr.) This course provides an introduction to the use of accounting information for decision making in organizations. Topics include reporting and analysis of financial statement information and the use of managerial decision-making tools to support planning and control. Students can receive credit for either AC 620 or MBA 620 but not both. Every Year, All

## Anesthesiology (ANE)

ANE 500 Medical Terminology ( 1 cr.) In this selfpaced, self-study course, students complete a programmed learning text and take a final exam at the completion of the text. Course includes word formulation, association to body systems, standard abbreviations and various surgical procedures. Every Year, Summer

## ANE 501 Ethics and professionalism in Health

 Care ( $\mathbf{1} \mathbf{~ c r}$.) This course covers the fundamentals of professionalism, HIPAA compliance, ethics and the student and ethics of practice. Topics include treating diverse populations, religious considerations, providerpatient challenges, end of life, and case discussions. Every Year, SummerANE 503 Introduction to Clinical Anesthesia (2 cr.) This course includes a brief history of anesthesia. Topics include hazards, universal precautions and infection control, personal protection, approaching the patient, the perioperative period, vascular access,
obtaining arterial blood samples, types of anesthesia, the anesthesia care team, application of ASA basic monitoring requirements, preparing the operating room for the first case of the day, introduction to patient positioning, introduction to induction, maintenance and emergence from anesthesia, and identifying and managing anesthetic emergencies. This course has both a final practical exam and a written final exam at the end of the semester. Every Year, Summer

ANE 503L Intro to Clin Anesthesia Lab (0 cr.) Lab to accompany introduction to clinical anesthesia course. Every Year, Summer

ANE 510 Anesthesia Laboratory I (1 cr.) This course is the first of a three-semester sequence exploring the physical principles of measurements, operation of breathing circuits and mechanical ventilation. Students spend time in the lab setting up and running experiments, collecting data and building PowerPoint presentations that are delivered in class. Labs begin with the study of pressure measurements, flow and resistance, laminar and turbulent flow, Venturi principles, setting gas flows and concentrations, investigating carbon dioxide absorption, solubility and diffusivity of gases, time constants, compliance and resistance of breathing circuits, the circle breathing system, mechanical ventilation, and Mapleson breathing systems. Labs are built to complement material covered in courses ANE 520 Physical and Chemical Principles of Anesthesia and ANE 550 Anesthesia Delivery Systems. Every Year, Summer

ANE 512 Anesthesia Laboratory II (1 cr.) The second of a three-semester sequence, this course focuses on the principles of patient monitoring systems. Students spend time in the lab setting up and running experiments, collecting data and building PowerPoint presentations to deliver in class. They explore the system response and how it affects the displayed waveforms and waveform parameters. They study basic measurements; ECG, noninvasive and invasive blood pressure measurements, pulse oximetry, capnography, airway pressures and flows, thermal dilution cardiac output, Doppler velocity measurement, gas emboli from entraining air into the cardiovascular system. Labs are constructed to complement material covered in the course ANE 554 Patient Monitoring. Every Year, Fall

ANE 514 Anesthesia Laboratory III (1 cr.) This is the third of a three-semester sequence, focusing on the principles of patient monitoring systems and anesthesia machine operation. Students explore starling forces, carbon monoxide production in dry soda lime, catastrophic failure modes of different anesthesia machines, how various anesthesia machines respond to loss of oxygen and air supply, and the loss of power,
and the effectiveness of various scavenging systems. The last lab of the semester is a student design lab in which the students identify a clinical problem of interest, design an experiment to answer the question, run the experiment, collect the data, analyze the data, and develop a PowerPoint presentation that is presented to all students. Labs are built to complement material covered in courses ANE 550 Anesthesia Delivery Systems, ANE 554 Patient Monitoring, and ANE 532 and ANE 534 Cardiovascular Physiology I and II. Every Year, Spring

## ANE 520 Physical and Chemical Principles of

 Anesthesia (2 cr.) This course presents an introduction to units of measure and dimensional analysis; mathematical functions; pressure, flow and resistance; partial pressures; gas laws; solubility and diffusion; osmosis; work energy and power; temperature and thermodynamics; analogous electric circuits; electrical safety; stoichiometry fires and explosions; isotopes and radiation. Every Year, Summer
## ANE 532 Cardiovascular Physiology I (3 cr.)

 This course includes a review of hemodynamics and cardiovascular system; cardiac cycle; the cardiac myocyte; nervous control of the heart; electrocardiogram; control stroke volume and cardiac output; endothelial cell; microcirculation and solute exchange; vascular smooth muscle and control of blood vessels; IV fluid therapy; administration of blood products and plasma volume expanders. Every Year, FallANE 532L Cardiovascular Physiology Lab (0 cr.) Lab to accompany ANE 532. Every Year, Fall

ANE 534 Cardiovascular Physiology II (2 cr.) This course covers specialization in individual circulations; cardiovascular receptors and reflexes; coordinated cardiovascular responses; atherosclerosis; Ischemic heart disease; acute coronary syndromes; valvular heart disease; heart failure; cardiomyopathies; dysrhythmias; hypertension; congenital heart disease; effects of inhalation anesthesia. Every Year, Spring

ANE 534L Cardiovascular Physiology II Lab (0 cr.) Lab to accompany ANE 534 Every Year, Spring

ANE 535 Pulmonary Physiology ( 2 cr .) This course explores pulmonary physiology. Topics include the atmosphere; functional anatomy of the respiratory tract; elastic forces and lung volumes; respiratory resistance; control of breathing; pulmonary ventilation; pulmonary circulation and non-respiratory functions; ventilation and perfusion; diffusion of respiratory gases; mechanical ventilation; carbon dioxide; oxygen and hemoglobin. Every Year, Fall

ANE 537 Pulmonary Physiology II (2 cr.) This course explores respiratory function in pregnancy; neonates and children; respiration during exercise and natural sleep; hypoxia and anemia; hyperoxia and oxygen toxicity; high altitude flying; effects of smoking; acute lung injury; lung transplantation; chronic hypoxia and anemia; ventilatory failure, airway disease; pulmonary vascular disease; parenchymal lung disease; acute lung injury; and artificial ventilation. Every Year, Spring

ANE 538 Autonomic Nervous System Physiology And Pharmacology (2 cr.) Topics include classical and new chemical neurotransmitters; presynaptic modulation and release of neurotransmitter theory; re-uptake and termination of neurotransmitters; action potentials and junction potentials; central autonomic control; peripheral autonomic nervous system; autonomic neuroeffector junction; autonomic neuromuscular transmission; dopaminergic neurotransmission and receptors; noradrenergic transmission and receptors; purinergic neurotransmission; acetylcholine and muscarinic receptors, acetylcholine and nicotinic receptors; acetylcholine esterase; amino acid, peptidergic and nitrergic neurotransmission; Cardiac and visceral afferents; autonomic control of airways; autonomic control of cardiac function; neurogenic control of blood vessels; autonomic control of cerebral circulation and the renal circulation. Every Year, Fall

ANE 539 Renal Physiology (1 cr.) This course covers basic renal processes, excretion of organic molecules, control of sodium and water excretion, regulation of extracellular volume and osmolarity, renal hemodynamics, and regulation of sodium, potassium and acid-base balance. Renal pathology includes diabetic nephropathy; interstitial nephritis; acute tubular necrosis; renal allograft rejection; and dialysis. Every Year, Spring

ANE 540 General Pharmacology (3 cr.) This course covers pharmacokinetics and pharmacodynamics, drug absorption, distribution, action and elimination, membrane transporters, pharmacogenetics, drug therapy, drug addiction and drug abuse, therapy of hypertension, pharmacotherapies of epilepsies, therapy of hypercholesterolemia and dyslipidemia, drug therapy of inflammation, chemotherapy of microbial diseases, drugs affecting gastrointestinal function, hormones and hormone antagonists including control of diabetes. Every Year, Spring

ANE 544 Pharmacology for Anesthesia I (2 cr.) In this course, emphasis is placed on drugs specifically related to the practice of anesthesia: inhaled anesthetics, local anesthetics, opioids, hypnotics and sedatives, anxiolytics, muscarinic agonists and antagonists,
anticholinesterase, neuromuscular junction blockers, autonomic ganglia, adrenergic agonists and antagonists, serotonin agonists and antagonists. Every Year, Spring

ANE 546 Pharmacology for Anesthesia II (2 cr.) In this course, emphasis is placed on histamine antagonists, dopaminergic agonists, pharmacology of asthma, analgesic antipyretic agents, diuretics, vasopressin, renin and angiotensin, treatment of myocardial ischemia, pharmacotherapy of congestive heart failure, antidysrhythmics, calcium channel blockers, pharmacotherapy of diabetes, procoagulants and anticoagulants, thrombolytics and antiplatelet drugs, and antimicrobials. Every Year, Summer

ANE 550 Anesthesia Delivery Systems ( 2 cr .) This course presents an introduction to the anesthesia delivery system including gas distribution systems, anesthesia machines, breathing circuits, anesthesia ventilators, scavenging waste gases and monitoring pollution, and risk management, along with critical incidents in anesthesia and resuscitation equipment. Every Year, Summer

ANE 554 Patient Monitoring ( $\mathbf{3} \mathrm{cr}$.) This course covers the fundamental principles of measurement; measuring adequacy of perfusion, the principles, application and interpretation of various monitoring modalities including: ECG, invasive and noninvasive blood pressure, oximetry, temperature, cardiac output, respiratory gas analysis, monitoring the breathing circuit and the lungs. Additional topics include intraoperative neurophysiologic monitoring, renal function, coagulation/hemostasis and neuromuscular junction. Every Year, Fall

## ANE 556 Advanced Patient Monitoring and

 Anesthesia Delivery Systems (3 cr.) This course covers advanced concepts of arterial pressure monitoring, ICP monitoring, transesophageal echocardiography, electric and radiation safety, and the hazards and complications of monitoring patients during anesthesia. Additional topics include examination of the newest generation of anesthesia delivery systems and evaluation of catastrophic failure modes, troubleshooting and resolving problems during anesthesia delivery, and discussion of advanced concepts of mechanical ventilation. Every Year, Summer
## ANE 560 Principles of Airway Management

(2 cr.) Students learn to recognize the difficult airway and have an opportunity to practice basic airway management techniques including pre-oxygenation, $\mathrm{bag} /$ mask ventilation, simple oral and nasal intubation techniques, oral and nasal airways, and application of laryngeal mask. The course involves scheduled time in the mock operating room to practice and become proficient at basic airway management skills. There is a mannequin-based practical exam in addition to an in-class final exam Every Year, Summer

ANE 563 Principles of Airway Management II (2 cr.)
The study of airway management continues with advanced techniques of airway management including fiber optic oral and nasal intonation, use of the retrograde wire, Combitube, light wands, placement of double lumen tubes and complications of endotracheal intubation. Students are required to spend time in the mock operating room becoming proficient at each technique. There is a mannequin-based practical exam in addition to an in-class final exam. Every Year, Fall

## ANE 563L Principles of Airway Management II Lab

 ( 0 cr.) Lab to accompany ANE 563. Every Year, FallANE 565 Advanced Airway Management (1 cr.) Students learn management of the difficult airway, including identification of appropriate airway management techniques for the difficult pediatric and adult airway, review of the ASA Difficult Airway Algorithm, physiologic response to intubation and the surgical airway. Students are required to spend time in the mock operating room to develop the ability to assess the airway and apply the most appropriate technique to use for normal and difficult airways, including two additional back-up approaches. There is a mannequinbased simulation practical exam in addition to an in-class final exam. Every Year, Summer

## ANE 570 Anesthesia Principles and Practices I

( $3 \mathbf{c r}$.) This is the first of a three-semester sequence of courses in which students are introduced to the clinical management of patients within the entire range of age and illness undergoing a wide spectrum of surgical procedures. Students learn to develop efficacious and safe anesthetic plans for medically diverse patients. Students are presented with unique issues from each type of patient, and learn how to modify a plan to accommodate these complexities. Students learn to identify specific concerns unique to each surgical subspecialty. The course consists of both didactic lectures and small group discussions, which focus on the specific needs of certain patient populations and the unique requirements they impose on the anesthesia team. The first segment includes anesthesia and co-morbidities for gastrointestinal surgery, gynecologic surgery, common orthopedic surgery, genitourinary surgery, ophthalmic surgery and otolaryngology surgery. Every Year, Fall

ANE 570L Anesthesia Principles and Practices I Lab ( 0 cr.) Lab to accompany ANE 570. Every Year, Fall

ANE 572 Anesthesia Principles and Practices II (3 cr.) This course is a continuation of ANE 570 with cases of increasing complexity and additional co-morbidities. Topics include anesthesia and co-morbidities for plastic/reconstructive surgery, common pulmonary thoracic surgery, general surgery for endocrine diseases, major

GI surgical procedures, complex orthopedic surgeries, renal disease and complex genitourinary surgery, vascular surgery, obstetric procedures, common pediatric surgeries and neonatal surgery. Every Year, Spring

ANE 572L Anesthesia Principles and Practices ( 0 cr .) lab to accompany ANE 572

ANE 574 Anesthesia Principles and Practices III (3 cr.) This course is a continuation of ANE 572 with cases of increasing complexity and additional co-morbidities. Topics include anesthesia and co-morbidities for neurosurgery, cardiac surgery, complex neonatal and pediatric surgery, transplant surgery, pediatric cardiac surgery, trauma and complex orthopedic surgery, anesthesia outside of the operating room suite, managing burns and shock, anesthetic complications and practice-related issues. Every Year, Summer

ANE 576 Regional Anesthesia I ( 2 cr .) Through classroom lectures, students learn about the overall practice of regional anesthesia and how to determine when regional anesthesia is preferred over general anesthesia. Students gain an understanding of the anatomy specific for each type of regional block as well as techniques for establishing the block and the local anesthetics. Students learn and practice sterile techniques and placement of spinal and epidural blocks using the patient simulator. Management of the complications associated with these blocks is discussed. The course includes a skills lab, in which students are practice the techniques of neuraxial blockade to reinforce concepts taught in the lecture portion of the course. There is a practical final exam in addition to the in-class final exam. Every Year, Spring

ANE 576L Regional Anesthesia I Lab (0 cr.) Lab to accompany ANE 576. Every Year, Spring

ANE 577 Regional Anesthesia II (2 cr.) Students gain an understanding of the use of ultrasound guidance and peripheral nerve stimulation for peripheral nerve blocks. They learn anatomy and surface landmarks and proper placement of local anesthetics for femoral, popliteal, ankle, sciatic, cervical plexus, recurrent laryngeal nerve and retrobulbar blocks. Effective management of complications arising from these blocks is presented. The course also includes a skills lab in which students practice the techniques of neural blockade to reinforce concepts taught in the lecture portion of the course. There is a practical final exam in addition to the in-class final exam. Every Year, Spring

ANE 579 Pre-Anesthetic Evaluation (2 cr.) This course covers techniques for examining patients in the process of the preoperative patient evaluation, gathering data by patient interviews and chart reviews, including basic ECG interpretation. It includes recording of rel-
evant laboratory data as well as the summarization of preoperative consultations and special studies. Every Year, Summer

## ANE 585 Simulation for Assessment of Clinical

Acumen (1 cr.) Students are faced with various clinical scenarios, which are delivered through a mannequin, and work individually to appropriately assess and manage each situation. Every Year, Summer

ANE 587 Intensive Clinical Practicum (1 cr.) Students who are having difficulty with clinical skills or translating knowledge into clinical practice may be required to spend additional time outside of the normal course work in the operating room with a preceptor to develop skills and knowledge that are equivalent to other students in the program. This may include weekend, evening or vacation time. Every Year, All

ANE 588 Individual Directed Study (1 cr.) This course permits first-year students to study a particular problem or area of emphasis in anesthesiology that is not covered in-depth in the program curriculum, under the direction of a faculty member. This may be used for student research. Every Year, All

ANE 589 Remedial Studies ( 1 cr .) This course permits first-year students, under the direction of a faculty member, to enroll for review in an area of emphasis in anesthesiology in which the student is having difficulty. Every Year, All

ANE 590 Clinical Anesthesia I (2 cr.) During semesters two through four of the program, students develop knowledge and skills in delivering anesthesia and managing patients receiving anesthesia; in patient interviewing and physical examination; vascular access; and basic airway management. Clinical activity occurs at the end of each semester in the first year of the program. The knowledge and skills defined in the task progression must be mastered for each clinical rotation before the student may advance to the next clinical rotation. Each successive semester provides increasing responsibility and increased complexity for the student. Students are assigned to a single clinical site for the entire first year of the program. ( 45 hours/week for 4.5 weeks) Every Year, Fall

ANE 592 Clinical Anesthesia II (2 cr.) This is a continuation of ANE 590, the three-semester sequence of hospital-based clinical education and training. (45 hours/week for 5.5 weeks) Every Year, Spring

ANE 594 Clinical Anesthesia III (3 cr.) This is a continuation of ANE 592, and is the last semester of the three-semester clinical sequence. By the end of the semester IV, students should be able to deliver a safe
anesthetic for an ASA physical status I patient with an uncomplicated airway. The student must be able to effectively participate as a member of the anesthesia care team in more difficult cases up to ASA physical Status III. ( 45 hours/week for 7.5 weeks) Every Year, Summer

ANE 650 Second Year Seminar I (2 cr.) The course is based on a four-week clinical rotation cycle and is delivered real-time by video teleconference throughout the U.S. During the first week, students deliver a PowerPoint presentation on particular patient and procedure in whose care they participated. In week two, students present an article from the current anesthesia literature. In week three, students are given a patient scenario and asked to analyze the untoward outcome hazard or complication, and describe how the patient may be better managed from careful attention to monitoring, rapid detection of the abnormality, and treatment of the problem. In the final week, students deliver a presentation from the surgeon's perspective, including the patient's symptomology, the surgical procedure, the intraoperative issues and potential postoperative complications from the surgeon's and the anesthetic perspectives. Every Year, Fall

ANE 652 Second Year Seminar II (2 cr.) The course is based on a four-week clinical rotation cycle and is delivered real-time by video teleconference throughout the U.S. During the first week, students deliver a PowerPoint presentation on a particular patient and procedure in whose care they participated. In week two, students present an article from the current anesthesia literature. In week three, students are given a patient scenario and asked analyze the untoward outcome hazard or complication, and describe how the patient may be better managed from careful attention to monitoring, rapid detection of the abnormality, and treatment of the problem. In the final week, students deliver a presentation from the surgeon's perspective, including the patient's symptomology, the surgical procedure, the intraoperative issues and potential postoperative complications from the surgeon's and the anesthetic perspectives. Every Year, Spring

ANE 654 Second Year Seminar III (2 cr.) The course is based on a four-week clinical rotation cycle and is delivered real-time by video teleconference throughout the U.S. During the first week, students deliver a PowerPoint presentation on a particular patient and procedure in whose care they participated. In week two, students present an article from the current anesthesia literature. In week three, students are given a patient scenario and asked analyze the untoward outcome hazard or complication, and describe how the patient may be better managed from careful attention to monitoring, rapid detection of the abnormality, and treatment of the problem. In the final week, students
deliver a presentation from the surgeon's perspective, including the patient's symptomology, the surgical procedure, the intraoperative issues and potential postoperative complications from the surgeon's and the anesthetic perspectives. Every Year, Summer

ANE 670 Anesthesia Review I (1 cr.) Students are required to read specific chapters in a nationally recognized authoritative textbook during their secondyear clinical rotations, and are tested on the contents of those chapters at the end of each four-week rotation. Required reading is linked to specialty rotations and general rotations. Every Year, Fall

ANE 672 Anesthesia Review II (1 cr.) Students are required to read specific chapters in a nationally recognized authoritative textbook during their secondyear clinical rotations and be tested on the contents of those chapters at the end of each four-week rotation. Required reading is linked to specialty rotations and general rotations. Every Year, Spring

ANE 674 Anesthesia Review III (1 cr.) Students are required to read specific chapters in a nationally recognized authoritative textbook during their secondyear clinical rotations, and are tested on the contents of those chapters at the end of each four-week rotation. Required reading is linked to specialty rotations and general rotations. Every Year, Summer

## ANE 687 Individual Clinical Practicum (1 cr.)

 This course permits students to enroll for review and participation in clinical areas where the student requires or requests additional clinical work. This may include general rotations or subspecialty rotations of clinical anesthesia. Every Year, AllANE 688 Individual Directed Studies ( 1 cr .) This course permits students in their final year to study a particular problem or area of emphasis in anesthesiology that is not covered in-depth in the program curriculum, under the direction of a faculty member. This may be used for student research. Every Year, All

ANE 690 Clinical Anesthesia IV (6 cr.) During the second year (final 12 months) of the program, students are in the operating room full time. Clinical rotations are assigned in three- or four-week blocks. Rotations include open and laparoscopic surgery for: general surgery; orthopedic surgery; ophthalmology; genitourinary surgery; gynecology; ear, nose and throat; vascular surgery; thoracic surgery, trauma surgery and transplantation as well as anesthetizing sites outside of the operating room in radiology, the gastrointestinal lab and the electrophysiology lab. Students also have mandatory four-week rotations in recognized subspecialty areas of anesthesia: pediatrics; obstetrics; neurosurgery; and
cardiac surgery. Clinical rotations are scheduled in both academic and private practice hospitals in many states across the country. Every Year, Fall

ANE 692 Clinical Anesthesia V ( 6 cr.) This course is a continuation of ANE 690. (45 hours/week for 15 weeks) Every Year, Spring

ANE 694 Clinical Anesthesia VI (6 cr.) This course is a continuation of ANE 692. (45 hours/week for 15 weeks) Every Year, Summer

## Biology (BIO)

BIO 505 Writing and Science ( 3 cr.) This course reviews how scientific results and ideas are communicated and reviewed. Course content includes the storage and retrieval of scientific information, data presentation (table, figures, graphics), the writing of reports and papers as well as the preparation of publications for peer review. Copyright, patent law and the ethical issues involved in scientific communication also are considered. Assignments include oral and written presentations and attendance at assigned seminars and meetings. Every Year, Fall

BIO 515 Advanced Biochemistry ( 4 cr .) This course offers advanced insights into major areas of biochemistry, including the structure and function of biological molecules, cell and membrane structure and function, bioenergetics and enzyme function, and cellular metabolism. This is a suitable prerequisite for many graduate courses. Every Year, Fall

BIO 568 Molecular and Cell Biology (4 cr.) This course examines the basic molecular biology of the cell, including the structure and composition of the cell's macromolecules, cell organelle structure, biosynthesis and regulation, and the mechanisms by which the cell communicates with its external environment and other cells. Every Year, Spring

BIO 571 Molecular Genetics ( 4 cr .) This study of the prokaryotic and eukaryotic genetic material includes transcription, translation, DNA replication and repair, gene cloning techniques, the regulation of the synthesis of gene products and genomics. Emphasis is placed on new genetic techniques that are used in industry and medicine. Every Year, Fall

BIO 605 DNA Methods Laboratory ( 4 cr .) These laboratories enable students to develop hands-on experience with the basic techniques in cell biology and molecular biology pertaining to DNA purification, modification and analysis. Prerequisite: BIO 571; Every Year, Spring

BIO 606 Protein Methods Laboratory (4 cr.) These laboratories enable students to develop hands-on experience with the basic techniques in cell biology and molecular biology pertaining to protein purification and analysis. Prerequisite: BIO 515; Every Year, Fall

## BIO 675 Comp Exam in Molecular and Cell Biology

( 2 cr .) The written comprehensive exam is a requirement of the non-thesis option for the MS degree in molecular and cell biology. Students must demonstrate both breadth and depth of knowledge by illustrating a command of the subject matter obtained from individual courses into unified concepts which link the student's own specialization to other fields of study. Students are encouraged to meet with the program director before registering for the comprehensive exam. Minimum grade of 3.0 is required to pass the Comprehensive Examination. Prerequisites: BIO 515, BIO 568, BIO 571, BIO 605, BIO 606; Every Year, Fall and Spring

Courses offered as needed
BIO 562 Bioinformatics ( 3 cr .)
BIO 580 Animal Cell Culture (4 cr.) Prerequisite: BIO 605 or BIO 606
BIO 589 Neurophysiology (3 cr.)
BIO 650 Thesis I
BIO 650 Thesis II
BIO 688 Independent Study for Thesis

## Biomedical Sciences (BMS)

BMS 502 Research Methods ( 4 cr .) This course involves topics related to developing scientific, analytical and laboratory skills, including written and oral communication, critical thinking and reasoning, scientific inference and information literacy. The purpose of the course is to examine, discuss and perform current methods used by research scientists and health care workers. Topics include recombinant DNA and protein techniques, Enzyme Linked Immunosorbent Assays, as well as experimental design and data analysis. Every Year, Fall and Spring

BMS 508 Advanced Biology of Aging (3 cr.) Why we age has been the eternal question and the most unsolved mystery in the history of mankind. However, we are gradually able to elucidate some of the secrets that regulate aging processes. This course focuses on the fundamental physiological deviations that occur during the aging process in individual tissue and organ systems and the various theories that attempt to define the reasons for these deviations. The course also emphasizes pathologies related to aging that are time regulated alterations in cellular, physiological and biochemical functions. Every Year, Fall

BMS 510 Biostatistics (3 cr.) This course covers the application of statistical techniques to the biological and health sciences. Emphasis is on mathematical models, collection and reduction of data, probabilistic models estimation and hypothesis testing, regression and correlation, experimental designs and non-parametric methods. Every Year, All

BMS 511 Writing for Scientists (3 cr.) Students develop skills in expository writing in the context of scientific forms. This course covers how to construct a hypothesis and develop an argument through analysis and critical thinking, how to write and present research papers, and other related topics. Intensive written exercises draw on student experience to clarify professional expression in practical situations. Readings include journalistic and scientific articles. Every Year, Fall

BMS 515 Advanced Pathophysiology I (3 cr.) Essential concepts of pathophysiology are emphasized. Normal function and selected disorders are studied especially as they relate to homeostatic and defense/repair mechanisms. Where appropriate the course includes clinical correlations of disease states with symptoms and physical findings. Every Year, Fall

## BMS 516 Advanced Pathophysiology II (3 cr.)

 Concepts of pathophysiology are continued in this course, with an emphasis on selected disorders of the human system. Relationships between normal physiologic function, pathogenesis and pathology are discussed. The course includes clinical correlations of disease states with physical and laboratory findings. Prerequisite: BMS 515; Every Year, SpringBMS 517 Human Embryology (3 cr.) This course considers the fundamental processes and mechanisms that characterize the embryological development of the human organism. Knowledge of the developing human serves as a basis for understanding normal relationships of body structures and causes of congenital malformation. Emphasis is on clinical as well as classical embryology. Every Other Year, Fall

BMS 518 Pathophysiology ( 3 cr.) Disease processes are studied as they relate to normal physiological and homeostatic mechanisms, basic pathology, pathogenesis, and defense/repair mechanisms. Where appropriate, the course includes some clinical correlations of disease states with signs, symptoms and lab findings. This course also is offered online in the spring. Every Year, Fall and Spring

BMS 520 Neuropharmacology ( 3 cr ) This course explores the effect of drugs on cells, synapses and circuits within the nervous system. Students examine neurotransmitter and neuromodulatory systems in
depth as pharmacotherapeutic targets for the treatment of psychiatric and neurological disorders. Students also comprehensively evaluate the effect of drugs on cognition and behavior. Every Year, Spring

BMS 521 Advances in Hematology ( $\mathbf{3}$ cr.) This course covers fundamental concepts and advances in human hematology including an in-depth study of the function, physiology and diseases associated with blood cells, hematopoiesis, bone marrow examination, evaluation of red cell morphology, disease processes that lead to abnormal red cell morphology, anemias and thalassemias, white blood cell differentiation, and white blood cell disorders both benign and malignant, in-depth discussion of the morphologic and immunologic classification of leukemias, a review of myelodysplastic syndromes, myeloproliferative disorders, lymphomas and lipid storage disease and platelets. Emphasis on identifying normal and abnormal WBC and RBC and indices as leads to diagnosis using the hemogram, blood smears and case studies. Course includes an overview of general hematological methods and molecular hematologic techniques used in the diagnosis of blood cells disorders. Every Other Year, Fall

BMS 522 Immunology ( $\mathbf{3} \mathbf{c r}$.) This course examines theories, techniques and recent advances in immunology and the latest knowledge on immunoglobulins, complement, the role of T and B cells in immune response study of allergy, tumor and transplantation immunology, and autoimmune diseases. The principles of immunology and how they apply to the diagnostic laboratory are discussed. Techniques studied include immuno- and gel-electrophoresis and fluorescent antibodies. Every Year, Spring

## BMS 525 Vaccines and Vaccine Preventable Diseases

( 3 cr .) This immunology course involves the investigation of vaccines and vaccine preventable diseases. The purpose of the course is to examine and discuss the current understanding of vaccinations, as well as the historical and current implication of vaccine preventable diseases. By the end of the semester, students should gain knowledge about vaccine preventable diseases, understand how vaccines work, how they are made, who recommends vaccines, the childhood vaccination schedule, when they should be given and why they are still necessary. Most importantly, students should be able to explain why vaccines are safe, and to be able to debunk the current myths and misconceptions regarding vaccines. Upper-level undergraduates may take course with permission. Every Year, Fall

BMS 526 Epidemiology ( 3 cr.) This graduate-level course in epidemiology directs itself toward application of epidemiological principles. The course involves analysis of prospective and retrospective studies, cross-
sectional studies and experimental epidemiology. Both communicable and chronic disease case studies are used, as well as case studies of occupationally induced diseases. The use of biostatistics in epidemiological studies is stressed. This course covers basic epidemiology principles, concepts and procedures useful in the surveillance and investigation of health-related states or events. Every Other Year

BMS 531 Human Clinical Helminthology (4 cr.) This course provides students with a fundamental understanding of the etiology, pathology, symptomology, treatment and epidemiology of diseases caused by helminth parasites. The course has both a lecture and lab component with the laboratory component emphasizing diagnosis. Every Other Year, Fall

BMS 532 Histology ( $\mathbf{4} \mathbf{c r}$.) This course is intended for pathologists' assistant students with a background in basic descriptive microscopic anatomy. The lecture material includes the microscopic and ultramicroscopic structure of cells, tissues and organs with emphasis on biochemical composition and distribution as related to functional mechanisms. The laboratory work involves the preparation of microscope slides of normal vertebrate tissues, including those of humans, for histological and histochemical studies as the student may expect to encounter in the clinical laboratory. Every Year, Spring

BMS 532L Histology Lab (0 cr.) Lab to accompany BMS 532. (3 lab hrs.) Every Year, Fall

## BMS 533 Air, Water and Soil Microbiology (4 cr.)

This in-depth graduate course examines the ecology of microorganisms in the water and air, as well as the medical and public health considerations of these organisms. Students explore the role of bacteria, algae, virus, protozoa and fungi in the air, soil and both natural and treated water. A lab is included that surveys standard techniques, as well as investigates innovative and experimental techniques in this exciting field of study. Every Other Year

BMS 535 Histochemistry ( 3 cr.) This course is intended for pathologists' assistant students with a background in basic descriptive microscopic anatomy. The lecture material includes the microscopic and ultramicroscopic structure of cells, tissues and organs with emphasis on biochemical composition and distribution as related to functional mechanisms. The lab work involves the preparation of microscope slides of normal vertebrate tissues, including those of humans for histological and histochemical studies as the student may expect to encounter in the clinical laboratory. Every Year, Spring

BMS 535L Histochemistry Lab (0 cr.) This lab accompanies BMS 535. Every Year, Spring

BMS 536 Endocrinology ( $\mathbf{3}$ cr.) This course introduces students to 1) an intensive understanding of the mechanism of hormone action; 2) the importance of the interrelationship among all hormones; 3) a detailed clinical situation dealing with hormonal aberrations; and 4) a theoretical and practical method for hormone assays. Every Other Year, Spring

BMS 542 Advanced Microbiology (3 cr.) This intensive classroom and lab study demonstrates the relevance and importance of microbiology in our society. Detailed studies illustrate the interactions between microorganisms and other organisms, especially man. The role of microbes in the food industry, pathology, protection from disease, environmental issues, recombinant DNA research and biotechnology also are discussed. Every Year, Fall

BMS 552 Toxicology ( 3 cr .) Biochemical toxicology is the branch of science that deals with events at the molecular level in which toxic compounds interact with living organisms. It is fundamental to the understanding of toxic reactions and therapeutic agents, and for the assessment of toxic hazards by chemicals and related substances in the environment. This course deals with compounds exogenous to normal metabolism, as well as metabolic intermediates, hormones, trace elements and other materials found in the environment. It examines the absorption, distribution, kinetics and elimination of such substances. Particular emphasis is placed upon the effects of toxic materials on neurotoxicity, hepatotoxicity, genetic toxicology and chemical carcinogenesis. Every Other Year, Spring

BMS 561 Immunohematology ( $\mathbf{3}$ cr.) This course examines the current concepts of hematopoiesis, including red blood cell and white blood cell morphogenesis, blood banking, blood typing, donor selection, adverse transfusion reactions, ABO antigens/antibodies, crossmatching, the structure and function of the components of normal blood and bone marrow, pathological processes that occur in the blood and bone marrow, and the normal and abnormal events during hemostasis. Every Other Year, Fall

## BMS 562 Blood Coagulation and Hemostasis (3 cr.)

This study of the basic principles of hemostasis includes the vascular component, platelet physiology and function, coagulation factors/fibrin clot formation and fibrinolysis. Hereditary and acquired forms of hemorrhagic disorders and thromboembolic disease are examined in detail along with the test procedures for their diagnoses and the initiation of proper therapy. Every Third Year, Fall

BMS 563 Anemias ( $\mathbf{3} \mathrm{cr}$.) This study of those classes of disorders related to abnormal red cell pathophysiology includes both intracorpuscular and extracorpuscular
defects. Erythropoiesis and basic red cell metabolism are briefly reviewed. Etiologies, differential diagnoses, and treatment of anemias are discussed in depth. Every Other Year, Fall

BMS 564 Fundamentals of Oncology ( 4 cr ) This course presents a study of the chemical and biological basis of carcinogenesis, natural history of human cancer, biochemistry of cancer, various aspects of experimental oncology including tumor immunology, and factors affecting survival and multiplication of cancer cells in the body. Delivery methods include weekly discussions on original research papers that correlate clinical studies with the molecular mechanisms presented in lecture.
Every Other Year, Fall
BMS 565 Leukemia ( 3 cr .) This course includes in-depth discussions with emphasis on the major forms of leukemia (ALL, CLL, AGL, CGL), current methods of blood component therapy and chemotherapy, the role of infections, immunological diagnostic advances, psychiatric and social aspects in patient management and recent advances in leukemia research. The purpose of the course is to enhance knowledge and understanding of those students who have had an introductory course in hematology and those who are actively involved in clinical or research hematological laboratories. Every Other Year, Fall

BMS 569 Antimicrobial Therapy ( 3 cr .) This graduate-level course explores the antimicrobial agents used to treat infectious diseases by inhibiting microbial growth and survival. This interactive, discussion-based class investigates the history, current status and future directions of antimicrobial drugs with an emphasis on antibacterial and antiviral chemotherapeutic agents. Topics include the mode of action and efficacy of drugs, as well as the development, spread and mechanisms of drug resistance. Upper-level undergraduates may take this course with permission. Every Year, Spring

BMS 570 Virology ( 4 cr .) This course presents a study of human and animal viruses, viral diseases, biochemical properties, and classification methods of isolation and identification of viral agents; preparation and inoculation of tissue culture, animals and embryonated eggs, immunological techniques, and antiviral chemotherapy. Every Year, Fall

BMS 572 Pathogenic Microbiology (4 cr.) This graduate microbiology course involves the study of medically important microbes, with a particular emphasis on the pathology associated with human infection. Students examine the underlying principles of microbial pathogenesis, including elements of structural biology, epidemiology, immunology and pathology. They also survey microbial organisms that plague mankind today. Every Year, All

BMS 573 Mycology ( 3 cr .) The morphology, taxonomy and classification of fungi and yeasts of medical importance are studied in this class. Laboratory exercises include isolation and identification techniques of selected human pathogens. Every Other Year, Fall

BMS 575 Food Microbiology (4 cr.) This applied course in microbiology is concerned with the microorganisms involved in the manufacture and spoilage of foods. Major pathogens that may be transmitted via foods are discussed. Laboratory stresses both identification of food-associated organisms and standard microbiological procedures used to determine the quality and safety of foods. Upper-level undergraduates may take course with permission. Every Year, Summer

## BMS 576 Drug Discovery and Development (3 cr.)

The material presented in this course encompasses the process of drug discovery and development. Topics covered include many aspects of drug development such as target identification, evaluation and screening, all phases of clinical development and post-marketing activities. The material presented is across drug classes, with a particular focus on psychoactive and neurology compounds. Every Other Year, Fall

## BMS 584 Emerging and Re-emerging Infectious

Diseases ( 3 cr .) This graduate-level course discusses current topics related to the plethora of infectious agents that besiege us. Emerging bacterial, protozoal and viral diseases, whether strictly animal or human or zoonotic pathogens, represent an increasing threat to animal and human health. The course examines, defines and discriminates between emerging, re-emerging and other infectious diseases; defines host and agent characteristics and risk factors; and analyzes social, economic and international trade changes, improper use of antibiotics, and multidrug resistant infectious agents as factors of emerging diseases. Upper-level undergraduates may take this course with permission. Every Other Year, Fall

BMS 585 Outbreak Control (3 cr.) An outbreak or epidemic is the occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time. Usually, the cases are presumed to have a common cause or to be related to one another in some way. Public health agencies must decide whether to handle outbreaks without leaving the office, or spend the time, energy and resources to conduct field investigations. The most important reason to investigate is to learn enough about the situation to implement appropriate control and prevention measures. Investigations also enable researchers to advance knowledge about the disease, agent, risk factors and interventions; provide a way to respond to public, political or legal concerns; evaluate a health program's effectiveness and weaknesses; and provide
training. When multiple agencies are involved in the investigation, coordination and communication become even more essential. Upper-level undergraduates may take this course with permission. Every Other Year, Fall

BMS 595 Transplantation Immunology (3 cr.) This course examines the current understanding of the major histocompatibility complex; the molecular basis of alloreactivity; and immunological mechanisms of allograft rejection, tolerance, and graft versus host disease. The objectives are: to understand the basics of the histocompatibility complex in relation to normal, disease and transplantation states, to understand the fundamental differences between immune responses to self antigens, foreign antigens, allo-antigens, and other non-self antigens, and to become familiar with the mechanisms underlying successful allogeneic transplantation and appreciate the concepts of immunosuppression and tolerance. Graduate level students are expected to complete a paper reviewing a current topic in transplantation. A basic understanding of immunology is desirable. Upper-level undergraduates may take course with permission. Every Year, Spring

BMS 596 Immunology of Infectious Diseases (3 cr.)
This graduate-level course examines the principal aspects of immune response to all types of infectious agents, with an emphasis on the immune system primarily as a host defense system. Students explore how the dialogue between different types of pathogen and the host immune system works, as well as the cross talk between the different members of the immune response. Infection is an encounter between a microbe and the host. In contrast to topics such as pathogenic microbiology, this course is aimed at the host side of the interaction, both from the innate immune response and the acquired immune response. Autoimmunity, sometimes a side effect of infectious disease, also is discussed. Upper-level undergraduates may take course with permission. Every Other Year, Fall

BMS 598 Synaptic Organization of the Brain (3 cr.) Students study a variety of brain regions from both an anatomic and physiologic viewpoint to learn how these structures are organized at the synaptic level. The course includes a discussion of how these regions are associated with neurological disease. At the end of the class, students should: 1) understand the basic principles of neuronal functioning at the cellular and circuit level; 2) understand how the wide diversity of neural circuits seen in the brain generate specific functions in different regions; and 3) gain experience reading and interpreting scientific papers. Every Year, Spring

BMS 599 Biomarkers ( 3 cr.) Technological advances in molecular biology have provided an opportunity to evaluate drug-disease relationships at the molecular and
cellular level. The goal of this course is to introduce the concept of biomarkers and how they are used clinically. This course covers both theoretical concepts and practical applications of biomarkers. Topics include the rationale for biomarkers, study design, logistics of sample collection/storage, options and techniques for analysis, as well as current applications in health care, including drug safety, regulatory issues, ethical considerations and the future direction of biomarker applications. Every Other Year, Spring

BMS 622 MED Cross-Listed Selective ( 3 cr.) BMS course to be cross-listed with a MED Course. Every Year, All

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Courses offered as needed
BMS 527 Pharmacology ( 3 cr.)
BMS 528 Advanced Clinical Parasitology ( 4 cr .)
BMS 529 Medical Entomology ( 4 cr.)
BMS 530 Human Clinical Protozoology (4 cr.)
BMS 542L Advanced Microbiology Lab (0 cr.)
BMS 574 Microbial Physiology (4cr.)
BMS 578 Cellular Basis of Neurobiological Disorders (3 cr.)
BMS 579 Molecular Pathology (3 cr.)
BMS 581 Receptors and Regulatory Mechanisms
( 3 cr .)
BMS 583 Forensic Pathology (3 cr.)
BMS 591 The New Genetics and Human Future (3 cr.)
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## Business Analytics (BAN)

## BAN 610 Introduction to Business Analytics

( 3 cr.) This course provides an introduction to business analytics concepts, methods and tools used to transform data for improved decision making. Students utilize modeling tools to summarize, visualize and understand useful information from historical data. Optimization and simulation models are introduced using Excel and SAS. Every Year, Fall and Spring

BAN 615 Predictive Modeling (3 cr.) The course introduces the techniques of predictive modeling and analytics in a data-rich business environment. It covers the process of formulating business objectives, data selection, preparation and partition to successfully design, build, evaluate and implement predictive models for a variety of practical business applications (such as marketing, customer retention, delinquency and collection analytics, fraud detection and insurance). Predictive models such as classification and decision trees, neural networks, regressions, pattern discovery analysis and other techniques are studied. Every Year, Fall and Spring

BAN 620 Text Mining (3 cr.) This course builds upon previously introduced data mining methods, focusing specifically on techniques for text extraction
and mining. Topics include efficient text indexing; document clustering and classification; information retrieval models; enhancement of structured data; scenario detection techniques; and using textual data in predictive models. Prerequisites: CIS 620, CIS 627; Every Year, Fall and Spring

BAN 650 Data Visualization ( 3 cr .) This course provides an introduction as well as hands-on experience to the field of data visualization. Students learn basic visualization design and evaluation principles to create meaningful displays of quantitative and qualitative data. They learn techniques for visualizing multivariate, temporal, text-based, geospatial, hierarchical and network/graph-based data. Prerequisite: BAN 615; Every Year, Spring and Summer

BAN 660 Optimization ( $\mathbf{3 c r}$.) This course focuses on developing computational methods to solve various optimization problems. Advanced regression analysis, time series analysis and other techniques are used to support improved forecasting and decision making. Prerequisites: BAN 610, BAN 615; Every Year, Fall

BAN 661 Web Analytics and Web Intelligence (3 cr.)
This course focuses on the analysis of a variety of web metrics including tracking, traffic and visitor behavior, tactics and strategies to successfully market on the Web to make data-driven decisions. Business analytics tools and techniques are utilized to extract and analyze webscale data to guide strategic decision making. Topics address solutions for measurably higher leads, sales, brand recognition, customer satisfaction or lower service costs. Prerequisite: BAN 610; Every Year, Spring

BAN 662 Insurance Analytics (3 cr.) This course leverages predictive modeling and analytics, optimization, and business intelligence to support data-driven decisions in the property-casualty insurance industry. Key topics include measuring underwriting performance, risk analysis and attributes of high performing insurance systems. Prerequisite: CIS 620; Every Year, Summer

BAN 690 Business Analytics Capstone (3 cr.) The capstone course in the MSBA program is designed to enable students to directly utilize what has been learned in the tools and applications courses to analyze and offer solutions for a major business challenge. A definition of the problem, analysis of options and a comprehensive presentation of findings and solutions are required components of the course. Prerequisites: BAN 610, BAN 615, BAN 620, BAN 650, CIS 620, CIS 627, CIS 628; Every Year, Fall and Summer

Courses offered as needed
BAN 680 Quality Management (3 cr.) Prerequisites: BAN 610, BAN 615

## Computer Information Systems (CIS)

CIS 600 Information Systems Strategy (3 cr.) Students develop the ability to analyze and identify opportunities to improve the effectiveness of organizations through the use of appropriate information technologies. Technologies that influence organizational strategies, structure, risks and processes are emphasized. Ethical, global and security issues also are covered. Every Year, All

CIS 620 Data Management ( 3 cr .) The concepts, principles, issues and techniques for managing corporate data resources are covered, including techniques for managing the design and development of large database systems. Data warehousing, data mining and database administration are emphasized. Students engage in hands-onlearning and work individually or in teams to complete a real-world project using contemporary data management tools and techniques. Every Year, Fall and Spring

CIS 627 Data Warehousing ( $\mathbf{3} \mathrm{cr}$.) This course focuses on the design and implementation of data warehouses, identifying key architecture differences between data warehouses and transactional databases. It also focuses on the interface to data warehouses to better understand how large amounts of information are used to enable organizations to make better decisions. Prerequisite: CIS 620; Every Year, Fall and Spring

CIS 628 Data Mining ( 3 cr.) This course applies data mining techniques using the Microsoft SQL Server Business Intelligence Studio. Students focus on business solutions from areas such as market basket analysis, association rules, cluster analysis and time series.
Prerequisite: CIS 620; Every Year, Fall and Spring
CIS 630 Business Design and Object-oriented Analysis (3 cr.) This course considers systemsdevelopment methods, analysis and design techniques with a focus on object-oriented analysis and design. The application of systems analysis and design concepts using current tools, techniques and approaches is covered. Students engage in hands-on learning and work in teams to complete a real-world project using contemporary analysis and design methodologies and tools. Every Year, Spring

CIS 685 Emerging Information Technologies (3 cr.) This course covers current and emerging topics and practices in information technology. Topics vary as new technologies develop. Students work through various hardware, software and integration issues and explore emergent Internet standards, such as XML and web services. Every Other Year

CIS 690 Project Management ( 3 cr.) This course develops a foundation of concepts and solutions required
for successful completion of a project. Topics include planning, scheduling, controlling, resource allocation and performance measurement. Every Year

Courses offered as needed
CIS 625 ERP Design and Implementation ( 3 cr .)
CIS 640 Communications and Networking ( 3 cr .)
CIS 642 Network Design and Implementation ( 3 cr .)
Prerequisite: CIS 640
CIS 650 Information Systems Security ( 3 cr.)
CIS 652 Advanced Topics in Information Systems Security (3 cr.) Prerequisite: CIS 650
CIS 660 Electronic Commerce Implementation ( 3 cr .)
CIS 662 Integrated Electronic Commerce Solutions
(3 cr.) Prerequisite: CIS 660
CIS 675 Research in Information Systems ( 3 cr.)
CIS 686 Emerging Information Technologies II (3 cr.)
CIS 691 Information Technology Capstone ( 3 cr .) Prerequisites: CIS 600, CIS 620, CIS 630, CIS 640, CIS 690, CIS 695
CIS 695 Enterprise Architecture (3 cr.)

## Economics (EC)

EC 600 Managerial Economics (3 cr.) This course considers the practical application of the tools of economic analysis to the solution of important business problems. An examination of analysis of demand, cost and output, market structure and pricing policies is included. Every Year, All

EC 641 Money and Banking ( 3 cr .) The course addresses the roles that money and banks play in the economy and the regulatory framework that delineates these roles. The course also discusses financial instruments and the behavior of interest rates. The structure and function of the Federal Reserve and the role of monetary policy in stabilizing the economy are examined. The course develops the varying monetary theories that fuel an ongoing debate over the effectiveness of monetary policy. In addition, international financial markets and their role in an increasingly more open and volatile world economy are explored. Prerequisite: EC 600 or EC 601; Every Other Year

EC 650 International Economics (3 cr.) This course provides a rigorous analysis of theory and practice in international trade. Topics include in-depth study of trade models-the Ricardian model, the HeckscherOhlin model, and the standard trade model-the instruments and the political economy of the international trade policies, monetary theory of trade, balance of payments, exchange rate systems, and international monetary systems. Prerequisite: EC 600; Every Year, Summer

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## Education (ED)

ED 500 Internship and Seminar I ( 1 cr.) This course provides the first-semester intern with supervision of the internship placement, as well as a weekly seminar that focuses on developing skills of reflective practice, mindfulness and intentional teaching. Taken in conjunction with ED 508 Classroom Environment, this course allows students to begin to acquire strategies for maintaining classroom environments that are conducive to learning. Admission to the MAT program is required. Every Year, Fall

ED 501 Internship and Seminar II (1 cr.) This course provides the second-semester intern with supervision of the internship placement, as well as a weekly seminar that focuses on developing skills of reflective practice, mindfulness and intentional teaching. Taken in conjunction with ED 525, this course allows students to study first-hand the issues surrounding diversity and multiculturalism in the school setting. Prerequisite: ED 500; Every Year, Spring

ED 502 Methods II: Teaching Biology ( 3 cr.) This course prepares students to teach biology on the secondary level. Central concepts, tools of inquiry, the structure of the discipline, as well as safety procedures and ethical treatment of living organisms are discussed. The Connecticut Common Core of Teaching, national and state standards for the teaching of science, technology and the assessment of students are emphasized in the course. Prerequisite: ED 524; Every Year, Fall

ED 504 Methods II: Teaching English (3 cr.) This course explores pedagogical theories and their practical application to the teaching of English language arts on the secondary level. The course prepares the student to use a variety of strategies in the classroom instruction of reading, writing and the critical examination of literature. The Connecticut Common Core of Teaching, national and state standards for the teaching of English are emphasized in the course. Prerequisite: ED 524; Every Year, Fall

## ED 505 Methods II: Teaching History/Social

Studies (3 cr.) This course provides the student with a theoretical and practical foundation for the teaching of history/social studies. It examines the issues, practices and materials involved with the study of the discipline. The Connecticut Common Core of Teaching, national and state standards, for the teaching of history/social studies, technology and the assessment of students are emphasized in the course. Prerequisite: ED 524; Every Year, Fall

ED 506 Methods II: Teaching Mathematics (3 cr.) This course is designed to prepare students to teach mathematics on the secondary level. Central concepts, tools of inquiry, and the structure of the discipline are addressed through the development of instructional units and lesson plans. The Connecticut Common Core of Teaching, national and state standards for the teaching of mathematics, technology and the assessment of students are emphasized in the course. Prerequisite: ED 524; Every Year, Fall

## ED 507 Methods II: Teaching a World Language

 ( 3 cr .) This course examines the current philosophies, objectives and methods of teaching a world language. Students examine theories of second language acquisition and develop instructional units and lesson plans across the broad range of world language curriculum. The Connecticut Common Core of Teaching, national and state standards for the teaching of a world language, technology and the assessment of students are emphasized in the course. Prerequisite: ED 524; Every Year, FallED 508 Classroom Environment (3 cr.) This course explores how to create a classroom environment that is conducive to learning for all students. The spectrum of theories of classroom discipline is explored with special emphasis on the theory of discipline with dignity. Admission to the MAT is required. Every Year, Fall

ED 509 Reading and Writing Across the Curriculum ( 3 cr .) This course presents an overview of language arts development in the secondary grades with an emphasis on reading and writing across the curriculum. Students explore literacy strategies to help all students learn and apply current theories of integrated learning, i.e., the reading-writing-thinking connection. Attention is given to the particular needs of students for whom English is a second language. Prerequisite: ED 524; Every Year, Fall

ED 510 Adolescent Development (3 cr.) The major theories of human development are studied in order to provide an understanding of the normative and exceptional development patterns of adolescents and pre-adolescents. The social, emotional, cognitive and physical changes of adolescence are addressed from the perspective of their implications for education. Prerequisite: ED 500; Every Year, Spring

ED 514 Internship I (1 cr.) This course aims to support teacher candidates who are working as interns in secondary schools through discussion of the issues and challenges they experience. Students examine issues of leadership, ethics and social justice. The goal is to help teachers understand what it means to be a leader or change agent in schools in the current climate of educational reform. Prerequisite: ED 413; Every Year, Fall

ED 515 Internship II (1 cr.) This course provides the second-semester intern in the five-year MAT program in secondary education with supervision of the internship placement. Prerequisite: ED 514; Every Year, Spring

## ED 521 Social and Philosophical Foundations of Education (3 cr.) This course is an inquiry into the

 institutional structures, social values and philosophical foundations of education. Teacher and student reflections focus on issues pertaining to the teaching-learning process, including freedom/authority/discipline; cultural diversity; multiplicity of learning modes; mind-body integration; community; alienation/violence; sexism/ racism/elitism; and teacher/student roles. Admission to the MAT program is required. Every Year, FallED 524 Methods I ( $\mathbf{3} \mathbf{~ c r}$.) In this introductory course, teacher candidates experience the process of instructional development from building a strong curriculum to designing a curricular unit to the creation of positive and engaging lessons. A focus on the understanding and application of the Common Core State Standards comprises a substantial portion of this course. Issues such as differentiated instruction, data-driven instruction, assessment and performance tasks are discussed. Cooperative learning experiences leading to an independent final project is the prominent instructional design for this course. Permission of the program director is required. Prerequisite: ED 413; Every Year, Summer

ED 525 Diversity in the Classroom (3 cr.) This course helps students understand that teaching is a social enterprise laden with moral responsibility and that, as teachers, they must be willing to act as agents for social justice in their classrooms and in their schools. This course helps students acquire the dispositions, cultural knowledge and competencies to adapt their curriculum and instructional skills for culturally responsive classroom practice. Admission to the MAT program or permission of program director is required. Every Year, Fall and Spring

## ED 532 Child Development and Psychological Theories for the Elementary Classroom (3 cr.) This

 course explores major theories of child development and learning related to elementary education. Students examine the developing child through the elementary school years, emphasizing the interaction between cognitive, social, emotional and physical development. Special consideration: brain-based learning and children as constructors of knowledge. Admission to the MAT program or permission of the program director is required. Every Year, Fall
## ED 534 Learning and Teaching in the Elementary

 Classroom ( 3 cr.) This course focuses on educational practice related to child development and learning theories within a constructivist philosophy. Topicsaddressed include: knowledge of the Common Core State Standards, unit and lesson development, authentic assessment strategies, integrated curricula, and infusion of multicultural issues into elementary instruction. Prerequisite: ED 535; Every Year, Spring

## ED 535 Elementary Internship and Seminar I (1 cr.)

This course provides the first-semester intern with supervision of the internship placement, as well as a weekly seminar that focuses on developing skills of reflective practice, mindfulness and intentional teaching. Taken in conjunction with ED 525 Diversity in the Classroom, this course allows students to study first-hand the issues surrounding diversity and multiculturalism in actual practice through their observations, reflections and participation in school settings. Admission to the MAT program is required. Every Year, Fall

ED 542 Cultivation, Design and Management of an Elementary Classroom (3 cr.) This course focuses on creating elementary classroom environments that foster learning, independence and appropriate behavior for elementary children. Management strategies for teachers as well as for students are covered. Applied behavior analysis and developing a positive classroom climate is a focus of the course. Atypical as well as typical children's behaviors are addressed. Admission to the MAT program is required. Every Year, Fall

ED 543 Clinical Practice in Reading (3 cr.) This course provides teacher candidates in the elementary program with the opportunity to apply their knowledge and skills of early literacy instruction to small group or individual tutorial situations. Students are required to complete 20 hours of literacy instruction/reflective seminars in a supervised setting. Instruction includes diagnostic assessment, preparation and implementation of lessons based on initial and ongoing assessment, case study preparation and final assessment reporting. Weekly seminar discussions focus on the analysis of the pedagogy provided in the clinical settings. Prerequisite: ED 544 or ED 436; Every Year, Fall

ED 544 Developing Literacy in the Primary Grades ( 3 cr .) This course is designed to provide pre-service teachers with the knowledge of the Common Core State Standards in the language arts, and diagnostic assessment and instructional strategies for the development of early literacy. Emphasis is on the development of teaching strategies necessary for the success of early readers and writers. Prerequisite: ED 535; Every Year, Spring

ED 545 Elementary Internship and Seminar II
( 1 cr .) This course provides the second-semester intern with supervision of the internship placement, as well
as a weekly seminar that focuses on developing skills of reflective practice, mindfulness and intentional teaching. Taken in conjunction with ED 547 Philosophy of Education, the course allows students to explore the historical underpinnings of current day practice and how philosophical assumptions and beliefs shape current practice. Prerequisite: ED 535; Every Year, Spring

ED 547 Philosophy of Education (3 cr.) The course helps students become familiar both with the realities of public schooling in the state of Connecticut and with a number of foundational approaches to education. The study of these foundational approaches is intended to help students understand that theory and practice are closely connected and that the former has a profound impact on how teachers actually conduct their classrooms. Prerequisite: ED 535; Every Year, Spring

ED 550 Issues and Research in Education (3 cr.) This course introduces students to some of the primary genres of educational research: action-based qualitative, theoretical and quantitative. In addition, the course begins to help students understand what constitutes good educational research and to recognize the link between theory and practice. Finally, the course helps students develop the tools and mindset of a teacherresearcher to help them become truly reflective practitioners. Prerequisite: ED 402, ED 413, ED 501 or ED 545; Every Year, Summer

ED 554 Internship and Seminar I (1 cr.) This course aims to support teacher candidates who are working as interns in elementary schools through discussion of the issues and challenges they experience. Students examine issues of leadership, ethics and social justice. The goal is to help teachers understand what it means to be a leader or change agent in schools in the current climate of educational reform. Every Year, Fall

ED 555 Internship and Seminar II (1 cr.) This course supports students in the five-year MAT program for elementary education in the second semester of their internship. Discussion and comparison of school experiences are shared in the seminar that accompanies the internship experience. Prerequisite: ED 554; Every Year, Spring

ED 556 Teaching Literacy in Grades 4-6 (3 cr.) This course provides students with the knowledge of the Common Core State Standards in the language arts, and diagnostic assessment and instructional strategies for the development of literacy in grades 4-6. Emphasis is on the development of teaching strategies necessary for the success of readers and writers in grades 4-6. Prerequisite: ED 436 or ED 544; Every Year, Fall

ED 558 Elementary School Science: Content and Pedagogy ( 3 cr .) This course leads students to an understanding of science concepts and scientific inquiry at the elementary school level through active investigations with common phenomena and everyday materials. Topics include: inquiry-based science focused on national standards and integration with the Common Core State Standards; increased knowledge of resources for science learning; and management considerations in such areas as material preparation, groupings and safety. Prerequisite: ED 534 or ED 440; Every Year, Summer

ED 562 Facilitating the Arts in the Elementary Classroom (2 cr.) This course focuses on the development of the teacher-as-facilitator in incorporating the arts into the elementary classroom. An emphasis is placed on the relationship of the arts to teaching, learning and the integration of the arts into other content areas. Students explore a variety of media, movement, music and theatrical skills for selecting materials and activities appropriate to a child's age/ stage of development. Attention also is given to the music and art of many peoples, with particular emphasis on developing a repertoire representative of different cultures and languages. Prerequisite: ED 534 or ED 440; Every Year, Summer

ED 566 Elementary School Social Studies: Content and Pedagogy ( 2 cr .) This course provides elementary teacher candidates with information, strategies and knowledge of the pedagogy of teaching social studies. The course incorporates other disciplines with Common Core State Standards and expands views of civic education. Students work collaboratively and independently to build understandings of the field of social studies and learn how to teach it creatively and effectively in a diverse community. Prerequisite: ED 534 or ED 440; Every Year, Summer

## ED 568 Teaching Mathematics in the Primary

Grades ( 3 cr .) This course introduces students to the Common Core State Standards in mathematics and the instructional methods and curricular materials used to enhance the instruction of mathematics in the primary grades. Students learn to develop lesson plans and assessment methods that positively affect the learning of mathematics in grades K-3. Students are required to apply this knowledge within their field placement to better understand the relationship of theory and practice in the instruction of mathematics in the lower elementary grades. Prerequisite: ED 535; Every Year, Spring

ED 569 Teaching Mathematics in Grades 4-6 (3 cr.) This course introduces students to the Common Core State Standards in mathematics and the instructional methods and curricular materials used to enhance the
instruction of mathematics in grades $4-6$. Students learn to develop lesson plans and assessment methods that positively affect the learning of mathematics in grades 4-6. Students are required to apply this knowledge within their field placement to better understand the relationship of theory and practice in the instruction of mathematics in the upper elementary grades. Prerequisite: ED 468 or ED 568; Every Year, Fall

## ED 575 Teacher Discourse: Language and Communication Issues in the Elementary Classroom

 ( 3 cr .) This course examines the communication systems of educational settings-in particular the communication systems of the classroom, the school/family dynamic and the individual developing child. The course analyzes and considers instructional language and its impact on the classroom community, student learning and student behavior. Students focus on teacher communication with parent/guardian populations and its impact on student learning. The course provides an understanding of the language development and language acquisition of the developing child as a basis for reading/language arts instruction and diagnosis including the language acquisition and development in the English Language Learner (ELL) student. Prerequisite: ED 436 or ED 544; Every Year, SummerED 588 Teaching in the Middle Grades ( 2 cr.) This course focuses on the instructional methods, curricular materials and classroom environment needed to increase the academic motivation and achievement of middle school students. Secondary preservice teachers have the opportunity to explore middle school philosophy and learn about the social, emotional, physical and intellectual growth these early adolescents experience as they transition from childhood to the more complicated world of adolescence. In addition, students explore the delicate balance between maintaining high standards and providing the close, supportive relationships that middle grades students need to thrive. Prerequisite: ED 413 or ED 501; Every Year, Summer

ED 601 Student Teaching and Seminar ( 6 cr .) This 10 -week student teaching placement at the elementary, middle or secondary level allows students to demonstrate the skills, understandings and dispositions needed to assume full responsibility as a classroom teacher. The seminar is designed to assist students in the attainment of their first teaching position. Prerequisite: ED 501, ED 514, ED 545 or ED 554; Every Year, Spring

ED 603 Student Teaching under a DSAP ( 6 cr.) This course is designed for students who are teaching under a Durational Shortage Area Permit (DSAP) issued by the Connecticut State Department of Education. Students receive supervision and support from a University supervisor on a regular basis during the first semester of
the academic year and as needed throughout the second semester. Prerequisite: Permission of the program director. Every Year, All

ED 614 Elementary Education Internship III (1 cr.)
This online course is designed for interns in the 5 -semester elementary education program. It aims to help teacher candidates develop the leadership skills needed to serve as agents of change in elementary schools. The course focuses on issues of leadership, ethics and social justice in the current climate of educational reform and increased levels of teacher accountability. Prerequisite: ED 545; Every Year, Fall

ED 615 Elementary Education Internship IV (1 cr.) This course provides the five-semester MAT student in the elementary education program with an optional fulltime internship in an elementary school. The internship occurs during the spring semester of the student's second year of study. Prerequisite: ED 614; Every Year, Spring

## ED 616 Secondary Education Internship III

( 1 cr.) This online course is designed for interns in the 5 -semester secondary education program. It aims to help teacher candidates develop the leadership skills needed to serve as agents of change in secondary schools. The course focuses on issues of leadership, ethics and social justice in the current climate of educational reform and increased levels of teacher accountability. Prerequisite: ED 501; Every Year, Fall

## ED 617 Secondary Education Internship IV (1 cr.)

 This course provides the five-semester MAT student in the secondary education program with an optional fulltime internship in a secondary school. The internship occurs during the spring semester of the student's second year of study. Prerequisite: ED 616; Every Year, SpringED 693 Research I (1 cr.) This course assists students in the development and design of a research study complete with methods of data collection and analysis. Prerequisite: ED 550; Every Year, Fall

ED 694 Research II (2 cr.) This course is intended as a culminating research course in which the work of the previous two semesters is brought to closure through the analysis of data and the writing of a research paper. Prerequisites: ED 550, ED 693; Every Year, Spring

## Educational Leadership (EDL)

EDL 501 Teacher Leadership to Transform School Culture ( 3 cr .) This course investigates leadership concepts and principles and related research findings and practices with an emphasis on how leaders can transform school culture and develop the school as a community of learners. The course helps teacher
leaders understand leadership theory and behavior and how to promote positive school culture by building a sense of community, increasing the quality of collegial relationships and discourse, and establishing open and effective communications. Theoretical concepts of leadership are integrated along with practical applications for teacher leaders.

## EDL 503 Leading the Instructional Program

 to Improve Student Learning ( 6 cr.) This course examines current curriculum designs and teaching/ learning models and the leadership processes of assessing, developing, implementing and revising instructional programs to improve student learning. Case studies focus on how to improve achievement through analysis of curriculum development processes in schools, analysis of achievement data, professional development programming, student assessment systems and coaching teachers to improve instructional practices. Prerequisite: EDL 501
## EDL 505 Research-based Literacy Practices (3 cr.)

 This course provides an overview of research-based instructional and assessment strategies in reading and writing, stressing the link between research and practice to improve student learning. Primary genres of educational research in the field of literacy are examined including action-based, qualitative, theoretical and quantitative. The course helps teacher-leaders develop the tools and mindset of a teacher-researcher so that they may reflect on their own classroom practice.EDL 509 Leading School Improvement ( 6 cr.) This course analyzes the characteristics of effective schools and the leadership theories and concepts related to the change process. Participants examine the application of these theories and concepts to the practice of improving the work of the school and the achievement of students. Case studies focus on the analysis of schools in need of improvement, the specific issues facing the schools, data analysis techniques, effective leadership practices, strategic planning, financing improvement plans, and evaluation processes. The role of teacher-leaders within the school improvement process is emphasized.

## EDL 511 Cycles of Inquiry within the Literacy

 Classroom (3 cr.) This course helps teacher-leaders understand the cycles of inquiry-a systematic approach to teaching and learning that includes: knowing content standards, diagnosing student needs, setting and working toward long- and short-term learning goals, backward planning from standards and assessments, investing students in their goals, teaching effectively and continuously analyzing data to ensure learning goals are being met. This course provides teacher-leaders with training and experience through complete cycles of inquiry within the literacy classroom to further developtheir skills as master teachers. Course assignments support each candidate as a reflective practitioner and build capacity for teacher-leaders to make a difference for every learner. Prerequisite: EDL 501

EDL 513 Coaching Teachers of Literacy ( 3 cr.) This course provides students with training and experience in mentoring colleagues-novice or experienced teachers-through a complete coaching cycle. Students actively participate in a coaching cycle that is designed to provide teachers with support over a period of consecutive days as they develop their teaching practice. Students develop skills necessary to support teachers through modeling lessons, co-planning and co-teaching lessons, conducting classroom observations and providing feedback to those literacy teachers to foster reflection. Ultimately, students explore the best practices in mentoring teachers to improve the teaching of literacy and to develop a peer-to-peer coaching network for inquiry, conversation, collaboration and support. Prerequisite: EDL 501

## EDL 515 Action Research in Literacy Leadership

 ( 3 cr .) This course provides an overview of the concepts and principles of conducting action research in an educational setting. Action research conducted in the field of literacy is reviewed and analyzed for purpose, methodology and outcomes. As a capstone experience, candidates design and implement action research in their school that involves working closely with peers on a project that is intended to improve the literacy skills of students. Prerequisites: EDL 505, EDL 513
## EDL 517 Cycles of Inquiry within the Mathematics

 Classroom ( 3 cr .) This course helps teacher-leaders understand the cycles of inquiry-a systematic approach to teaching and learning that includes: knowing content standards, diagnosing student needs, setting and working toward long- and short-term learning goals, backward planning from standards and assessments, investing students in their goals, teaching effectively and continuously analyzing data to ensure learning goals are being met. This course provides teacher-leaders with training and experience through complete cycles of inquiry within the mathematics classroom to further develop their skills as master teachers. Course assignments support each candidate as a reflective practitioner and build capacity for teacher-leaders to make a difference for every learner. Prerequisite: EDL 501
## EDL 521 Action Research in Mathematics

Leadership (3 cr.) This course provides an overview of the concepts and principles of conducting action research in an educational setting. Action research conducted in the field of mathematics is reviewed and analyzed for purpose, methodology and outcomes. As a capstone experience, candidates design and
implement action research in their school that involves working closely with peers on a project that is intended to improve the mathematics skills of students. Prerequisites: EDL 505, EDL 519

## EDL 523 Leading Organizational Learning ( 3 cr .)

This course examines the nature of effective professional learning in schools and how such learning contributes to sound classroom pedagogy, organizational renewal, reform efforts and gains in student achievement. The unique role of teacher-leaders in professional development is examined. Course topics include principles of successful professional development programming, organizational and social contexts that influence teacher learning, and the evaluation of professional development programs. Prerequisite: EDL 501

## EDL 525 Diversity in the Classroom and School Community (3 cr.) This course develops an

 understanding and commitment to the position that teaching is a social enterprise laden with moral responsibility, and that teacher leaders must be willing to act as agents for social justice in their classrooms and in their schools. This course helps teacher-leaders develop the dispositions, cultural knowledge and competencies to adapt curriculum and instructional skills for culturally responsive classroom practices and to advocate for social justice at the school level.
## EDL 527 Financing Program Improvement

Initiatives (3 cr.) This course is an introduction to preparing and writing grant proposals for funding program improvement projects in schools based on identified needs. It includes specific terminology related to the grant-writing process and how to identify eligibility requirements. The course focuses on how to develop the grant narrative, budget and other components necessary for a successful proposal. Prerequisite: EDL 609

## EDL 601 Leading and Managing the Contemporary

School ( 6 cr.) This course is an introduction to leadership and management theories and concepts and how school leaders apply them to address current problems and issues. Case studies focus on the development and analysis of school policies, practices and resources related to contemporary educational issues and the leadership and management styles required to implement them. The course includes a field-based experience involving the analysis of school and district policies, practices and resources related to a contemporary educational issue impacting teaching and learning. Every Year

## EDL 603 Leading and Managing the Instructional

Program ( 6 cr.) This course examines current curriculum designs and teaching/learning models and the leadership processes of developing, implementing and super-
vising instructional programs to improve student learning. Case studies focus on how to improve achievement through analysis of curriculum development processes in schools, professional development programming, student assessment systems and analysis of achievement data, and instructional practices of teachers. Course includes a field-based experience involving classroom supervision of a specific instructional program across multiple grade levels. Every Year

## EDL 605 Leading and Managing School

 Improvement ( 6 cr.) This course analyzes the characteristics of effective schools and the leadership theories and concepts related to the change process. Emphasis is on application of these theories and concepts to the practice of improving school operations and student achievement. Case studies focus on analysis of schools in need of improvement, the specific issues facing the schools, data analysis techniques, effective leadership practices, strategic planning, financing improvement plans and evaluation processes. Course includes a field-based experience involving the analysis of the school as a professional learning community and the development of a school improvement plan to address identified needs. Every Year
## EDL 607 Internship in Educational Leadership

 (3 cr.) This field-based experience requires students to assume a leadership role and demonstrate application of the standards established by the Educational Leadership Constituent Council. The internship is planned, guided and evaluated cooperatively by the student, the University professor and the field site mentor, who is a licensed, practicing administrator. The course culminates in the development of an electronic portfolio, which represents the work during the internship. This course is graded pass/fail. Prerequisites: EDL 601, EDL 603, EDL 605; Every Year
## EDL 609 Educational Program Evaluation (3 cr.)

This course is an overview of the concepts and approaches in educational program planning and evaluation, with an emphasis on the responsibilities of school leaders to use program evaluation as a means to improve teaching and learning. The interpretation of data collected through the program evaluation process is emphasized so that decisions may be made to continue, restructure or terminate educational programs. Case studies focus on critiquing program evaluations and students are required to plan and conduct an assessment of an educational program in their school or district. Every Year

EDL 611 Educational Law (3 cr.) This course is a survey of federal and state statutes, regulations, case law, executive agency options and published research with respect to the rights of students and personnel
and the corollary responsibilities of school and state agency officials. Case studies focus on actual legal issues brought to the courts by students, parents, teachers, administrators and the public. Every Year

EDL 613 Public School Finance (3 cr.) This course provides a comprehensive, detailed overview of the resource allocation process from the development of planning guidelines to the reporting of the results of school financial operations. Theoretical and practical treatments of the budget process are examined, with a focus on the budget as a tool to accomplish school goals. Case studies focus on how schools can utilize the budgeting process and both competitive and entitlement grants to reallocate and manage resources to improve educational programs and student learning. Every Year

## EDL 700 Connecticut Adminstrators Test (0 cr.)

## English (EN)

EN 509 Multicultural Literature ( 4 cr .) This course entails close reading of selected literary works, reflecting stories of the multicultural experience in American literature of the 20th century. These stories are fundamentally narrative: accounts of people and events during a specific time and place, dramatizing the themes of identity and cultural heritage. Emphasis is placed on understanding the differing visions of America and on analyzing major aspects of the American Dream. The diverse nature of America as reflected in these works includes the experience of: the immigrant, the African American, the Native American, and the Hispanic, among others. Every Other Year, Fall

## EN 541 Poetry for Prospective High School Teachers

( 4 cr .) This course, designed for students who aspire to teach in secondary schools, presents an extensive study of the techniques, forms and history of poetry in English. A wide chronological range of poems is considered to bolster students' understanding of prosody, conventional poetic forms, free verse and the development of poetry from the Anglo-Saxon period to the present. Every Year, Fall

EN 551 Advanced Studies in Writing ( 4 cr.) This is a class in writing pedagogies and practices designed for MAT students who are planning on teaching students at the secondary level. The course covers historical movements and cases that have affected what we know about teaching writing. Participants explore the rich nexus between critical thinking and writing. The heaviest emphasis in the course is on practice: developing tools and techniques that have immediate application to the secondary classroom. Every Year, Summer

EN 554 Literature for Youth and Adolescence (4 cr.) Designed for prospective teachers of English (grades $7-12$ ), this course examines young adult literature and the genre of adolescent literature. Authors may include Alice Childress, Robert Cormier, Paul Zindel, S.E. Hinton, Elizabeth Spears and Gary Paulsen. Students become familiar with some or all of the following:

1) stages of cognitive growth in reading development;
2) print and electronic sources on the literature;
3) appropriate text selection and assessment of readability levels; 4) motivation techniques that encourage reading and appreciation of literature; 5) design of reading study guides; and 6) categories within young adult literature. Prerequisite: EN 544; Every Year, Spring

Courses offered as needed
EN 500 Special Topics in Literature ( 4 cr .)
EN 540 Classical Literature for Prospective Teachers ( 4 cr .)
EN 544 Adolescent Literature-Graduate Writing Project (1 cr.) Prerequisite: EN 554
EN 565 The American Renaissance (4 cr.)
EN 580 Realism and Naturalism in American Fiction ( 4 cr .)

## Entrepreneurship (ENT)

Courses offered as needed
ENT 625 Entrepreneurship (3 cr.)
ENT 626 Business Plan Competition (3 cr.)

## Finance (FIN)

FIN 610 Global Investments Analysis (3 cr.) This course focuses on the theory and practice of investment analysis in a global environment. Topics include relative, intrinsic and no-arbitrage valuation models, classical and modern theories of risk and return, introductory asset allocation and portfolio optimization techniques, market structure, and the role of institutions. The emphasis is on equity products, but fixed income and derivative securities also are covered. Prerequisite:
FIN 600 or MBA 640; Every Year, Fall
FIN 612 Fixed Income Investments (3 cr.) This course rigorously evaluates fixed-income securities, including default-free bonds, floating-rate notes and corporate bonds. Closely related financial instruments, such as forwards and futures on fixed-income securities, bond options and interest rate swaps are strongly emphasized. In addition to analyzing specific types of fixed-income securities, students examine the tools used in bond portfolio management. Prerequisite: FIN 600 or MBA 640; Every Year, Fall

FIN 616 Derivatives ( 3 cr.) This course provides an in-depth analysis of derivative securities (futures, options, swaps, and other contingent claims). Topics include valuation, hedging, market structure, trading strategies and the application of option pricing theory to agency problems, financial contracting and capital budgeting. Prerequisite: FIN 600 or MBA 640; Every Year, Spring

FIN 630 Portfolio Theory and Practice (3 cr.) This course provides a rigorous examination of modern portfolio theory and practice. Emphasis is on the design of portfolio objectives, advanced asset allocation and portfolio optimization techniques, and the use of futures and options in portfolio management. Legal and ethical obligations also are discussed. Prerequisite:
FIN 610; Every Year, Spring
Courses offered as needed
FIN 604 Risk Management ( 3 cr.) Prerequisite: FIN 600 or MBA 640
FIN 613 Management of Financial Institutions (3 cr.)
Prerequisite: FIN 600 or MBA 640
FIN 615 Emerging Financial Markets (3 cr.)
Prerequisite: FIN 600 or MBA 640
FIN 665 Issues in Equity Compensation (3 cr.) Prerequisite: FIN 600 or MBA 640
FIN 670 Trading and Exchanges ( 3 cr.) Prerequisite: FIN 610

## Health Management (HM)

HM 600 Foundations of Health Care Management
( 3 cr.) This course expands the student's understanding of: 1) the organization and functions of various health services organizations/systems and their interrelationships; 2) basic concepts of management planning, organizing, leading, staffing and controlling as they relate to issues critical to the mission and strategic positioning of the organization/system; and 3) the utilization of scarce resources to deliver optimum health care at reasonable cost. Every Year, Fall

## HM 621 Quality Management in Health Care

Facilities ( $\mathbf{3}$ cr.) This course provides a broad perspective on improving quality in health care facilities. Students gain a working knowledge of accreditation organizations and health care regulatory requirements including the JCAHCO and patientsafety legislation. The course explores patient safety and quality methods as well as the role of consumers in evaluating the quality of the health care services they receive. At course completion, students are able to competently participate in health care quality/ patient safety endeavors at all levels of provider, payer, regulatory and accreditation organizations. Students may participate in an onsite project. Every Year, Fall

HM 626 Epidemiology and Population Health (3 cr.) This course familiarizes students with the principles and methods of epidemiology and their application to the study of the health of populations-skills becoming increasingly important for health care managers given the advent of Accountable Care Organizations. Students focus on the determinants and distribution of diseases among groups of people, examining infectious and chronic diseases, including diseases and conditions caused by accidents and violence. Emphasis is placed on using epidemiologic data for planning and managing health care services, including preventive services, developing health policy and measuring the outcomes of health care programs. Every Other Year, Fall

## HM 630 Corporate Compliance in the Health

 Care Industry ( 3 cr .) This course addresses both the managerial and legal aspects of health care corporate compliance. Essential elements of a compliance program are presented with a focus on various pieces of federal legislation and enforcement initiatives conducted by the U.S. Department of Justice and the Office of Inspector General in the Department of Health and Human Services. Every Year, Spring
## HM 635 Advanced Healthcare Compliance: The

 Legal Issues ( 3 cr.) This course provides an in-depth review of the laws and legal issues facing the health care compliance officer and the health care organization. This course is designed primarily for the non-lawyer who needs a comprehensive understanding of the compliance legal issues facing the health care industry. Lawyers wishing to practice in the health care compliance field would also benefit from this course's analysis of the laws in this area and the application of the laws to specific issues pursued by the U.S. Department of Justice and by the Office of Inspector General in the area of health care compliance. Every Other YearHM 657 Health Care Compliance Law ( 3 cr.) This course illuminates the legal aspects of health care compliance. At both the federal and state levels, the course addresses the statutory, regulatory, and case law that comprises the complex legal backdrop in which the healthcare industry operates. The course introduces the history, purpose, and substance of healthcare regulatory compliance programs and addresses legal doctrines concerning reimbursement law and related fraud and abuse, legal restrictions on physician referral and related anti-kickback laws, antitrust law, compliance issues in healthcare business transactions, compliance mandates in the Affordable Care Act, and the law governing healthcare research. Prerequisite: HM 668

## HM 660 Human Resource Management in Health

 Care Administration (3 cr.) The policies, organization, procedures and techniques required to develop a positivepersonnel program and a favorable working climate specific to health care organizations are studied. Labor law for health care facilities is identified as it relates to collective bargaining, unfair labor practices, disputes, union security, reporting and disclosure requirements, contract negotiations and conciliation and mediation procedures. The importance of positive human resource programs in the labor-intensive health care industry is emphasized. Every Year, Summer

## HM 663 Integrated Health Systems and Managed

Care ( 3 cr .) This course focuses on the integration of provider networks to create more efficient and better coordinated health care systems. The impact of activity on traditional health care provider roles is analyzed. Capitation and other reimbursement techniques and the successes and failures of integrated health systems are examined critically. Prerequisites: HM 600, HM 621, HM 664; Every Year, Spring

## HM 664 Financial Management in Health Care

 Organizations ( 3 cr .) This course equips the student with a basic understanding of financial management techniques as well as the application of financial theory to the practice of health care administration. Unique problems of financing health care organizations are covered, with special attention paid to using allocation decisions to develop structured financial management systems. Every Year, Spring
## HM 668 Legal Aspects of Health Care Delivery

 ( 3 cr .) This course provides a fundamental knowledge of law and the legal system, examining how they affect health care administration. Three areas of law of special importance to the health care setting are emphasized: tort law, contract law and administrative law. The course also examines the legal responsibilities and liabilities of an institution's governing board, its administrators, and its clinical staff. Finally, the course analyzes the legal and ethical rights of the patient and considers the patient's right to informed consent, confidentiality and commitment. Every Year, SpringHM 671 Health Policy and Politics ( $\mathbf{3}$ cr.) This course outlines the role of government in U.S. health policy. Government agencies and other institutions affecting health policy making are covered. The course discusses how the media, advocacy organizations and campaign contributions affect health policy making. It focuses on key interest groups in the U.S. health policy-making process. Every Other Year

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## HM 783 Consulting Practicum I (degree students only) (3 cr.)

## Health Science (HSC)

## HSC 503 Interprofessional Community-based Service Learning Seminar: Children and Youth

 (SL: Service Learning) (1 cr.) This seminar course has a community experience component ( $8-10$ hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of communitybased practice and the focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a community-based service learning project for children/youth. The classroom/service learning schedules will be determined. Every Year, AllHSC 504 Interprofessional Community-based Service Learning Seminar: Young Adult (SL: Service Learning) ( $\mathbf{1} \mathrm{cr}$.) This seminar course has a community experience component ( $8-10$ hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of community-based practice and the focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a community-based service learning project for young adults. The classroom/service learning schedules will be determined. Every Year, All

## HSC 505 Interprofessional Community-based

Service Learning Seminar: Older Adult (SL: Service
Learning) ( 1 cr.) This seminar course has a community experience component ( $8-10$ hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of community-based practice and the focus of learning activities for students to be engaged as active learners. This community component provides both lecture/discussion and service learning related to the impact working with population health in the local
community. Students work interprofessionally to apply the concepts of health, wellness and/or safety education to develop and implement a community-based service learning project for older adults. The classroom/service learning schedules will be determined. Every Year, All

Courses offered as needed<br>HSC 546 Controversies in Health Care Ethics (3 cr.) HSC 562 Methods of Teaching Allied Health Science (3 cr.)<br>HSC 563 Microteaching ( 3 cr.)

## History (HS)

HS 524 Approaches to World History (4 cr.) This course examines various approaches to, and interpretations of, world history. The course has a topical format, with the specific focus shifting depending on contemporary global issues, recent interpretive innovations in the field and the interests of the instructor and the students. A specific goal of the class is to offer future teachers approaches to modern world history that will aid them in lesson planning and development. More generally, the goals of this class include the improvement of written and oral communication skills and the development of critical thinking skills through the examination of primary and secondary sources and the construction of interpretative arguments. Every Year, All

HS 525 History of the Atlantic World from the 15th to 19th Century ( 4 cr .) This course explores the world made by contact, exchanges and clashes between European, Africans and Americans between the early 1400 s to the late 1800 s. The key assertion underpinning this course is that, despite social and cultural distinctiveness, Europe, Africa and America were interconnected, and are best understood as a regional system where each part is most intelligible by investigating its relationship to the whole. Using a thematic and chronological approach, this course explores critical themes that not only link these sub-regions but also give them distinctive historical character. Global trade networks, migration and settlement, colonization and imperialism, cultural and epidemiological transmission, race and gender relations and demographic reconfigurations are among the topics investigated in this course. Every Other Year, All

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## Instructional Design (IDN)

## IDN 525 Instructional Design for Digital

Environments (3 cr.) This course introduces students to the instructional design process. Each phase of the process is investigated, including conducting a researchbased problem analysis, analyzing the target audience, selecting delivery media and designing, implementing and evaluating an instructional resource. This course requires students to identify a local organization (e.g., school, community center, corporation), conduct a needs assessment in that setting to identify an instructional problem and, based on their findings, prepare a design proposal for an appropriate educational resource. Every Year, Fall and Spring

IDN 526 Cognitive Science and Educational Design 1 ( 3 cr .) This course covers theoretical approaches to learning, discussion of learning processes, current research in mind and brain, and theories of multimedia learning. Focus is on the application of theory to guide design decisions. Readings include empirical studies as well as theoretical material to help students become comfortable with the task of reading, interpreting and applying empirical research. The final project for the course is a design document and proof of concept for an instructional media resource. Every Year, Fall

IDN 527 Cognitive Science and Educational Design 2 ( 3 cr .) This course investigates a number of learning paradigms commonly applied to digital resources for instruction, including problem-based learning, cognitive apprenticeship, distributed cognition, anchored instruction and computer-supported collaborative learning. Social and cultural influences on design and implementation of digital resources are discussed. The class examines a range of resources and deconstructs them to analyze the paradigms and influences that shape them. Readings include theoretical and philosophical material as well as empirical studies. Every Year, Spring

## IDN 528 Designing Digital Environments for

Education 1 ( 3 cr .) This course focuses on the design of learning environments as a collaborative effort. Concurrent with ongoing discussion and analysis of existing digital learning resources of many types (e.g., learning management systems, games, simulations, microworlds, social media networks), students work in small teams to create a needs analysis, design specifications for and prototype of their own learning resource. Every Year, Fall

## IDN 529 Designing Digital Environments for

 Education 2 ( 3 cr .) This course examines the principles, techniques and current practices used to produce and/or deliver interactive multimedia applications for education. Through a series of project-basedassignments, students gain experience with a range of software tools used to create media artifacts such as text, graphics, animation, audio, video, games or wireframes. Course makes use of a variety of applications based on each student's specific interests, needs and level of proficiency. Every Year, Spring

IDN 530 Web Design for Instruction ( $\mathbf{3} \mathbf{c r}$.) In this course, students investigate web-based instructional resources. They examine relevant theoretical frameworks and use these principles to analyze the design of existing web resources, including graphics and functionality. Students develop a design document and a working prototype of a web-based instructional resource using a web design tool such as Dreamweaver. Topics include principles of graphic design, basic literacy in HTML and approaches to content organization. Every Year, Spring and Summer

## IDN 531 Design of Interactive Educational

Environments (3 cr.) This course examines the design of interactive environments, including games, simulations and microworlds, from both theoretical and practical perspectives. Topics include information representation, types of interactivity, user control and pedagogical implications of interactivity, as well as the effective design of these resources for education. Students develop proficiency in the use of an interactive authoring environment or game design platform, depending on the individual's technical background, creating a functioning prototype of their design. Every Year, Fall and Summer

## IDN 532 Design and Development of Online

Learning ( 3 cr .) This course looks at current practices, issues and applications in the field of online learning. Students examine the planning, development and implementation of distance learning programs, analyze a number of existing resources and develop proficiency in the sophisticated use of a learning management system such as Blackboard. They also become familiar with empirical studies that investigate the efficacy of online learning and apply this information to the development of a prototypical course site. Every Year, Fall and Spring

## IDN 533 Producing Educational Video and Digital

Training ( 3 cr .) Video segments are commonly found as stand-alone resources as well as embedded in websites, games, online learning environments, etc. Students in this course examine the use of video in education, including theoretical approaches to visual learning as well as practical considerations of how to write, plan, produce and integrate video resources. Depending on students' levels of technical preparation, they use a range of applications to plan and produce a short video segment. Every Year, Fall and Summer

IDN 534 Implementing Digital Media for Learning ( 3 cr .) This course examines the challenges of implementing digital environments for learning in real-world contexts. Through research articles and case studies, students explore issues such as selecting, budgeting and evaluating technology resources. Within the structure of the class, students may choose to focus on implementing media in $\mathrm{K}-12$ environments (in and out of school), higher education, industry or public spaces. Every Year, Summer

IDN 535 New Directions in Digital Environments for Learning ( 3 cr .) As new digital resources are developed, instructional designers need to be able to understand and evaluate their practicality and value for educational use. This course allows students to explore new and changing technologies, applications and approaches. By definition, topics in this course change each time it is offered, but may include such areas as augmented reality, handheld devices and the maker. Every Year, Spring

IDN 536 Independent Study ( 3 cr .) This course includes supervised study of special topics in instructional design. This option is designed to allow a student to further customize his or her course of study if needed. Each student must submit a proposed course of study including assessment plan for approval prior to enrolling. Every Year, Fall and Spring

Courses offered as needed

## IDN 540 Thesis/Portfolio (6 cr.)

## Interactive Media (ICM)

ICM 501 Issues in Contemporary Media (3 cr.) This seminar grounds the creation of media content in a history of social theory, analysis of media and application of these concepts to the design of usable and appropriate media systems. Participants read the significant literature, discuss the central issues and create arguments that apply and synthesize these ideas. Every Year, Fall and Spring

ICM 502 Information Design ( 3 cr .) This course covers the principles and practices associated with graphic design as a way to make complex information easier to understand and use. With a primary focus on typography as the fundamental means of conveying content, the course emphasizes the creative process of organizing, visualizing and organizing type and images through hierarchy and spatial organization of grid structures, positive and negative space, depth perception, transparency and color theory. Readings locate design and typography within the larger history of visual art and graphic design and in relation to technology developments. Every Year, Fall and Spring

ICM 504 Interactive Animation and Mobile Design ( 3 cr .) This course covers the concepts and production elements that lead to the design and development of animated and interactive content for mobile devices and personal computers. Students analyze the development and present state of mobile experiences and interactive content delivery and learn how to create mobile and multimedia productions using web development software, HTML5, CSS3 and simple scripting. Students design working interfaces that include animation and interactivity for mobile and web delivery. Prerequisite: ICM 505 or permission of the ICM program director; Every Year, All

## ICM 505 Introduction to Front End Development

( 3 cr .) The front end languages live in the browser. This course introduces the foundational techniques of creating web-based content using HTML, CSS, PHP and JavaScript. Through a series of small exercises, participants learn how interactive networks are organized, where to find the information necessary to create standards-based systems, and gain elementary experience designing and implementing sites for interactive channels that use the Web. Every Year, All

ICM 506 Writing for Interactive Media (3 cr.) Despite the changing media landscape, good writing skills are a necessity for professional communication. Students in this class use written modalities to create, develop and hone a distinct, searchable written voice within varied media environments. Much of professional media work involves creating a consistent voice or presence for a person, organization or company. In this course, participants focus on how to accomplish (or enhance) this process using effective compositional techniques. Every Year, All

ICM 508 Multimedia Techniques ( $\mathbf{3} \mathrm{cr}$.) This course covers the aesthetic and technical principles and practices that together work to create interactive visual and audio content. Students learn to digitally acquire video images and record audio, edit the material and weave the components into multimedia narratives. Emphasis is also placed on analysis and criticism of multimedia in the public domain. Every Year, All

ICM 509 Advanced Multimedia Techniques ( 3 cr .) The course covers advanced concepts and skills needed to design and create professional-level media content for digital distribution. Whether on PCs, smart phones, tablets or kiosks, the focus is on communicating ideas through story by using video and audio in depth as the design medium. Special effects software is added to the student's toolkit. Prerequisite: ICM 508; Every Year, All

ICM 512 Designing for the User (3 cr.) Students learn design for the user studies information structures,
workflows and visual relationships between the elements and components on a screen, making it an essential aspect of the user's experience for applications-whether for the desktop, the Web or mobile devices. The course focuses on design methods and design thinking, and allows students to develop practical skills through a series of design experiences. The course covers ideation techniques, sketching on paper, design development using software tools, static prototyping technique and contemporary perspectives on visual design. Prerequisite: ICM 502 or permission of the ICM program director; Every Year, All

## ICM 513 Information Architecture and Content

Strategy ( 3 cr.) This course focuses on how information and content is organized, labeled, designed and managed. It documents the navigation structure that makes it possible for users to find information. Information architecture helps you find out how users think about the world, and transition those lessons to the site or application. Students learn to gather requirements data, analyze the target audience, model information structures, and develop a variety of documents from sitemaps to wireframes to communicate the information architecture to stakeholders. Prerequisite: ICM 512 or permission of the ICM program director; Every Year, All

ICM 514 User Research and Methods ( 3 cr .) The course introduces students to empirical user research methods such as contextual inquiry, ethnographic studies, card sorting and image collaging that provide the foundation for user-centered interaction and communications design. In addition students conduct usability studies combining research, persona development, testing and reporting. Usability is the study of discrepancies between expected and actual user behavior. Prerequisite: ICM 512 or permission of the ICM program director; Every Year, All

## ICM 515 Advanced Multimedia and Animation

( 3 cr.) This course covers the concepts and production skills needed to create and integrate advanced interactive projects with video and animation for the web, mobile devices or kiosks. The focus is on communicating ideas and material effectively, by educating, informing and entertaining the target audience with various media. Students also have opportunities for in-depth exploration of a particular technique. Prerequisites: ICM 504 and ICM 508 or permission of the ICM program director; Every Year, All

ICM 517 Prototyping (3 cr.) Prototyping teaches students to use sequential visual narrativesstoryboards, flowcharts, dynamic prototypes and simulations-as analysis tools for the development of information systems. The course draws on theoretical approaches to forms of visual storytelling including
animation, illustration or comics. Through a series of practical, analytical and creative projects, students learn to apply storyboards and limited multimedia prototypes to interface design and develop content. Prerequisite:
ICM 512 or permission of the ICM program director; Every Year, All

ICM 522 Social Media Concepts and Practice (3 cr.)
The widespread use of social media in society has created a communications environment built on platforms that encourage contribution and collaboration through user-created media and interaction. This course explores the underlying concepts, development and management of social media platforms as well as the creation of effective approaches to facilitate a viable social media presence. Every Year, All

## ICM 524 Social Media, SEO and Web Analytics (3 cr.)

Social media and web search presents communicators with an unparalleled ability to measure and track a deluge of data to derive insights on the effectiveness of their campaigns. This has made analytics and SEO (Search Engine Optimization) some of the most critical tools in the social media and web content arsenal. This course gives students a working knowledge of the analytics process, analytics tools and SEO technique, along with their application to communications objectives within real-world situations. Prerequisite: ICM 522 or permission of the program director. Every Year, All

ICM 526 Community Management ( 3 cr.) The Social Web is made up of communities, groups of interconnected individuals linked by shared interests, who are at the heart of any effective social media program. The role of a community manager is to help create, nurture and activate online communities by building transparent and meaningful relationships with their members. This course explores the roles, responsibilities, strategies and tactics community managers need to create viable, successful and sustainable communities. Prerequisite: ICM 522 or permission of the program director. Every Year, All

ICM 527 Strategic Planning ( 3 cr .) This course introduces students to the concept of strategic planning. The students learn and practice the five steps of the strategic planning process: conducting research to understand the issue, developing goals and measurable objectives, preparing tactics to influence awareness, attitudes and behaviors, performing evaluation to measure the results, and maintaining relationships through stewardship. The students demonstrate what they have learned through the development and presentation of the strategic public relations campaign plan for corporate, nonprofit, or government organizations. The focus of this section is on campaigns with a strong social media component.

Prerequisite: ICM 522 or permission of the program director. Every Year, All

ICM 531 Graduate Internship (3 cr.) This elective course provides interactive media students with the opportunity to work in a professional setting to acquire additional skills and insights into their chosen area of study. Students completing this course are required to work at least 120 hours in a supervised environment. All internships must be approved by the graduate program director. Every Year, All

ICM 552 Media Ethics and Policy (3 cr.) This course addresses topics relating to use, creation and dissemination of media, including ethical issues, business and government policies, intellectual property matters concerning media-based content, international issues and differences between Internet and traditional media. The course also covers appropriate conduct as it relates to contracts and protections in the creation of media. Every Year, All

ICM 590 Project Planning (3 cr.) Students focus on the analytical skills required for successful project planning and its application to project management. The course provides instruction in the activities, tasks and techniques of project planning and management for developing interactive content. Readings, cases and simulations allow students to learn how these planning skills are applied to produce business/ organizational results that require project management. A comprehensive project plan is developed that can be used for the master's capstone. Every Year, All

ICM 601 Master's Capstone (3 cr.) Students majoring in interactive media are required to spend a semester completing a capstone experience. The master's capstone typically is the creation of an original, functional work that examines a technical, aesthetic or conceptual problem using techniques and approaches learned while in the program. Interactive sites, technical development, strategic plans and media productions are acceptable. Students must receive approval for the master's capstone topic from the program director. Prerequisite: ICM 590; Every Year, All

ICM 602 Thesis ( 3 cr .) The thesis option requires students to research and write an original scholarly paper that explores an aspect of interactive media. Students must receive approval for the thesis subject from the program director. Every Year, All

## International Business (IB)

Courses offered as needed<br>IB 611 International Corporate Finance (3 cr.)<br>Prerequisites: MBA 640, MBA 660<br>IB 623 International Business Negotiation (3 cr.)<br>Prerequisite: MBA 660<br>IB 652 Multinational Management ( 3 cr.)<br>Prerequisites: MBA 615, MBA 660

## Journalism (JRN)

JRN 503 Analytics for News Reporting (3 cr.) Unpacking the volumes of data produced by public and private institutions throughout the world is one of the key challenges facing journalists. This course introduces students to the concept of big data and how to extract and deploy statistical information in news reports. Every Year, Fall

JRN 504 Multimedia Reporting ( $\mathbf{3}$ cr.) The capacity to gather information and report the news remains at the core of the journalism profession. This course focuses on the fundamentals of news writing while also engaging students in emerging social media and other tools to present comprehensive news stories to all audiences. Every Year, All

JRN 521 Audio Storytelling (3 cr.) Writing for the ear requires skills in preparing scripts, natural sound and audio recording and editing. This course prepares students to compose stories for radio news and podcasts, with a focus on developing the style of conversational broadcast writing common to National Public Radio. Every Year, Fall

JRN 524 Broadcast Journalism (3 cr.) Visual news stories as broadcast by networks, affiliates and cable news channels and in evolving digital formats require skills in both storytelling and technology for shooting and editing video. This course covers the essentials of shooting video, editing and field reporting and producing. Every Year, Fall

JRN 528 Information Graphics and Design (3 cr.) Information graphics are now an integral component of news, conveying big data into readily understood formats such as diagrams and charts. This course teaches students how to visually organize information and apply it to news stories for broadcast or online presentation. Every Year, Spring

JRN 530 Independent Study (3 cr.) This is a special course offered to accommodate students who seek advanced practical training or advanced research in an area not directly included in the curriculum. The topic and scope of the course is development by the student in
consultation with a faculty adviser, subject to approval by the dean. Every Year, All

JRN 531 Graduate Internship ( $\mathbf{3} \mathbf{~ c r}$.) Experience in association with working professionals is essential to securing career opportunities. Students completing an elective internship to secure such experience are required to work a minimum of 120 hours in a supervised environment, approved by the program director. Every Year, All

## JRN 533 Advanced Reporting and Writing (3 cr.)

 Students explore the conceptual reasoning and practical skills required for developing ideas and reporting and writing long-form narratives that tackle complicated subjects not easily resolved in traditional newswriting. Work completed for the class will be distributed to news websites and online magazines for publication upon acceptance. Every Year, SpringJRN 539 History of Journalism (3 cr.) Students examine the origins and development of American journalism in this course. Emphasis is placed on significant persons, events and trends that have most influenced the profession as it is practiced today, thus acquainting students with the history of their chosen profession. Every Year, Spring

JRN 552 Media Law and Ethics (3 cr.) A thorough knowledge of laws and ethical behavior is essential to the professional practice of journalism. As such, this course covers the legal and ethical dimensions of media communications across platforms, with an emphasis on First Amendment, privacy and copyright issues. Every Year, Spring

JRN 570 Crafting the News Feature ( 3 cr.) News stories that reveal personality, explain how things work, reveal trends or otherwise represent an in-depth portrait of people, places and things are grouped in a category labeled as the feature story. Students completing this course are expected to pursue fresh and creative approaches to the genre. Every Year, All

## JRN 572 Researching and Writing the News

Documentary ( 3 cr .) The complexities of producing the news documentary range from finding the right story to pursue to uncovering the proper visuals to help tell it. This course provides students with the skills to research, write, and produce visual nonfiction, long-form projects rooted in history or current events. Every Year, Fall

JRN 575 Critical Issues in Journalism ( $\mathbf{3}$ cr.) Reporters confront a widening tableau of subjects that are baffling to the reader unless presented in a clear and concise form. By studying issues in coverage techniques extracted from the daily torrent of news, students sharpen their news judgment, using reason, analysis and writing to critique coverage and become better journalists in the process. Every Year, Fall

JRN 580 Investigative Reporting ( $\mathbf{3} \mathbf{~ c r . ) ~ T h e ~ p u r p o s e ~}$ of this class is to prepare students to recognize investigative opportunities in all stories and to equip them with the practical skills necessary to succeed in investigative and project reporting, including knowledge of state and federal laws regarding access to governmental information. Every Year, Spring

JRN 590 Newsroom Clinical (SPS 490) (3 cr.) This course focuses on advanced reporting for multimedia reports, broadcast news, news documentaries and magazine stories. Students produce daily, weekly and long-term stories in their area of expertise for the journalism department's tablet application, among other platforms. Every Year, All

JRN 601 Master's Project (3 cr.) Students completing the journalism program must complete either a master's project or thesis. The project option requires students to create an original, in-depth print, broadcast or multimedia journalistic piece. The graduate program director and dean must approve the topic. Every Year, All

JRN 602 Thesis ( $\mathbf{3} \mathrm{cr}$.) Students completing the journalism program must complete either a master's project or thesis. The thesis option requires students to research and write a scholarly paper that explores an aspect of journalism. The graduate program director and dean must approve the topic. Every Year, All

Courses offered as needed
JRN 500 Special Topics in Journalism ( 3 cr .)
JRN 526 Copyediting ( 3 cr .)
JRN 527 Covering Government and Politics ( 3 cr .)
JRN 532 Advanced Broadcast Journalism (3 cr.)
Prerequisite: JRN 524
JRN 536 Opinion Journalism ( 3 cr.)
JRN 540 Broadcast Performance ( 3 cr .)
JRN 542 Graduate Seminar (3 cr.)

## Management (MG)

MG 640 Strategic Sourcing and Supply Management ( 3 cr .) This course explores strategic sourcing and supply management in the industrial purchasing cycle for operating supplies, raw materials, components and capital equipment. Topics include strategic issues relating to the procurement decision process including supplier selection and evaluation, supplier development, make vs. buy decision, JIT purchasing, e-purchasing and the interrelationships between purchasing and other areas of the organization and the supply chain. Every Year, Fall

MG 641 Supply Chain Management ( 3 cr.) This course examines concepts, strategies and analytical techniques to improve production systems that create and deliver a firm's products and services. It offers an integrated view
of supply chain systems by including suppliers, manufacturers, warehouses, transportation, retailers and services providers. Based on key concepts such as the value of information, coordinated product and supply chain design and international supply chain opportunities, the following areas are emphasized: product realization, order fulfillment, production/inventory management, distribution channels and information systems. Prerequisite: MBA 635; Every Year, Fall

MG 642 Transportation Management (3 cr.) The course gives a broad yet thorough understanding of the role of transport in the supply chain. Topics include operations, current challenges and how different transportation modes interact to make a complete system. The major elements covered in this course are the respective terminals and facilities and the operation of air, rail, road, maritime and pipeline transport. Within each of these elements, participants look at all parties involved in the management of the operations as well as the stakeholders. Every Year, Spring

Courses offered as needed
MG 600 Business Ethics and Legal Environment (3 cr.) MG 603 Project Management ( 3 cr.) MG 639 Special Topics (3 cr.)

## Marketing (MK)

MK 615 Managing Marketing Channels (3 cr.) This is an introduction to the design, evaluation and management of distribution channels. Topics include strategic issues in designing distribution channels, channel member roles, managing channel conflict, evaluation of channel performance, motivation of channel members, managing a hybrid mix of traditional and non-traditional channels, and channel logistics (transportation, inventory, materials handling and information management). Prerequisite: MK 600 or MBA 645; Every Year, Spring

MK 616 Digital Marketing (3 cr.) This course introduces students to topics and issues employed by marketing managers as they develop and implement their digital marketing strategies. Topics include; marketing analytics, digital business models, digital marketing channels, search engine marketing, social media and mobile marketing. The class incorporates experiential learning opportunities which enable students to bridge the gap between marketing theory and managerial practice. Prerequisite: MK 600 or MBA 645; Every Year, Summer

[^7]MK 612 New Product Marketing (3 cr.) Prerequisite:
MK 600 or MBA 645
MK 613 Marketing Planning ( 3 cr .) Prerequisite:
MK 600 or MBA 645
MK 620 Applied Consumer Behavior Research ( 3 cr .)
Prerequisite: MK 600 or MBA 645

## Master of Business Administration (MBA)


#### Abstract

MBA 601 Foundations for Decision Making (MBA QUick Start) ( $\mathbf{1} \mathbf{c r}$.) This course covers basic elements of statistics, technology (including Excel), financial accounting, managerial accounting, finance and economics as well as other fundamental business concepts. The course must be taken during a student's first semester in the MBA program, but can be completed concurrently with MBA 615. The course is graded on a Pass/Fail basis. Every Year, All


MBA 602 Communicating Effectively for Managers ( 3 cr .) This course provides instruction and practice in the various formats and styles of writing required of executives and professionals in a business environment. This course focuses on the ability to communicate clearly, which is necessary for success in the business world. Students are encouraged to organize thoughts logically, plan communications in advance, write in appropriate formats and communicate ideas concisely. Students learn communication skills necessary for leaders in today's global marketplace. International degree students only. Every Year, Fall

MBA 610 Business Decision Analysis (3 cr.) This course is an introduction to basic quantitative tools that enable managers to analyze data and make informed decisions. Topics include descriptive analysis of survey data, introductory probability, sampling and sampling distributions, hypothesis testing, simple and multiple regression and decision analysis. Students apply the quantitative decision-making tools to business situations through cases. Every Year, Summer

## MBA 615 Managing the Decision Making Process

 ( 3 cr .) This course introduces a framework for formulating, analyzing and making complex business decisions. Students learn to analyze problems from multiple perspectives and different disciplinary points of view and how to evaluate business decisions through an ethical lens. The course provides an overview of business functions with a focus on the need to integrate activities among them for effective decision making. Students learn to evaluate the extent to which an individual or organizational bias affects the decisionmaking process and identify alternative approaches to mitigating biases. Every Year, AllMBA 620 Financial and Managerial Accounting for Decision Making (AC 620) (3 cr.) This course provides an introduction to the use of accounting information for decision making in organizations. Topics include reporting and analysis of financial statement information and the use of managerial decision-making tools to support planning and control. Students can receive credit for either AC 620 or MBA 620 but not both. Every Year, All

MBA 625 Organizational Behavior and Leadership for Decision Makers (3 cr.) Students become familiar with both the language and practice of organization theory, including designing organizations, managing the organizational environment and understanding the relationships between tasks, technology, environment and organization structure. Issues related to motivation, leadership, organization culture, decision making and ethical leadership are presented. Interpersonal relationships are explored through an examination of the roles of power, politics and conflict in organizations as well as leader behavior, styles and leadership development. Students also explore how organizational structures and leadership models interrelate with the marketing, operational and financial systems in the enterprise. Students can receive credit for either MBA 625 or MG 610 but not both. Every Year, All

## MBA 635 Decision Making for Business Operations

( 3 cr .) Students learn to design and manage the production processes that create and deliver the firm's primary products and services to improve performance of the business. Both tactical day-today operating decisions and longer range strategic decisions are examined through topics that include process analysis, work force management, capacity and facilities planning, inventory control and quality management. Students also explore the relationship between the production system of the organization and the marketing, financial and human resources systems during the creation of goods and services. Every Year, All

MBA 640 Financial Decision Making (3 cr.) This course introduces students to the theory and techniques of financial analysis with application to real world problems and situations. Topics include risk and return, asset pricing, capital budgeting and corporate investment decisions, capital structure decisions, dividend policy, corporate merger, divestiture and takeover decisions. Students can receive credit for either MBA 640 or FIN 600 but not both. Every Year, All

## MBA 645 Marketing Decision Making (3 cr.)

Students learn to formulate, manage and evaluate the marketing strategies that create the firm's products and services and deliver those products and services to the market. Both tactical day-to-day operating decisions
and longer range strategic decisions are examined through topics that include buyer behavior, market segmentation, demand estimation, product positioning, product development, branding, pricing, distribution channels, and integrated marketing communications. Students also explore the relationship between the marketing and the overall corporate strategy. Students can receive credit for either MBA 645 or MK 600 but not both. Every Year, All

## MBA 660 Decision Making in a Global Economy

 ( 3 cr .) Students come to understand the global trends and issues that create business opportunities in foreign markets as well as the impact of the global environment on domestic business practices and opportunities. Students examine the economic, social and political issues that affect a firm's strategy for entering international markets and how cross-cultural issues affect internal business processes. Some sections of the course include an international travel experience while others include a virtual study abroad experience. BS/MBA students are required to take a section that includes an international travel experience. Part-time and online students are encouraged to take a section with an international travel component; however, parttime and online students who are unable to complete an international travel experience may take a section of the course with a virtual international experience. Additional course fee (travel) applies to all sections except virtual study abroad.MBA 690 Decision Making Capstone ( 3 cr.) This is a capstone course in strategic decision making for MBA students. Students learn concepts and theory relevant to the field of strategic management, as well as review and integrate the accumulated functional business knowledge from the other MBA core courses. The course covers such topics as internal and external firm analysis, industry analysis, value chain, competitive strategy, corporate and functional strategy, top management leadership and strategic performance evaluation. Emphasis is placed on developing critical thinking and decision-making skills through company analyses and simulated business exercises. Students can receive credit for either MBA 690 or MG 690 but not both. Prerequisites: MBA 601, MBA 615, MBA 620, MBA 625, MBA 635, MBA 640, MBA 645; Every Year, All

## Courses offered as needed

MBA 650 Strategic Public Relations and Reputation Management (3 cr.)

## Mathematics (MA)

MA 521 Algebraic Reasoning (2 cr.) Students apply proof-based reasoning in the context of different algebraic systems, including groups, rings and fields. Specific examples include finite fields and matrix rings, as well as the real and complex numbers. Emphasis is placed on the interplay between axiomatic algebra and the existence and solution of algebraic equations. Every Year, Summer

MA 522 Analytic Reasoning (2 cr.) Students explore properties of the real numbers and functions of real numbers based on the completeness axiom, including continuity in the context of powers and roots, exponentials and logarithms, and the trigonometric functions. Definitions and properties of these functions are developed and proved, with an emphasis on their reliance on continuity. Every Year, Fall

MA 541 Complex Variables ( 2 cr.) This course extends the concepts of calculus to deal with functions whose variables and values are complex numbers. Topics include the geometry of complex numbers, differentiation and integration, representation of functions by integrals and power series, and the calculus of residues. Prerequisites: MA 242 or MA 251; MA 301; Minimum grade C-; Every Year, Fall

MA 565 Famous Mathematical Constants (3 cr.) This course is a tour of mathematics from the viewpoint of the well known constants e, pi and i. Topics are chosen from geometry, number theory, calculus and algebra. Every Third Year

MA 580 Euclidean and Non-Euclidean Geometry ( 4 cr .) Students study concepts in Absolute, Euclidean and non-Euclidean geometries, including planar geometry, hyperbolic geometry, and spherical geometry. In particular, students explore topics which may include finite geometries, axiom systems, transformations and symmetries, analytic geometry, circles, triangles, quadrilaterals, the parallel postulate, Pythagorean Theorem, area and similarity. Every Year, Spring

MA 583 Mathematics: Historical Insights (2 cr.) Students explore mathematics from historical perspectives. In particular, students investigate contributions of ancient Babylonian, Egyptian, and Persian cultures, historical methods of solving quadratic and cubic equations, development of the calculus. Every Year, Summer

Courses offered as needed
MA 585 Mathematical Problem Solving (3 cr.) MA 586 Discrete Structures ( 3 cr .)

MA 590 Issues in Pre-College Mathematics (3 cr.) MA 591 Introduction to Abstract Mathematics (3 cr.) MA 599 Technology in Mathematics Teaching ( 3 cr .)

## Nursing (NUR)

NUR 500 Biostatistics ( $\mathbf{1} \mathrm{cr}$.) This biostatistics course is an introduction to probability concepts and statistical tests currently used in the biological and health sciences. The course covers the application of statistics to data analysis. An emphasis is placed on inferential statistics, which includes estimation, confidence intervals, means, variances and proportions. Every Year, Fall Online

## NUR 510 Beginning Spanish for Health Care

Professionals ( 3 cr .) This language course is targeted to students with limited or no experience using the Spanish language in health care settings. The course addresses the needs of students and professionals who work in clinical settings and require a basic level of communication with Spanish-speaking patients and their families. This course is designed to facilitate the development of basic speaking, listening, reading and writing skills with emphasis on oral and aural abilities. Students acquire essential vocabulary and phrases as well as an understanding of basic grammatical structures and intercultural awareness. The course employs a methodology of self-paced and partner-based activities and strong self-directed learning skills are needed to be successful in the course. Students without prior experience with the Spanish language must seek the instructor's approval before registering. Every Year, Spring and Summer Online

## NUR 514 Epidemiology and Evidenced-based

Practice (3 cr.) This course introduces epidemiologic principles, methods and data used in advanced nursing practice. Population health concepts are coupled with risk analysis statistics to critique evidence for holistic public health approaches. The use of data to assess acute and chronic population health problems, to implement effective interventions addressing these problems, and to examine outcomes is emphasized. Prerequisite: NUR 500; Every Year, Spring

NUR 516 Health Policy and Organizational Systems (3 cr.) This course provides an introduction to various social and political policy environments impacting advanced nursing practice and health care systems. Students examine issues that inform health care policy, organization and financing. Nursing's advocacy role in shaping policy in organizational, social and political venues is emphasized. Every Year, Fall

NUR 517 Human Anatomy for the Nurse Anesthetist ( 2 cr .) This courses explores fundamentals of anatomy
for the cardiac, respiratory and nervous systems. Renal and hepatic anatomy also are covered. The course stresses anatomy as it pertains to regional administration as well as pain management. Every Year, Summer

## NUR 517L Human Anatomy for the Nurse

Anesthetist Lab (1 cr.) This course features dissections of specific organs and the use of computer and anatomic models. Course includes an extensive study of airway anatomy through multiple modalities. Anatomy lab is utilized. Every Year, Summer

NUR 520 Advanced Health Assessment I (3 cr.) This course presents the principles of performing a comprehensive health assessment and reporting the findings in a professional format. Attention is given to assessment and physical examination across the lifespan within diverse communities. The processes underlying diagnostic decision making are introduced. A laboratory component enables the student to master the techniques of performing a holistic health assessment. Every Year, Fall

NUR 520L Advanced Health Assessment I Lab (2 cr.) This lab must be taken with NUR 520. (2 lab hrs.) Every Year, Fall

## NUR 524 Principles of ECG Interpretation (1 cr.)

This course provides a directed approach to understanding the principles and basic interpretation of electrocardiography as applied in advanced practice nursing. Intended for students in the adult-gerontology and family nurse practitioner tracks. Every Year, Summer Online

## NUR 528 Principles of Radiography ( 2 cr.) The

 basic principles of radiologic and imaging techniques, recognition of common abnormal findings, indications and contraindications for various tests including cost analysis and availability factors are considered. Intended for students in the adult-gerontology and family nurse practitioner tracks. Every Year, Spring OnlineNUR 530 Advanced Pharmacology (3 cr.) Students are introduced to pharmacological management across the lifespan and provided with advanced knowledge of pharmacokinetics. Selected categories of drugs commonly prescribed for management of health care problems and health promotion within diverse communities are presented. Controlled substances and the potential for abuse are discussed. The responsibilities and legalities of prescriptive authority in advanced practice are defined. Every Year, Fall Online

NUR 532 Primary Care I (3 cr.) Health promotion, prevention and the diagnosis of common and chronic problems encountered in primary care settings are considered. A holistic and family-centered approach to clients from adolescence to senescence is emphasized. Evidence-
based, multidisciplinary management approaches to selected health problems also are discussed. Theory and research are integrated to develop nursing strategies for health promotion and restoration; case study approach is introduced. Intended for students in the master's level adult-gerontology and family nurse practitioner tracks. Prerequisite: BMS 518; Every Year, Spring

NUR 533 Primary Care Practicum I (3 cr.) This course integrates the principles of primary care nursing (NU 532) and includes a mentored practicum with a clinical seminar. Students apply newly acquired advanced health assessment skills and use critical thinking to provide health promotion and care for common health problems across the adult lifespan. Appropriate clinical documentation, case presentation and use of web-based clinical resources are emphasized. Intended for students in the master's level adult-gerontology and family nurse practitioner tracks. Prerequisites: NUR 520, BMS 518; Every Year, Spring

NUR 534 Primary Care II ( 4 cr .) This course addresses the diagnosis and management of selected acute primary care problems from adolescence to senescence. Assessment and management of the selected problems include attention to cultural traditions, families and socioeconomic policies that affect the delivery of care. The course is grounded by a holistic approach to care; case studies are used to promote critical thinking. Intended for students in the master's level adult-gerontology and family nurse practitioner tracks. Prerequisites: NUR 532, NUR 533; Every Year, Fall

NUR 540 Educational Principles for the Health Care Professional ( 3 cr .) This course examines the theoretical perspectives of education as it relates to educational leadership and professional development for health care professionals. Teaching/learning theories, models and principles are examined as preparation for the design, development, evaluation and revision of professional development-related curricula. Instructional strategies and teaching techniques adapted for diverse populations are explored. Every Year, Fall Online

NUR 543 AGNP Primary Care Practicum III (4 cr.) This course includes a mentored clinical practicum with a clinical seminar and provides opportunity for practice with adults in diverse communities. Students are assisted to manage progressively complex and multifaceted health problems. Appropriate collaboration among disciplines is emphasized and opportunity to apply theory and research findings relevant to care of adults is provided. Specialized clinical skill workshops are continued in the seminar. Intended for students in the master's level adult-gerontology track. Prerequisites: NUR 543, NUR 541; Every Year, Spring

NUR 544 Introduction to Informatics (3 cr.) This online graduate course provides essential knowledge and skills in health care informatics to enhance the quality of patient care and outcomes through the assessment, development, implementation, use and evaluation of information technologies. It prepares the nurse to support evidence-based practice and manage patient-care technologies to deliver and enhance interprofessional care and communication for improved coordination of care. Every Year, Summer Online

NUR 545 Primary Care III (4 cr.) This course focuses on selected complex, urgent or less frequently encountered problems of primary care across the lifespan from adolescence to senescence. An opportunity to refine differential diagnosis and management of challenging health concerns in diverse populations is provided by the use of case studies. A holistic and family-centered approach frames the course. Intended for students in the master's level adult-gerontology and family nurse practitioner tracks. Prerequisite: NUR 534; Every Year, Spring

## NUR 547 AGNP Primary Care Practicum II (4 cr.)

 This mentored practicum with clinical seminar provides further opportunity for advanced nursing practice with diverse adult populations. Students refine primary care skills including appropriate documentation, differential diagnosis, case presentation and technology utilization with attention to cost-effective and evidence-based approaches to care. Workshops on specialized clinical skills and alternative modalities are incorporated into the seminar. Intended for students in the master's level adult-gerontology track. Prerequisites: NUR 532, NUR 533; Every Year, Fall
## NUR 550 Family Primary Care I Maternal/Child

Focus (2 cr.) The childbearing family is the focus of this course. Dual frameworks of family theory and lifespan development are used to develop health promotion strategies and facilitate anticipatory guidance. Emphasis is placed on developing the student's knowledge base to care for the pregnant woman, well infant and child in diverse communities. Opportunities to evaluate theory and research findings relevant to holistic care of the family are provided. Intended for students in the master's level family nurse practitioner track. Prerequisites: NUR 532, NUR 533; Every Year, Fall

## NUR 551 FNP Practicum II Practicum II (4 cr.) A

 mentored practicum experience and a clinical seminar are included in this course. Health promotion and assessment of health problems of individuals within family systems are emphasized. Students refine primary care skills including appropriate documentation, differential diagnosis, case presentation and technology utilization with attention to cost-effective and evidence-based approaches to care. Intended for students in the master's level family nurse practitioner track. Prerequisites: NUR 532, NUR 533; Every Year, Fall

NUR 552 Family Primary Care II (2 cr.) Health care of the child within the family system is considered. Comprehensive assessment and management of common health problems of children encountered in primary care settings are addressed. Opportunities to evaluate theory and research findings relevant to care of the family and child are provided. Intended for master's level family nurse practitioner students. Prerequisite: NUR 550; Every Year, Spring

NUR 553 FNP Primary Care Practicum III (4 cr.)
This course includes a mentored practicum experience and a clinical seminar and provides opportunity for nursing practice with families at an advanced level. Comprehensive assessment, clinical decision making and strategies to facilitate health promotion and health restoration of individuals within family systems are emphasized. Opportunity to apply theory and research findings relevant to the care of the family is provided. Intended for students in the master's level family nurse practitioner track. Prerequisites: NUR 534, NUR 550, NUR 551; Every Year, Spring

## NUR 602 Principles of Ethical Theory in Nursing

( 1 cr.) This course facilitates the student's formulation of a theoretical basis for ethical judgment at an advanced level of practice. Students analyze ethical theory and debate responses to ethical problems in advanced nursing practice. Every Year, Fall and Summer Online

## NUR 610 Clinical Scholarship and Inquiry in

Nursing ( 3 cr.) This course applies quality improvement methods to an identified practice problem. Building on prior knowledge of theories, research and statistics, students critique related evidence, identify a practice innovation, and determine outcome measures and cost implications. Every Year, Summer Online

## NUR 610PBL Portfolio Synthesis Seminar I (1 cr.)

 This seminar accompanies NUR 610 and provides an opportunity for students to integrate their learning through application of quality improvement concepts to the identified practice problem. There are 120 practice hours associated with this course. The course is graded on a pass/fail basis. Every Year, Summer OnlineNUR 611 Leadership Seminar and Practicum I (2 cr.) This clinical seminar accompanies 120 hours of experiential learning in the field, and introduces students to human factors analysis and systemic quality improvement for increased patient and provider safety. Every Year, Spring Online

NUR 612 Leadership and Collaboration for Change in Health Care (3 cr.) This course focuses on developing advanced practice nursing leaders who are able to generate pragmatic responses to health care policy, systems and practice inquiry problems through a collaborative approach. Prerequisite: NUR 610; Every Year, Fall Online

## NUR 612PBL Portfolio Synthesis Seminar II (1 cr.)

 This seminar accompanies NUR 612 and provides an opportunity to accomplish the leadership project designed in NUR 612. Students also finalize the portfolio synthesis, in which they integrate their learning through reflection on and evaluation of their portfolio. There are 120 practice hours associated with this course. This course is graded on a pass/fail basis. Prerequisites: NUR 610, NUR 610PBL; Every Year, Fall Online
## NUR 613 Leadership Seminar and Practicum II

 ( 2 cr .) This clinical seminar accompanies 120 hours of experiential learning in the field, and further develops students' skills in identifying, critiquing and applying evidence-based practice and ethical concepts in health care. Prerequisite: NUR 611; Every Year, Fall OnlineNUR 615 Leadership Seminar and Practicum III ( 2 cr.) This clinical seminar accompanies 120 hours of experiential learning in the field, with an emphasis on legal concepts in health care. Prerequisite: NUR 613; Every Year, Summer Online

NUR 617 Leadership Fellowship I (2 cr.) This Fellowship consists of 240 hours of experiential learning in the field, with an online seminar to discuss student experiences and analyze the application of leadership concepts and skills. Prerequisite: NUR 615; Every Year, Spring Online

NUR 619 Leadership Fellowship II (2 cr.) This Fellowship consists of 240 hours of experiential learning in the field, with an online seminar to discuss student experiences and synthesize leadership concepts and skills. Prerequisite: NUR 617; Every Year, Summer Online

NUR 620 Advanced Principles of Population-based Health Care ( 3 cr .) This course examines policies impacting health across a broad spectrum of health care conditions and settings. Students discuss the contributions of nursing to population health. There are 40 fieldwork hours associated with this course. Every Year, Fall Online

## NUR 622 Special Topics in Advanced Practice

 Nursing ( $\mathbf{3}$ cr.) This seminar allows each student to examine contemporary issues surrounding advanced nursing practice and population health within the context of the individual student's population health focus.There are 40 fieldwork hours associated with this course. Prerequisite: NUR 620; Every Year, Spring Online

NUR 623 Population Health Fellowship (1 cr.) This clinical experience allows for a wide variety of individual student preferences in working with issues of population health. The 120 -hour requirement can be completed in condensed or extended timeframes. Prerequisites: NUR 620, NUR 622; Every Year, Summer

NUR 630 Advanced Health Assessment II (3 cr.) This course expands on assessment across the lifespan with attention to complex systems. The processes underlying diagnostic decision making are explored and a variety of simple office procedures such as suturing and splinting are taught. Prerequisite: NUR 520; Every Year, Spring

## NUR 630L Advanced Health Assessment II Lab

 ( 2 cr .) This lab must be taken with NUR 630. (2 lab hrs.) Prerequisite: NUR 520L; Every Year, SpringNUR 631 Introduction to Clinical Practicum and Seminar I (1 cr.) This 120-hour practicum introduces students to primary care assessment, diagnostics and treatments. Prerequisites: NUR 630, NUR 630L; Every Year, Summer

## NUR 632 Health Promotion and Advocacy (3 cr.)

 Health promotion, advocacy and mental health problems encountered in primary care settings are considered. A holistic approach to clients from adolescence to senescence is emphasized. Evidence-based guidelines and research are integrated to develop nursing strategies for health promotion and prevention. Every Year, FallNUR 633 Nurse Practitioner Practicum II (1 cr.) This 120-hour practicum provides continued opportunity to develop clinical reasoning skills for primary care. Every Year, Summer

NUR 634 Reproductive Health Problems in Primary Care ( 3 cr .) Gender-related problems in primary care across the lifespan are the focus of this course. Selected alternative and complimentary therapies are included. Prerequisite: NUR 632; Every Year, Spring

NUR 636 Common Problems in Primary Care ( 3 cr.) This course considers diagnoses of common problems encountered in primary care settings. Evidence-based, multidisciplinary management approaches to selected health problems also are discussed. Assessment and management of the selected problems include attention to cultural traditions, alternative treatments and socioeconomic policies that affect the delivery of care. The course is grounded by a holistic approach to care; case studies are used to promote clinical reasoning. Prerequisite: NUR 634; Every Year, Fall

NUR 637 Clinical Fellowship (2 cr.) This intensive clinical experience allows for deepened clinical practice in a flexible timeframe. The 240 -hour requirement can be completed in six weeks as a full-time practice, or in two- or three-day practice allotments throughout the summer. This course comes at the end of the student's sequence of clinical courses. This course is graded on a pass/fail basis. Prerequisite: NUR 612; Every Year, Summer Online

NUR 638 Laboratory Diagnosis ( 2 cr .) This course introduces students to selected laboratory tests, including cardiac and pulmonary testing. Students discuss the use and interpretation of diagnostics in a variety of primary care problems. Attention to financial considerations in the selection of diagnostics is emphasized. Every Year, Summer Online

## NUR 640 Special Topics in Adult Pharmacology

 ( 1 cr .) This course focuses on medication choices for adults with various health conditions. Drug effects and interactions in patients with multiple health issues are emphasized. Topics span the continuum from healthy adolescents to elders with multiple co-morbidities. Prerequisite: NUR 530; Every Year, Spring Online
## NUR 641 Adult Health Practicum and Seminar I

 (3 cr.) This course integrates the principles of primary care nursing and includes a mentored practicum with a clinical seminar. Students apply advanced practice skills to manage acute and chronic health problems across the adult lifespan. Appropriate clinical documentation, case presentation and use of web-based clinical resources are emphasized. Every Year, FallNUR 642 Complex Problems in Primary Care ( 3 cr.)
This course focuses on selected complex, urgent or less frequently encountered problems of primary care across the lifespan from adolescence to senescence. An opportunity to refine differential diagnosis and management of challenging health concerns in diverse populations is provided by the use of case studies.
Prerequisite: NUR 636; Every Year, Spring
NUR 643 Adult Health Practicum and Seminar II
( 3 cr .) This course includes a mentored practicum with clinical seminar and provides further opportunity for advanced nursing practice with diverse adult populations. Students refine primary care skills including appropriate documentation, differential diagnosis, case presentation and technology utilization with attention to cost-effective and evidence-based approaches to care. Prerequisite: NUR 641; Every Year, Spring

NUR 645 Adult Health Practicum and Seminar III ( 3 cr .) This course includes a mentored clinical practicum with a clinical seminar, and provides
an opportunity for continued, advanced holistic practice with adults. Students are assisted to manage progressively complex and multifaceted health problems. Comprehensive assessment, clinical decision making and strategies to facilitate health promotion and health restoration of individuals within family systems are emphasized. Prerequisite: NUR 643; Every Year, Fall

## NUR 647 Adult Health Practicum and Seminar IV

(3 cr.) This course includes a mentored clinical practicum with a clinical seminar, and provides continued opportunity for holistic nursing practice with families at an advanced level. Students are expected to manage the process of patient care with increasing confidence, efficiency and accuracy. Cost-effectiveness, evidence-based practice, ethical dilemmas, cultural sensitivity and preparation for entry to licensed practice are emphasized. Prerequisite: NUR 645; Every Year, Spring

## NUR 650 Special Topics in Family Pharmacology

 ( 1 cr .) This course focuses on the special pharmacological needs of infants, children and adolescents. Calculating appropriate medication dosages and medication delivery are essential to this course. Topics include over-the-counter and holistically-focused medicinal therapies. Prerequisite: NUR 530; Every Year, Spring Online
## NUR 651 Family Health Practicum and Seminar

 I (3 cr.) This course includes a mentored practicum experience and a clinical seminar. Health promotion and assessment of health problems within family systems are emphasized. Students learn primary care skills including appropriate documentation, differential diagnosis, case presentation and technology utilization with attention to cost-effective and evidence-based approaches to care. Every Year, Fall
## NUR 652 Primary Care of the Child and Family I

 ( 3 cr .) This course focuses on health care of the child within the family system. Comprehensive assessment and management of common pediatric health problems encountered in primary care settings are addressed. Every Year, Fall
## NUR 653 Family Health Practicum and Seminar

II ( 3 cr .) This course includes a mentored practicum experience of 120 hours and a weekly clinical seminar. It provides an opportunity for nursing practice with families at an advanced level. Comprehensive assessment, clinical decision-making and strategies to facilitate health promotion and health restoration of individuals within family systems are emphasized. Prerequisite: NUR 651; Every Year, Spring

NUR 654 Primary Care of the Child and Family II ( 3 cr .) This course continues the focus on health care
of the child within the family system. Primary care management is emphasized. Prerequisite: NUR 652; Every Year, Spring

## NUR 655 Family Health Practicum and Seminar III ( 3 cr.) This course includes a mentored practicum experience of 120 hours and a weekly clinical seminar. It provides continued opportunity for holistic nursing practice with families at an advanced level. Comprehensive assessment, clinical decision making and strategies to facilitate health promotion and health restoration of individuals within family systems are emphasized. Prerequisite: NUR 653; Every Year, Fall

NUR 656 Pediatric Assessment (1 cr.) This course discusses holistic health assessment of newborns, infants, children and adolescents. Assessment of normal growth and development is presented, as is assessment of common pediatric primary care problems. Prerequisite: NUR 630; Every Year, Summer Online

NUR 657 Family Health Practicum and Seminar IV ( 3 cr.) This course includes a mentored practicum experience of 120 hours and a weekly clinical seminar. Students are expected to manage the process of patient care with increasing confidence, efficiency and accuracy. Cost-effectiveness, evidence-based practice, ethical dilemmas, cultural sensitivity and preparation for entry to licensed practice are emphasized. Prerequisite: NUR 655; Every Year, Spring

NUR 670 Basic Principles of Anesthesia II (3 cr.) This introductory course covers the essential elements of physical assessment of the patient preparing to undergo anesthesia. The anesthesia machine and basic monitoring modalities are introduced. Students discuss airway management and assessment as well as fluid and blood component therapy, positioning, choice of anesthesia, premedication, regional anesthesia and recovery and pain management of the patient postoperatively. Every Year, Spring

NUR 670L Basic Principles of Anesthesia Lab (1 cr.) Lab to accompany NUR 670 and the initial introduction to the clinical area. Simulation is utilized throughout as well as the standardized patient lab. Every Year, Spring

NUR 671 Clinical Practicum I (1 cr.) This course provides an introduction to the administration of anesthesia for selected patients. Emphasis is placed on the application of basic principles of anesthesia; patient assessment; preparation of anesthesia equipment and drugs; development of patient-specific anesthesia care plans and basic airway management in supervised settings. Every Year, Spring

NUR 672 Advanced Pharmacology II (3 cr.) This course is a continuation of NUR 696 and covers the drugs utilized in the practice of anesthesia. Local anesthetics, anti-hypertensive agents, antibiotics in addition to other adjuvant drugs are covered in this extensive course. Prerequisite: NUR 530; Every Year, Spring

NUR 673 Clinical Practicum II (1 cr.) This course is an intermediate clinical practicum. Emphasis is placed on achievement of greater responsibility in planning, managing and implementing patient-specific anesthesia care plans for more difficult procedures. Prerequisite: NUR 671; Every Year, Summer

NUR 674 Professional Aspects of Nurse Anesthesia Practice I (1 cr.) This course covers practice issues that pertain to the nurse anesthetist. Topics include legal aspects and scope of practice, our national association and the structure and functions of the autonomous councils, quality assurance and the business of anesthesia. Students explore their role in the political arena, and have an opportunity in a seminar format to discuss the issues concerning health care policy and the role of the CRNA. Attendance at the AANA Midyear Assembly is required for the nurse anesthesia student to provide an opportunity to visit with legislators and lobby on Capitol Hill. Every Year, Spring

NUR 675 Clinical Practicum III (2 cr.) Intermediate clinical practicum. Specialty rotations in obstetrics, pediatrics and neuro anesthesia are introduced. Students begin taking call and assuming greater responsibility for the anesthetic management for patients with greater acuity. Prerequisite: NUR 673; Every Year, Fall

NUR 676 Professional Aspects of Nurse Anesthesia Practice II (1 cr.) This unit covers wellness and chemical dependence as it relates to the issues faced by all anesthesia providers. Professionalism is defined and discussed as it relates to practice as well as cultural understanding in patient care. Every Year, Fall

NUR 677 Clinical Practicum IV (2 cr.) This course includes an advanced clinical practicum including specialty rotations in cardiac, obstetric and pediatric anesthesia. Students demonstrate progress toward achievement of the terminal objectives for entry-level competency in anesthesia practice. A call component is included. Prerequisite: NUR 675; Every Year, Spring

NUR 678 Professional Aspects of Nurse Anesthesia Practice III (1 cr.) This course discusses educational leadership as it pertains to the role of clinical preceptor and educator. Topics include curriculum development, evaluation and the role of the clinical educator. Every Year, Spring

NUR 679 Clinical Practicum V (2 cr.) This course includes an advanced clinical practicum including specialty rotations in cardiac, obstetric and pediatric anesthesia. Topics focus on internalization of theoretical concepts in the application and management of all types of patients and procedures and achievement of the terminal objectives for entry-level competency in anesthesia practice. A call component is included. Prerequisite: NUR 677; Every Year, Summer

NUR 680 Physics and Chemistry for the Nurse Anesthetist (4 cr.) This course includes an extensive study of key concepts pertaining to organic, biochemistry and physics as they relate to anesthesia. Topics include medical mathematics and conversion factors, the gas laws, biochemistry of fluids and electrolytes, acid-base and buffers systems, electrical circuits, reviews of organic chemistry including the functional groups and physical principles that are relevant. Equipment and technology used in anesthetic practice also are studied in this course. Students have an opportunity to utilize common anesthetic equipment in the laboratory setting. Every Year, Summer

NUR 681 Clinical Practicum VI (2 cr.) This course is a continuation of the advanced clinical practicum. Prerequisite: NUR 679; Every Year, Fall

NUR 682 Advanced Principles of Anesthetic Practice I ( $\mathbf{2}$ cr.) The first course in advanced principles covers anesthetic management for specialty procedures and groups of patients such as the elderly and morbidly obese. Robotic procedures, orthopedic surgery, trauma and malignant hyperthermia are among the topics presented. Concepts of advanced airway management and principles of anesthetic management in remote locations are included. Prerequisites: NUR 670, NUR 670L; Every Year, Fall

## NUR 682L Advanced Principles of Anesthetic

 Practice Lab I (1 cr.) Labs accompany this course and include time spent in the simulated and/or cadaver labs. Prerequisites: NUR 670, NUR 670L; Every Year, FallNUR 683 Clinical Practicum VII (2 cr.) This course is a continuation of the advanced clinical practicum. Prerequisite: NUR 681; Every Year, Spring

NUR 684 Advanced Principles of Anesthetic Practice II ( 3 cr.) This course covers the fundamental concepts essential to clinical anesthesia practice in the obstetric and pediatric populations and the theoretical and practical aspects of acute and chronic pain management. Prerequisite: NUR 682; Every Year, Spring

NUR 685 Clinical Practicum for Post-Master's I (1 cr.) This is the first of the clinical components of the nurse
anesthesia doctoral program for post-master's CRNAs. Students select a specific topic in their chosen area of clinical focus. Clinical exploration of the selected topic is done with the guidance of their adviser. The student selects studies and readings to support the selected topic. Every Year, Fall Online

NUR 686 Advanced Principles of Anesthetic Practice III (1 cr.) This course covers the administration and management of major nerve conduction anesthesia and anesthetic management for cardiac, respiratory and neuro anesthesia. Prerequisite: NUR 684; Every Year, Summer

NUR 687 Clinical Practicum for Post-Master's II ( $1 \mathbf{c r}$. ) This is the second of the clinical components of the nurse anesthesia doctoral program for post-master's CRNAs. The students continue to work on their area of focus in the clinical arena. Clinical exploration and the formulation of an abstract and bibliography of this selected topic are done with guidance of their adviser. Every Year, Spring Online

NUR 688 Human Factors and Patient Safety (3 cr.) This course examines issues related to human error and patient safety with an emphasis on crisis management. Students explore the theoretical basis of human error, patient safety and quality assurance in health care. This course introduces a systems approach to error investigation and analysis, and integrates concepts of teamwork, crisis management, simulation and monitoring systems in anesthesia practice and medical practice. Prerequisites apply to post-bachelor's program only. Prerequisites: NUR 671, NUR 673, NUR 675; Every Year, Spring Online

NUR 689 Clinical Practicum/Patient Safety Seminar for Post-Master's III ( 2 cr .) The students continue to work on their area of focus in the clinical arena. The students complete the rough draft of their work during this semester. Each student analyzes an anesthesiarelated critical event by presenting a Journal Club and discussion. Every Year, Summer Online

NUR 690 Advanced Principles of Anesthesia IV (2 cr.) This course covers more advanced practices in anesthesia and expands on previous advanced principles course work. Prerequisite: NUR 688; Every Year, Summer

NUR 691 Clinical Practicum/Patient Safety Seminar for Post-Master's IV ( $\mathbf{2} \mathbf{~ c r}$.) This is the fourth of the clinical components of the nurse anesthesia doctoral program. Students complete their projects and submit for possible publication. The accompanying seminar focuses on areas in patient safety. Fall Online

NUR 692 Clinical Case Study Presentation (1 cr.) This course gives the students an opportunity to present their work, which was done throughout the clinical practica to an audience of their peers and the community. Students are assessed for the delivery and ability to take questions from the audience. Every Year, Spring

NUR 693 Clinical Practicum/Patient Safety Seminar for Post-Master's V (2 cr.) This is the final clinical component of the nurse anesthesia doctoral program. Each student finalizes the work on his/her area of clinical focus for presentation. Every Year, Spring Online

NUR 694 Oral Comprehensive Exams (2 cr.) This course is designed to test the student's knowledge in preparation for the NCE. Oral exams are given in pharmacology, anatomy and physiology, pathophysiology and basic/advanced principles of anesthesia. Prerequisite: completion of all anesthesia core courses. Every Year, Spring

NUR 696 Advanced Pharmacology and Basic Principles of Anesthesia I (3 cr.) This course precedes the anesthesia clinical practicum and covers a variety of basic concepts needed to assess patients preoperatively for an anesthetic, care for them intraoperatively and safely deliver them to the postoperative care unit. An introduction to the basic principles of pharmacology and the primary classes of agents utilized in anesthetic practice is included. Every Year, Fall

NUR 696L Advanced Pharmacology and Basic Principles of Anesthesia I Lab (1 cr.) The lab complements the weekly lectures with sessions in the simulation lab. Every Year, Fall

## Occupational Therapy (OT)

OT 500 Fieldwork Level II (6 cr.) This supervised, 12-week clinical experience is designed to provide the student with in-depth opportunities to apply theory to practice in a wide variety of delivery settings, populations and emerging practice arenas. The focus is on the application of purposeful and meaningful occupation and the management of occupational therapy services. The fieldwork experience is designed to promote clinical reasoning and reflective practice, develop professionalism, and demonstrate competence. Specifically, areas of practice may include the following: community-based occupation and life skill training, developmental centers, and mental health settings. Students must abide by all policies in the department student manual. Every Year, Summer

OT 510 Laws and Regulations in OT (2 cr.) This course provides a comprehensive overview of the legislative and regulatory bodies, as well as regulations
that impact the practice of occupational therapy. Students review the current systems of regulation and the roles and liabilities of the occupational therapist within these systems. This course emphasizes the process of retrieval of legal materials to allow lifelong learning as legislative changes occur. Every Year, Fall

## OT 511 Administration and Management in OT (4 cr.)

 This class introduces students to the daily management functions of an occupational therapy department including planning, organizing, directing, controlling, and supervision of occupational therapy assistants and other department personnel. The course integrates students' knowledge of interventions with information related to the delivery of occupational therapy services. Topics include managed care, quality assurance, leadership, regulatory agencies, models of practice, ethics, and consultation. Students gain hands-on experience with budgeting, marketing, program evaluation, and ethical problem-solving in administration. Every Year, Fall
## OT 535 Integrative Interventions: Sensory and

 Rehabilitation (4 cr.) This course provides a comprehensive overview of advanced intervention techniques used in occupational therapy. While opportunities are provided to learn specific interventions, emphasis is placed on the clinical reasoning process used in a variety of occupational therapy practice contexts. Application of frames of reference and appreciation of cultural and environmental factors as they relate to client-centered intervention are highlighted. Every Year, Fall
## OT 535F Intervention: Sensory Integration and

 Rehabilitation Fieldwork (1 cr.) This course provides structured fieldwork observation in neurorehabilitative and sensory integration settings and allows the student to observe and explore the evaluation and intervention process utilized in these frames of reference. Students have the opportunity to see, observe and report on the variety of intervention strategies utilized within the various models such as health care, education, community and social systems. The settings utilized are equipped to provide clinical application of principles learned in the OT curriculum and focus on the sensory integration and neurorehabilitation intervention process. Fieldwork is three hours per week. Every Year, Fall
## OT 535L Intervention: Sensory Integration and

 Rehabilitation Lab ( 2 cr .) This lab integrates the advanced intervention techniques discussed and described in the lecture portion of this class. Opportunities are provided to learn specific interventions required for a variety of occupational therapy practice contexts and with consideration of cultural and environmental factors. Observation is focused on specific evaluation, intervention and outcome processes for these frames of reference. (2 lab hrs.) Every Year, FallOT 536 Intervention: Ergonomics and Assistive Technology (4 cr.) This course integrates intervention techniques such as ergonomics, environmental modification, assistive technology, and design and fabrication of orthotics and devices. While opportunities are provided to learn specific interventions, emphasis is placed on the clinical reasoning process used in a variety of occupational therapy practice contexts. Application of frames of reference and appreciation of cultural and environmental factors as they relate to intervention are highlighted according to practice environments: rehabilitative, home, work and technology. Every Year, Spring

OT 536F Intervention: Ergonomics and Assistive Technology Fieldwork (1 cr.) This course provides structured fieldwork observation in various settings and allows the student to observe and explore the intervention process utilized in occupational therapy. Students also have the opportunity to see, observe and report on the variety of intervention strategies utilized within the various models such as health care, education, community and social systems. Students develop an appreciation for the frame of reference used in various models of practice as a guide to intervention selection. The settings utilized are equipped to provide clinical application of principles learned in the OT curriculum and focus on intervention strategies with people in home, work and assistive technology settings. Fieldwork is three hours per week. Every Year, Spring

OT 536L Intervention: Orthotic Lab (1 cr.) This lab course provides students with practical, hands-on learning experience in splinting. Students evaluate and fabricate splints for specific diagnoses and client populations. Students apply biomechanical principles to splint construction, analyze the cost of splints (prefabricated versus custom-made), and discuss the role of splinting as part of an overall intervention plan for clients. In addition, students are introduced to various prosthetic devices and the role of occupational therapy during pre-prosthetic and prosthetic training for clients with amputations. An integrated case study links the clinical reasoning process involved in all three components of this course: fieldwork, ergonomics, assistive technology and orthotics. Every Year, Spring

OT 550 OT Research ( 4 cr .) This course addresses the importance of research in the practice of occupational therapy. The course examines the research theories and methods in occupational therapy practice. Students participate in designing and implementing entry-level research studies as well as analyzing and interpreting the professional literature. Students formulate the proposal for their spring capstone project. Every Year, Fall

OT 555 Pharmacology and Environmental Toxins Affecting Human Performance (3 cr.) This course
addresses the effects of drug therapy and environmental toxins on the therapeutic process and daily occupational performance of clients. Pharmacokinetics, side effects, drug interactions and current environmental risks are addressed for each body system. Students identify implications for practice based on performance effects observed. This course integrates information from previous courses on bodily systems, human performance, and environmental risk factors with advanced practice issues related to medication and environmental risks. Every Year, Spring

OT 556 Professional Development ( 3 cr .) This distance learning course focuses on the current issues related to the roles of the student transitioning to professional. The course emphasizes linking theory to practice, self-analysis and reflection upon academic experience, and relating those to different facets of clinical and professional reasoning as a funding mechanism in practice. Continued professional growth through the development of understanding of personal and professional responsibilities as a practicing therapist and a commitment to lifelong learning and professional advocacy also are addressed. Grant writing is included. Every Year, Spring

OT 560 Contemporary Modalities Lab ( 1 cr.) This integrated lecture-lab provides hands-on experience with the advanced contemporary modalities used in occupational therapy. Topic areas include traditional physical agent modalities and complementary and alternative modalities used to enhance healing and manage pain in preparation for clients' occupational performance. Students gain experience with each modality and apply use of modalities to comprehensive intervention planning assignments. Students use clinical reasoning to identify the most appropriate physical agent modalities and complementary technique for a given client based on previous knowledge of client evaluation, body systems and sociocultural influences. Every Year, Fall

OT 565 Integrative Case Studies ( 2 cr .) This course explores individual, group and population case studies of clients in occupational therapy. Students analyze each case using clinical reasoning, qualitative research strategies, frames of reference and best practices to develop integrative evaluation and intervention skills. Every Year, Spring

OT 570 Capstone Graduate Projects (3 cr.) This capstone course is a culminating experience in the occupational therapy curriculum, which integrates all coursebased material and fieldwork experiences with practical application. Students design and execute a research or creative project that is relevant to current and emerging practice areas in occupational therapy. Students gain experience in project management, critical analysis and professional presentations. Every Year, Spring

OT 580 Fieldwork Level II ( 6 cr.) These supervised experiences provide the student with the opportunity to apply theory and clinical reasoning skills to the occupational therapy evaluation and intervention process for clients across the life span and in a variety of life environments. Students must abide by all fieldwork policies as listed in the program manual. Fieldwork is 12 weeks long. Every Year, Fall and Summer

OT 581 Fieldwork Level II ( 6 cr.) These supervised experiences provide the student with the opportunity to apply theory and clinical reasoning skills to the occupational therapy evaluation and intervention process for clients across the life span and in a variety of life environments. Students must abide by all fieldwork policies as listed in the program manual. Fieldwork is 12 weeks long. Every Year, Fall

## OT 600 Evidence-Based Practice in OT ( 3 cr.)

This course provides an opportunity to learn and use evidence to make informed decisions for practice. Students review the definitions, uses and purposes of evidence-based practice. Each student has several opportunities to search, analyze and apply evidence to his or her area of practice. Every Year, Spring

OT 602 Practice Trends in Occupational Therapy ( 3 cr .) Students study practice trends in occupational therapy, looking at changing terminology in the profession; the profession's vision and focus areas for the future; an analysis of practice from the viewpoints of practitioners, clients, administration and health care policy; and professional involvement. Readings focus on current literature. Online discussions focus on critical reflection and assignments target analytical planning for future practice as a goal. Every Year, Spring

OT 610 Legal Research and Practice Implications (3 cr.) This course provides a comprehensive overview of the legislative and regulatory bodies, as well as the current legislation and regulations that impact the practice of occupational therapy. The course emphasizes the current systems of regulation, the roles and liabilities of the occupational therapist and the skills required to research within these systems. Every Year, Summer

OT 611 Administrative/Management (3 cr.)
This class introduces students to the management functions of an occupational therapy department or business including planning, organizing, directing, and controlling. The course integrates students' knowledge of interventions with information related to the delivery of occupational therapy services. Topics include managed care, quality assurance, leadership, regulatory agencies, models of service delivery, ethics and consultation. Students gain hands-on experience with strategic planning, budgeting, marketing,
program evaluation and ethical problem-solving in administration. Every Year, Summer

OT 612 Professional Writing (1 cr.) This course reviews the skills required for writing professional papers and publications within the health care environment. While grammar and citation skills are reviewed, the ability to create a document written clearly and persuasively is emphasized. Students must be enrolled in the post-professional online OTD. Every Year, January and Summer

OT 640 Directed Study in Evidence-based Practice ( 3 cr .) Students learn the steps of the evidence-based practice continuum using a journal entry format. Each student follows the steps using actual practice case studies from his/her individual practice sites and presents the responses to each step in the process to discover evidence to guide the practice case questions. Peer interaction and feedback is critical to the realistic development of evidence to guide practice decisions. A major assignment is to have each student participate in the writing of a systematic review or an evidence-based practice brief for the profession. Students complete a needs assessment of a particular site or practice area as well. Prerequisite: OT 654; Every Year, Spring

## OT 650 Application of Theory and Exploration of

 Occupation (3 cr.) This course begins by exploring occupation-the central construct of the profession. Students also look at occupational science as a disciplinary knowledge base. Current ideas about occupation-based practice in both traditional settings and emerging practice areas are analyzed. Theories and models of practice that guide occupation-based practice also are reviewed. Every Year, SpringOT 651 Systems ( 3 cr .) Knowledge of health care delivery in the U.S. is fundamental to providing occupational therapy services. A key element to providing relevant health care services is an understanding of the broader systems that influence and drive delivery models. This course addresses the general systems model as applied to the delivery of health care services. System components are addressed including the resources, the internal processes, external influences, measureable outcomes and stakeholders in service delivery systems. The course examines the range of service delivery models in OT including the traditional medical model, school-based, community, educational, home health, hospice and telehealth, among others. The course prepares students to analyze the key components of delivery system and determine how OT services are optimized in specific models. Every Year, Fall

OT 652 Doctoral Seminar ( 1 cr .) Students create a professional development plan and an e-portfolio for doctoral
work with goals and objectives related to occupation and evidence-based practice. This plan also relates to the core curriculum and chosen tracks. Students explore advanced evidence-based practice skills required to retrieve evidence. They also learn about the tools utilized by clinicians to enhance practice, how to be a consumer of scholarship, and proper use of evidence/citations. Every Year, Fall

OT 653 Policy/Ethics (2 cr.) The future leaders of the profession need an understanding of the political and legal policies impacting occupational therapy, as well as the ethics involved in decision making. Students explore the role of the occupational therapist in advocacy as well as the concepts of social justice. The impact of these policies and decisions are reviewed in relationship to all settings and the occupational as well as psychosocial well-being of the individual client and populations of clients. Every Year, Fall

OT 654 Critical Inquiry of Scholarship ( 3 cr.) This course is the first of a series of courses focusing on scholarship in the profession. Emphasis is placed on understanding the various forms of scholarship that are needed to drive the profession of occupational therapy forward and building a solid foundation needed to carry out a scholarly project. This course covers the scholarship process, with a focus on developing a question for scholarly exploration and ways of answering questions. Quantitative, qualitative, mixed method and participatory research methodologies are introduced. Every Year, Fall

OT 655 Professional Seminar ( 3 cr.) This course integrates prior learning into the discussion of how to become an agent of change within the occupational therapy environment. Topics include the analysis of statistics related to occupational therapy, advocacy, leadership, group dynamics, systematic interactions and the ability to manage groups both internal and external to occupational therapy. As discussions progress, students are given the opportunity to participate in a panel discussion regarding these topics and how they relate to future capstone projects. Every Year, Summer

## OT 656 Critical Inquiry of Scholarship II (4 cr.)

This course is the second of a series of courses focusing on scholarship in the profession. Emphasis is placed on developing a proposal for a scholarly project. Drawing on the content of OT 563, students develop the background to the project and problem statement, questions guiding the project informed by theory, a literature review and method section. Prerequisite: OT 654; Every Year, Summer

OT 660 Seminar: Innovations and Emerging Issues in Children and Youth ( 3 cr.) The OT seminars 660, 661 and 662 present core content that is the same for
all three courses during weeks one and two. The focus of the core weeks is on environmental scanning for evidence of change and locating evidence in the literature for that change. Weeks four-seven focus on the individual theme as selected by the individual student. The content is faculty facilitated in the thematic areas based on the OTD tracks. Every Year, Fall

OT 661 Seminar: Innovations and Emerging Issues in Environmental Adaptations ( 3 cr .) The OT seminars 660, 661 and 662 present core content that is the same for all three courses during weeks one and two. The focus of the core weeks is on environmental scanning for evidence of change and locating evidence in the literature for that change. Weeks four-seven focus on the individual theme as selected by the individual student. The content is faculty facilitated in the thematic areas based on the OTD tracks.

OT 662 Seminar: Innovations and Emerging Issues in the Adult Health Care Continuum (3 cr.) The OT seminars 660, 661 and 662 present core content that is the same for all three courses during weeks one and two. The focus of the core weeks is on environmental scanning for evidence of change and locating evidence in the literature for that change. Weeks four-seven focus on the individual theme as selected by the individual student. The content is faculty facilitated in the thematic areas based on the OTD tracks.

OT 670 Leadership in Program Development/ Business ( $\mathbf{3}$ cr.) Students analyze leadership styles as they relate to supervision in both public and private sectors. The course includes a review of skills required to be an entrepreneur, own a practice and navigate the policies required of a business. Every Year, Spring

## OT 671 Leadership in Higher Education (3 cr.)

Students analyze leadership styles as they relate to the educational setting for those interested in academia. The course also includes a discussion of transitions from practice to the educational setting.

OT 672 Leadership in Practice ( 3 cr .) Students analyze leadership styles as they relate to supervision of occupational therapy staff as well as the transition from a clinician to a supervisor or administrator.

OT 680 Capstone I ( 1 cr .) This capstone course is a culminating experience in the occupational therapy curriculum, which integrates all core and track material. Students design and execute a scholarly or creative project that is relevant to current and emerging practice areas in occupational therapy. Students gain experience in project management, critical analysis and professional presentations. Every Year, Fall

OT 681 Capstone II ( $\mathbf{3} \mathbf{~ c r}$.) This capstone course is a culminating experience in the occupational therapy curriculum, which integrates all core and track material. Students design and execute a scholarly or creative project that is relevant to current and emerging practice areas in occupational therapy. Students gain experience in project management, critical analysis and professional presentations. Every Year, Spring

## Organizational Leadership (OL)

OL 601 Foundations of Organizational Leadership
( 3 cr .) This course explores foundational concepts of modern leadership and reviews traditional leadership theory. Contemporary issues in leadership provide opportunity for practical application and personal reflection. Every Year, All

## OL 610 The Power and Politics of Communication

 ( 3 cr.) This course reviews effective communication techniques at the corporate and individual levels. The study of power and politics of communication includes ethical, cultural and contemporary concepts. Prerequisite: OL 601; Every Year, AllOL 615 Leadership Across Boundaries ( 3 cr.) This course covers the challenges of interacting, managing and leading across cultural differences and national boundaries. The focus is on coordinating and sustaining cooperative activities across various types of boundaries, including cultural, generational, gender, ethnic and regional. Students explore domestic and international differences as well as evaluate the implications of emerging global actors on business practices. Prerequisite: OL 601; Every Year, Fall and Spring

OL 630 Performance Management ( 3 cr .) This course focuses on the theoretical and practical application of performance management systems. The importance of an effective performance management system is examined. An effective performance management system includes a continuous process of identifying factors and integrated approaches that align individual and team competencies with organizational goals. Students gain a conceptual understanding of key factors involved in assessing performance management systems in small and large organizations. Prerequisite: OL 601; Every Year, Spring and Summer

OL 640 Project Management ( 3 cr. ) This course goes beyond basic project management (PM). Students learn advanced PM technology tools and techniques for managing complex projects and programs. Cases and simulations allow students to learn how these advanced skills are applied to produce business/organizational results that require collaborative relationships. Students
can receive credit for only one of the following courses: MG 603, OL 640 and CIS 690. Every Year, Fall and Summer

OL 650 Leading Organizational Change ( 3 cr .) This course examines theoretical concepts and practical techniques of organizational design and change. Students gain a conceptual understanding of leadership skills required for organizational change. The study of leading organizational change includes factors relating to the need for organizational change and the strategystructure relationship to organizational design with a focus on organizational effectiveness. Prerequisite: OL 601; Every Year, Fall and Spring

OL 662 Ethics and Governance ( 3 cr .) This course uses contemporary examples and theoretical perspectives to assess the critical dimensions of ethics in leadership, and explores responsible corporate governance linked to organizational leadership. Prerequisite: OL 601; Every Year, Spring and Summer

OL 681 Leadership in Human Resources ( 3 cr .) In this course students are introduced to the principles of human resource management(HRM). The course balances theoretical and practical approaches with emphasis on the four primary HRM functions of recruiting, selection, performance management and governance. Other areas covered include compensation and benefits as well as challenges of international HRM. Every Year

OL 682 Employment Law for the Non-Lawyer ( 3 cr .) This course introduces the non-legal professional to laws that govern workplace personnel. Students are provided with an overview of legal issues affecting human resource management. The primary concentration is on the practical application of employment law on individuals in organizations and its impact on HR decisions. Every Year, Summer

## OL 683 Employee Development Strategies for

 Organizational Leaders (3 cr.) This course provides students with strategic approaches to developing human talent. Students gain knowledge in the area of training, performance development and talent management principles. Focus is placed on how to analyze performance problems as well as how to apply the principles of learning to the individual, the team and organization development. Every YearOL 686 Leading Public Service Organizations (3 cr.) This course examines the challenges and opportunities of public sector leadership. Course participants examine the chief executive's role as a policy maker; dealing with other community leaders and the media; discipline and ethical conduct, and leading in unionized environments. Critical leadership competencies
including authenticity, trust building, exercise of power, organizational behavior, and learning to influence the work environment are also examined. Every Year

## OL 687 Strategic Planning for Public Service

 Organizations ( 3 cr.) This course develops skills in systematic planning within a variety of public sector organizational settings. Strategic goal setting, missiondriven plans, managing constrained resources and monitoring and modifying strategic plans in a dynamic environment are emphasized. Participants explore the processes of advanced planning through the analysis of an organization's strategic plan. Every Year
## OL 690 Leadership Consulting Capstone ( 3 cr .)

This course integrates the knowledge and skills gained throughout the program. The course focuses on the design and implementation of a consulting case/project, including a comprehensive analysis of organizational issues and proposal of appropriate recommendations and implementation plans. The result is a professionally written consulting paper and presentation. The course is ideally taken last in the program. Prerequisites: OL 601, OL 610, OL 615, OL 630, OL 640, OL 650, OL 662; Every Year, All

## Pathology (PA)

## PA 502 Medical Terminology: Advanced (2 cr.)

Students study the etymology of medical and surgical terms with emphasis on the principles of word analysis, construction and evolution. The course includes a review of anatomy and abstraction of current published case studies. Every Year, Summer

PA 511 Human Microscopic Anatomy (4 cr.) Human anatomy at the light microscopic level is explored through a general and systemic approach using a lecturelab combination. Students are introduced to primary tissues and their cellular components followed by system (organ) investigation morphologically that uses the light microscope emphasizing pattern recognition as the mechanism employed for tissue identification. Every Year, Summer

PA 512 Human Anatomy (4 cr.) This course covers dissection of the human body with particular attention to the morphological relationships of individual organ systems. Emphasis is placed on internal anatomy as a major facet of this instruction that is designed for eventual autopsy evisceration and subsequent dissection. Every Year, Summer

PA 512L Human Anatomy Lab (0 cr.) Lab to accompany PA 512. Every Year, Summer

PA 513 Basic Human Pathology I (3 cr.) This series of lectures utilizes slides of gross and microscopic pathology starting with a general introduction to pathology covering inflammation and neoplasia, and then progressing to pathology by the systems such as cardiovascular, endocrine and gastrointestinal systems. Every Year, Fall

PA 514 Basic Human Pathology II (3 cr.) This series of lectures utilizes slides of gross and microscopic pathology of specific areas of disease in a systemic approach including such specialty areas as dermatologic, perinatal, pediatric and forensic pathology as well as the genitourinary, musculoskeletal, respiratory and neuropathology systems. Every Year, Spring

PA 515 Human Physiology (4 cr.) Various aspects of human physiology are examined, with emphasis on the physiologic and biochemical function. The fundamental functional principles for general and systematic organ systems are covered. Every Year, Summer

PA 516 Clinical Pathology ( 4 cr.) Clinical relationships to disease are examined, highlighting such topics as hematology, chemistry, toxicology, serology, urinalysis, blood banking and cytology. Basic techniques and theoretical applications from a case history medical approach are emphasized. Every Year, Spring

## PA 517 Applied Anatomic Pathology (4 cr.)

Basic principles of clinical history taking, physical examinations and general medical terms and symbols are studied. Emphasis is on autopsy and surgical techniques of evisceration and organ system dissection through lectures, films, slides and practical exposure. Every Year, Spring

PA 518 Laboratory Management (3 cr.) The organization and function of an anatomic pathology laboratory is investigated to include ordering supplies, money management, computerization, laboratory safety, organization compliance (JACHO, CAP, OSHA) and quality assurance. Every Year, Fall

PA 520 Autopsy Pathology I ( 6 cr.) This threesemester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Summer

PA 521 Autopsy Pathology II ( 6 cr.) This threesemester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Fall

PA 522 Autopsy Pathology III (6 cr.) This threesemester rotational, practical course on the techniques of autopsy dissection includes summarization of clinical histories and gross autopsy findings. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Spring

PA 523 Surgical Pathology I ( 6 cr .) This is a threesemester inclusive practical course in methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immunofluorescent, immunochemical, frozen and electron microscopy. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Summer

PA 524 Surgical Pathology II (6 cr.) This is a threesemester inclusive practical course in methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immunofluorescent, immunochemical, frozen and electron microscopy. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Fall

PA 525 Surgical Pathology III ( 6 cr.) This threesemester inclusive practical course covers methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immuno-fluorescent, immunochemical, frozen and electron microscopy. The 12 -month rotation involves several different hospitals in both community and university settings. Every Year, Spring

PA 526 Biomedical Photography ( 4 cr .) This is a teamtaught course designed to give the pathologists' assistant student a basic background leading to practical application of photographic techniques used in the anatomic pathology laboratory. It also includes an introduction to the principles of imaging radiography. The course is divided into three parts over two summer-school semesters: basic photographic principles and technique; the theoretical and practical aspects of photomacrography and photomicrography as they are applied to anatomic specimens and imaging radiology. Every Year, Summer

PA 535 Disease Mechanisms (4 cr.) This course investigates how the normal physiology of the human body is altered in disease states. The mechanisms by which diseases become established, cause damage and alter organ system function are established. Natural body responses and therapeutic measures are examined for their mode of action, side effects and after affects. Every Year, Fall

## Perfusion (PR)

## PR 500 Theoretical Foundations of Cardiovascular

 Perfusion (2 cr.) This course exposes students to role expectations, practice, ethics and professionalism. Students gain an appreciation of the history of key individuals and progress through discoveries that influenced the development of current practice in cardiothoracic surgery and extracorporeal circulation. Students become familiar with the role of organizations that impact their field, including those responsible for overseeing national certification exams and continuing education programs. A minimum grade of B - is required to progress. Every Year, Fall
## PR 502 Systems Anatomy and Physiology I (3 cr.)

 This course examines selected organ systems pertinent to cardiopulmonary bypass and related procedures performed by the perfusionist. Students study the structure and function of the cardiovascular, lymphatic, immune and pulmonary systems. Emphasis is placed on group discussion and the application of knowledge to solving problems that arise in clinical situations. A minimum grade of B- is required to progress. Every Year, Fall
## PR 503 Systems Anatomy and Physiology II (3 cr.)

This course examines selected organ systems pertinent to cardiopulmonary bypass and related procedures performed by the perfusionist. Students study the structure and function of the nervous, hepatic, renal and endocrine systems. Emphasis is placed on group discussion and application of knowledge to solving problems that arise in clinical situations. A minimum grade of B - is required to progress. Prerequisites: PR 500, PR 502, PA 535, PR 508, PR 516; Every Year, Spring

## PR 506 Pharmacologic Intervention in Cardio-

 vascular Perfusion ( 4 cr .) This course is an intensive study of pharmacokinetics, pharmacodynamics, mechanism of action, indications and contraindication of drugs administered to the patient undergoing cardiopulmonary bypass. Cardiovascular drugs, anticoagulants and anesthetic agents administered by the perfusionist are emphasized. Students also become familiar with many drugs used to treat other disease states that may be taken by patients with significant comorbidities. A minimum grade of $B$ - is required to progress. Prerequisites: PR 500, PR 502, PA 535, PR 508, PR 516; Every Year, Spring
## PR 508 Extracorporeal Circuitry and Laboratory I

( 1 cr .) Students receive orientation in both the laboratory and the cardiac operating room to equipment operation and techniques applicable to providing extracorporeal circulation during cardiac surgical procedures. Emphasis is placed on developing student skills in researching best practice methods
as found in the medical literature. Competent operation of equipment, including the heart lung machine, ventricular assist devices, intra-aortic balloon counterpulsation pump, and autologous blood recovery devices must be demonstrated. A minimum grade of Bis required to progress. Every Year, Fall

## PR 509 Extracorporeal Circuitry and Lab II (1 cr.)

 This intensive study of the appropriate procedures for providing extracorporeal circulation for a variety of purposes includes operation of specialized medical devices, quality control and troubleshooting techniques. Intraaortic balloon counterpulsation, autologous blood recovery and ventricular assist devices are covered. Students are expected to search recent medical publications and generate discussion in an attempt to resolve controversial issues pertaining to best practice. A minimum grade of B- is required to progress. Prerequisites: PR 500, PR 502, PA 535, PR 508, PR 516; Every Year, SpringPR 510 Surgical Techniques (2 cr.) This course examines the cardiothoracic surgical procedures that require extracorporeal circulatory support. Students develop an understanding of the techniques used in numerous open-heart procedures performed on adults and children. Special application of extracorporeal circulation in rare surgical procedures is included. Students are required to view a number of these procedures in the operating rooms of affiliated institutions to increase their understanding of the skills required to perform these operations. A minimum grade of B- is required to progress. Prerequisites: PR 500, PR 502, PA 535, PR 508, PR 516; Every Year, Spring

PR 512 Pediatric Perfusion (4 cr.) This course presents a study of the embryological formation of the cardiopulmonary system, a description of congenital cardiopulmonary anomalies and the application of perfusion techniques during corrective surgical procedures. Students work both independently and in groups to evaluate the results of clinical studies that contribute to current thinking and practice in the specialized area of pediatric perfusion. A minimum grade of B - is required to progress. Prerequisites: PR 500, PR 502, PA 535, PR 508, PR 516; Every Year, Spring

## PR 514 Special Topics in Cardiovascular Perfusion

( 2 cr. ) This course explores less common and newly introduced procedures for perfusionists, including the use of investigational drugs that modify the biochemical impact of adult and infant extracorporeal membrane oxygenation, extracorporeal carbon dioxide removal, total artificial hearts and newly introduced ventricular assist devices. Old standards of practice are reexamined in the light of new evidence. A minimum grade of Bis required to progress. Prerequisites: PR 503, PR 506, PR 509, PR 510, PR 512; Every Year, Summer

PR 516 Physiologic Monitoring (4 cr.) This course covers monitoring of the physiological impact of extracorporeal circulation, administration of drugs, blood products and anesthetic agents on the patient undergoing surgery requiring cardiopulmonary bypass. Monitoring of intravascular arterial and venous pressures in the systemic and pulmonary circulations, cardiac output measurement are covered. An emphasis is placed on 12-lead electrocardiogram, blood anticoagulation measurement, analysis and interpretation of arterial and venous blood gases, fluid and electrolyte balance and cerebral oxygen saturation. After mastering the basic concepts of each section, students work through case-study scenarios to apply theory to practice. Electronic simulators are used. A minimum grade of Bis required to progress. Every Year, Fall

## PR 520 Research Methods in Cardiovascular

Perfusion (2 cr.) This course explores ethical issues in medical research, provides an overview of grant proposal writing and includes development of a research project, data collection and analysis using statistical programs for computers. Students develop a presentation and employ various computer presentation techniques to present student project data. Students work individually on the project and require the approval of the instructor to pursue a particular topic. A minimum grade of B - is required to progress. Prerequisite: PR 600; Every Year, Fall

PR 522 Research Methods in CV Perfusion II (2 cr.) This course is a continuation of PR 520. It provides the perfusion student with an introduction to current areas of research being conducted in the open-heart field, scientific principles of experimental design and analysis and methods of reporting results to the scientific community. This course enables students to complete the collection/analysis of data that was begun in PR 520, prepare the final written report and present the results of the research project to the perfusion community. A minimum grade of B - is required to progress. Prerequisite: PR 520; Every Year, Spring

PR 600 Clinical Practicum I ( 5 cr .) This course provides experience in the areas of heart-lung bypass for adult, pediatric and infants, including long-term supportive extracorporeal circulation, adjunctive techniques and patient monitoring. Students focus on hypothermia, pulsatile devices, and monitor hemodynamics, blood gases, bubble detection, level sensing, temperature, electrophysiology, coagulation potential and fluid electrolytes. Special applications also are covered. Students must successfully complete a sufficient variety and number of perfusions to satisfy recommendations of the American Board of Cardiovascular Perfusion. Students meet as a group every six weeks, and individually present a patient case study at grand rounds. A minimum grade of B- is
required to pass. Prerequisites: PR 503, PR 506, PR 509, PR 510, PR 512; Every Year, Summer

PR 602 Clinical Practicum II (5 cr.) This course provides experience in the areas of heart-lung bypass for adult, pediatric and infants, including long-term supportive extracorporeal circulation, adjunctive techniques and patient monitoring. Students focus on hypothermia, pulsatile devices and monitor hemodynamics, blood gases, bubble detection, level sensing, temperature, electrophysiology, coagulation potential and fluid electrolytes. Special applications also are covered. Students must successfully complete a sufficient variety and number of perfusions to satisfy recommendations of the American Board of Cardiovascular Perfusion. Students meet as a group every six weeks, and individually present a patient case study at grand rounds. A minimum grade of B - is required to progress. Prerequisite: PR 600; Every Year, Fall

PR 604 Clinical Practicum III (5 cr.) This course provides experience in the areas of heart-lung bypass for adult, pediatric and infants, including long-term supportive extracorporeal circulation, adjunctive techniques and patient monitoring. Students focus on hypothermia, pulsatile perfusion devices and monitor hemodynamics, blood gases, bubble detection, level sensing, temperature, electrophysiology, coagulation potential and fluid electrolytes. Special applications also are covered. Students must successfully complete a sufficient variety and number of perfusions to satisfy recommendations of the American Board of Cardiovascular Perfusion. A final comprehensive exam covering all aspects of the program and clinical practice is taken at the end of this course. A successful performance on the examination is required to complete the program. A minimum grade of B - is required to progress. Prerequisite: PR 602; Every Year, Spring

## Physical Therapy (PT)

## PT 502 Introduction to Clinical Decision Making

 ( 3 cr .) This course integrates information from previous course work through reinforcement of the patient/client management model. The ICF model is introduced and is used as an organizing framework. This interactive, case-based course guides students through a series of video, standardized and real-life patient scenarios. Principles of evidence-based practice are introduced. This case-based learning experience allows the student to gain a basic understanding of patient management in preparation for clinical course work. Every Year, Spring
## PT 503L Physical Therapy Process Lab (2 cr.)

This course introduces the physical therapy student to basic physical therapy examination and treatment skills. Students begin to learn medical terminology,
documentation and basic skills including body mechanics, transfers, bed mobility and gait training. Students learn how to assess vital signs, and how to respond to medical emergencies commonly encountered. Range of motion and manual muscle testing of the upper extremity is introduced. Every Year, Fall

## PT 504L Physical Therapy Process Lab II (4 cr.)

This course is a continuation of PT 503L. Tests and measures employed by the physical therapist are introduced including range of motion and manual muscle testing of the lower extremities and spine. The student learns to apply therapeutic exercise and is introduced to thermal modalities. Examination of posture, skin, sensory and the chest evaluation are introduced. Students visit the clinical simulation lab to practice skills. Every Year, Spring

PT 505 Kinesiology I ( 2 cr .) This course introduces the basic principles of biomechanics with special emphasis on applications to upper extremity motion. The course reviews Newtonian mechanics and physical principles in the analysis of motion at the shoulder, elbow and hand. Forces and torques in static clinical free body diagrams are emphasized. The course also introduces the biomechanics associated with human tissue. Every Year, Fall

PT 505L Kinesiology I Lab (1 cr.) This course affords the student an opportunity to gain an understanding of the effect of changes in the magnitude and application of a force on the torque produced by that force. Using an electromyographic recording system, the student also gains an understanding of agonist and antagonist muscle function during various types of voluntary muscle actions and experience in the interpretation and presentation of data obtained from the EMG recording system. Every Year, Fall

PT 506 Kinesiology II (1 cr.) This course introduces the basic principles of biomechanics with special emphasis on applications to the lower extremities. The course emphasizes joint structure and function of the lower extremity as well as the spine. Forces and torques in static clinical free body diagrams are expanded and dynamic motion is studied. Every Year, Spring

PT 506L Kinesiology II Lab (1 cr.) Using motion analysis, electromyographic, force plate data acquisition systems, students gain an understanding of which joints are used, the range of motion and select muscle torques required to accomplish functional tasks. The students utilizes this knowledge to analyze and interpret the data generated by the data acquisition systems and provides an explanation of the how the functional task is performed. Every Year, Spring

PT 512 Human Anatomy I (4 cr.) This is the first of a two-course study of human anatomy. Dissection and presentation of the human body using a regional approach provides the foundation for introducing clinical anatomy with a strong emphasis on structure/ function relationships. This course teaches the anatomy of the upper extremity, head and neck. Each unit begins with the study of joint structure followed by muscular, nervous and circulatory systems. Clinical correlations of musculoskeletal/neuromuscular pathologies are presented to develop problem-solving skills. Every Year, Fall

PT 512L Human Anatomy Lab ( 0 cr.) Lab to accompany PT 512. Every Year, Fall

PT 513 Human Anatomy II (3 cr.) This course utilizes the regional approach to the study of the human body as presented in PT 512. The regions of study include the lower extremity and body cavities. The study of the body cavities begins with an overview of surface anatomy and surface projections of internal viscera. The contents of the thoracic, abdominal and pelvic cavities are identified with an emphasis on interrelationship of visceral structures. Clinical correlations are presented to develop critical-thinking skills. Every Year, Spring

PT 513L Human Anatomy II Lab (0 cr.) Lab to accompany PT 513. Every Year, Spring

PT 514 Neuroanatomy I ( 2 cr .) This course presents the gross anatomy and development of the central nervous system. Major structures and landmarks within each major brain vesicle and spinal cord are covered. Every Year, Fall

PT 515 Neuroanatomy II ( 2 cr .) This course deals with the function of the systems and structures covered in PT 514 including major efferent and afferent pathways. Emphasis is placed on the motor control mechanisms for posture and movement and their involvement in common neuropathologies treated by a physical therapist. Every Year, Spring

PT 517 Clinical Education Seminar (1 cr.) This course provides students with knowledge required for the initial full-time clinical experience. The role of clinical educators, documentation requirements, the process of clinical education evaluation, and the concept of academic/clinical preparedness are presented. A practical examination is administered to determine the student's preparedness. Discussion of legal issues and ethical dilemmas helps students develop strategies for decision-making. Students are introduced to their professional duty to be future physical therapist educators. Prerequisite: All previously sequenced DPT curriculum course work must be completed prior to course registration unless special permission has been granted by the
chair of the program. APTA membership is required for this course. Every Year, Summer

PT 519 Professional Issues in Physical Therapy I ( 2 cr .) This course introduces physical therapy students to many topics and issues relevant to the physical therapy profession. Students explore the roles of the American Physical Therapy Association, practice issues, professional skills and behaviors, including the profession's code of ethics and standards of practice. Topics include OSHA and HIPPA training as well as preparation for requirements for clinical education experiences. Every Year, Fall

PT 520 Pathophysiology I (3 cr.) This course prepares students for an in-depth understanding of the pathophysiology for cardiovascular, pulmonary, hematological and renal systems disorders. The disease process is presented in terms of known pathology, known or potential etiology and risk factors, clinical manifestations, application of lab values and medical management and its application to physical therapy. This course is taught concurrently with PT 523 DE Applied Pharmacology I. Every Year, Summer

PT 523 Applied Pharmacology I (1 cr.) Patients are taking a variety of drugs to treat or manage various conditions, diseases or disorders. This course allows the student to understand how drug therapy can affect patients receiving physical therapy and how physical therapy intervention strategies may need to be modified based on a patient's medication. Specifically, students look at medications utilized for cardiovascular and pulmonary disease processes. Anesthetics, opioids and NSAIDS also are addressed. Every Year, Summer Online

PT 528 Musculoskeletal I ( 3 cr .) This course builds on information taught in the foundational sciences. and is designed to provide the physical therapy major with the necessary knowledge to perform an evidencebased clinical examination on individuals with musculoskeletal dysfunctions of the shoulder, elbow, wrist/hand, hip and knee regions. Given examination findings, students learn to generate an evidence-based diagnosis, prognosis, plan of care and intervention for these individuals. Every Year, Spring

PT 528L Musculoskeletal I Lab (1 cr.) Lab must be taken with PT 528. This course, in conjunction with PT 528 lecture, provides the physical therapy major with the necessary skills to perform an evidencebased clinical examination on individuals with musculoskeletal dysfunctions of the shoulder, elbow, wrist/hand, hip and knee regions. Given examination findings, students learn to generate an evidence-based diagnosis, prognosis and plan of care and administer the intervention for these individuals. Every Year, Spring

PT 529 Musculoskeletal II (2 cr.) This course builds on information taught in the foundational sciences and provides the physical therapy major with the necessary knowledge to perform an evidence-based clinical examination on individuals with musculoskeletal dysfunctions of the spine and ankle/foot. Given examination findings, students learn to generate an evidence-based diagnosis, prognosis, plan of care and intervention for these individuals. Every Year, Summer

PT 529L Musculoskeletal II Lab (2 cr.) Lab must be taken with PT 528. This course, in conjunction with PT 529 lecture, provides the physical therapy major with the necessary skills to perform an evidencebased clinical examination on individuals with musculoskeletal dysfunctions of the spine and ankle/ foot. Given examination findings, students learn to generate an evidence-based diagnosis, prognosis and plan of care and administer the intervention for these individuals. Prerequisite: PT 519; Every Year, Summer

## PT 531 Acute Care and Cardiopulmonary Physical

 Therapy I (3 cr.) This course introduces the student to the acute care setting and the physical therapist's role in the hospital. Students are provided with a broad background in management of patients with acute medical problems with emphasis on cardiopulmonary and integumentary conditions. Students develop the ability to perform an examination and treatment plan including discharge recommendations. Students learn specialized units on intensive care, and appropriate precautions for safe patient care. Every Year, Summer
## PT 531L Acute Care Cardiopulmonary Physical

 Therapy Lab I (1 cr.) Lab must be taken with PT 531. The student practices skills that are essential for working in the hospital setting especially infection control and donning personal protective equipment. Utilizing the information that is studied in PT 531, the student learns and practices examination and treatment techniques for patients with cardiopulmonary and integumentary conditions. Clinical decision making skills are enhanced with the employment of case studies, standardized patients and the ICU simulation lab. Prerequisite: PT 531; Every Year, SummerPT 548L Physical Agents Lab (1 cr.) This course provides the student with the necessary knowledge and skills to properly use electrotherapy, light energy and biofeedback therapy in patient treatment. An emphasis is placed on problem-solving, integration of theory, and evidence-based modality use, to allow the student to utilize modalities appropriately. Every Year, Summer

PT 569 Education/Community Health/Wellness (2 cr.) Theories of wellness, prevention and health promotion are presented, including implications for
persons and/or health programs within a community setting. Topics include health promotion, health risks and disparities related to age, gender, culture, ethnicity and lifestyle, general systems theories, determinants of health, and leading health indicators/focus areas. The unique role of PTs in community practice is emphasized with discussion of practice settings, cultural competency training, and ethical reporting of elder, child abuse and domestic violence. Every Year, Fall

PT 626 Pathophysiology II (3 cr.) This course is a continuum of preparing students for an in-depth understanding of the characteristics of pathophysiology for common neurological and musculoskeletal disorders. The disease processes are presented in terms of known pathology, known or potential etiology and risk factors, clinical manifestations and medical management and its application to physical therapy. This course is taught concurrently with PT 627 DE Applied Pharmacology II. Every Year, Spring

PT 627 Applied Pharmacology II (1 cr.) This course is a continuation of Pharmacology to introduce the physical therapist student to the chemical agents that many patients are taking. This course allows the student to understand how drug therapy can affect patients receiving physical therapy and how physical therapy intervention strategies may need to be modified. Specific medications utilized in the treatment of cancer, neurologic conditions, endocrine dysfunction, antimicrobials and role of CAMs are covered. Every Year, Spring Online

## PT 628 Acute Care and Cardiopulmonary Physical

 Therapy II (2 cr.) Students are educated on mechanical ventilation, 12 lead ECG, invasive cardiac monitoring and anticoagulation therapy. Participants discuss the effect metabolic syndrome, obesity and other systemic conditions have on the cardiovascular and pulmonary systems. Endurance, exercise tolerance and oxidative capacity are identified with an emphasis placed on appropriate exercise prescription. Conditions that affect the cardiovascular and pulmonary systems in the pediatric population across the acute care, outpatient the ICU are explored. Every Year, SpringPT 628L Acute Care and Cardiopulmonary Physical Therapy II Lab (1 cr.) Students analyze case studies, formulate and demonstrate a safe plans of care for individuals with impaired cardiovascular and/or pulmonary function in the acute care and outpatient settings. Students demonstrate proper use of medications/equipment used for this population. Assessment of endurance, exercise tolerance and oxidative capacity are performed. Students formulate appropriate exercise prescriptions. Additional topics include age-appropriate examination, treatment and goal writing for the pediatric population. Every Year, Spring

PT 646 Prosthetics and Orthotics ( 2 cr .) This course is the study of the examination and treatment of individuals with prosthetic and orthotic devices. The focus is on lower extremity and gait. The course provides the students with the necessary skills to thoroughly examine and treat patients with lower extremity prosthetic or orthotic devices. Every Year, Summer

PT 646L Prosthetics and Orthotics Lab (0 cr.) Lab to accompany PT 646 Prosthetics and Orthotics. Every Year, Summer

## PT 652 Professional Issues in Physical Therapy II (1

 cr.) This course introduces students to the current issues facing the physical therapy profession. Topics include professional trends and professionalism, risk management, workforce trends including minority and cultural impacts to care, education trends, legal and ethical issues. The course addresses physical therapy concerns related to state and federal legislation. Every Year, SpringPT 657 Diagnostic Imaging for Physical Therapists ( 2 cr .) This course introduces the student to diagnostic imaging principles and techniques as applied to musculoskeletal, neurologic and cardiovascular and pulmonary systems examination, evaluation and management. The course emphasizes radiographic anatomy, common normal variants and pathological and traumatic conditions. In addition to standard radiographic techniques, other imaging and special techniques are discussed. The course is organized by body systems: musculoskeletal, cardiovascular and pulmonary and neurologic as well as a session on technologic advances. Every Year, Summer

PT 658 Differential Diagnosis (3 cr.) This course provides students with methods of identifying signs and symptoms of diseases and differentiating between those that are musculoskeletal and those that are systemic conditions. Throughout the course, the student learns to correlate the findings from the patient's personal and family history, the physical therapy interview and the objective examination. This course provides the student with reference for determining when patients should be referred to a physician. Every Year, Summer

## PT 661 Administration and Leadership in Physical

 Therapy (3 cr.) Students learn components of PTs as manager or consultant in the current health care delivery system. The organization, administration and management of a department is emphasized through topics such as: principles of management, types of supervision/managerial styles, program planning and decision-making, policy development, quality assurance, utilization review, reimbursement, budget preparation, regulating agencies and managed care, legal issues and risk management, and consumer satisfaction. Professional topics include career-planning strategiessuch as resume writing and leadership development. Every Year, Summer

PT 664 Neurological Rehabilitation I (4 cr.) This course presents physical therapy examination and treatment procedures for the neurologically impaired adult. Assessment procedures include normal movement, abnormal movement, functional mobility and other specific neurological deficits. The semester includes laboratory instruction and practice in neurological treatment techniques. During the course, the student performs a comprehensive examination of a neurologically impaired adult, plans treatment and writes a comprehensive case study. Every Year, Spring

PT 664L Neurological Rehabilitation Lab I ( 0 cr.) Lab to accompany PT 664. Every Year, Spring

PT 665 Neurological Rehabilitation II (3 cr.) A continuation of PT 664, this course teaches additional examination and treatment principles pertaining to the neurologically impaired adult. Treatment procedures focus on: proprioceptive neuromuscular facilitation, balance, vertigo, head injury and cerebellum disorders. The student is expected to synthesize previously learned materials and customize evaluations and treatment plans based upon specific diagnoses. Students visit a clinic to examine and plan a detailed treatment program with a client. Every Year, Summer

## PT 665L Neurological Rehabilitation Lab II (0 cr.) Lab to accompany PT 665. Every Year, Summer

PT 666 Capstone I ( 2 cr .) This is the first of a threecourse series culminating in a project that contributes to the body of knowledge in physical therapy. The respective goals for the three-capstone courses are: to identify the purpose of the project and write a detailed justification, including a thorough review of the literature (Capstone I); to develop a detailed description of the project (Capstone II); and to implement and report on the project (Capstone III). Every Year, Spring

## PT 668 Psychosocial Aspects of Physical Disability

 ( 2 cr .) This course addresses the psychosocial dimensions of physical therapy intervention from the therapist's and client's perspective. Topics include: the humanistic philosophy as part of psychological rehabilitation, physical and psychological variables that influence recovery, qualities of experts, the therapeutic relationship, client-centered practice, psychological influences on rehabilitation and adaptation including stress and trauma, mental health conditions, behavioral management of difficult persons and situations including suicidality, abuse and mental illness, and intervention strategies of sexuality and disability. Every Year, Spring
## PT 668L Psychosocial Aspects of Physical Disability

 Lab (0 cr.) Lab to accompany PT 668. Every Year, SpringPT 671 Clinical Education I (4 cr.) Students are assigned to full-time clinical experiences in outpatient orthopedic, acute care and sub-acute rehabilitation facilities. Students practice within the patient-client management model they have learned to date in the curriculum on patients with various musculoskeletal, neuromuscular and cardiopulmonary health conditions. Students develop their professional and interpersonal skills through interactions with patients, families and health professionals. This course is graded on a pass/fail basis. Every Year, Fall

PT 675 Normal/Abnormal Gait (1 cr.) This hybrid course provides an overview of both normal and abnormal gait with an emphasis on kinematic and kinetic analysis of the gait cycle. Gait analysis techniques including motion analysis, dynamic electromyography, force plate recordings and measurement of stride characteristics are presented. Physical therapy treatment approaches for patients with abnormal gait are discussed. Prerequisites: PT 505, PT 506; Every Year, Fall

PT 676 Capstone II ( 1 cr .) This is the second of a three-course series culminating in a project that contributes to the body of knowledge in physical therapy. The respective goals for the three-capstone courses are: to identify the purpose of the project and write a detailed justification, including a thorough review of the literature (Capstone I); to develop a detailed description of the project (Capstone II); and to implement and report on the project (Capstone III). Every Year, Summer

PT 685 Evidence in Practice ( 2 cr .) This course provides students with the skills and knowledge needed to read, interpret and appraise the quality of various types of primary (intervention, prognosis and diagnosis studies) and secondary (systematic reviews and clinical practice guidelines) research. Topics include psychometric properties of outcome measures, research design, hypothesis testing and ethics in research. Learning experiences include completion of online tutorials and assignments, and participation in student-led small group discussions of current evidence. Every Year, Fall

PT 730 Musculoskeletal III ( 2 cr .) This course builds on information taught in Musculoskeletal I and II and provides the physical therapy major with the necessary knowledge and skills to examine, generate a diagnosis, prognosis and evidence-based plan of care, including manipulation and kinesiology taping, for those patients with musculoskeletal dysfunction of the spine, hip, knees, ankle, shoulder, elbow and temporomandibular joint. Included are tests and measurements dealing with ergonomics and body mechanics. Every Year, Fall

PT 730L Musculoskeletal III Lab (1 cr.) This course, taken in conjunction with PT 730 lecture, provides the physical therapy major with the necessary skills to perform an evidence-based clinical examination on individuals with musculoskeletal dysfunction of the spine, hip, knees, ankle, shoulder, elbow and temporomandibular joint. Given examination findings, students learn to generate an evidence-based diagnosis, prognosis and plan of care and administer the intervention including manipulation, for these individuals. Every Year, Fall

PT 736 Pediatric Rehabilitation (4 cr.) This course presents information needed for the physical therapy student to complete an examination/evaluation of a child with neurological and/or orthopedic diagnoses. Upon completion of the examination, students learn to generate an accurate diagnosis, prognosis and an appropriate plan of care for these patients. Relevant theory and practical learning experiences are provided for the student to develop the knowledge and skills necessary for applying an evidence-based physical therapy plan of care. Every Year, Fall

PT 736L Pediatric Rehabilitation Lab ( 0 cr.) Lab to accompany PT 736. Every Year, Fall

PT 744 PT Skills Elective (2 cr.) This course is a required therapy skills course in which students can choose a section focusing on a specific area of concentration from one of the four main practice areas of physical therapy: neuromuscular, musculoskeletal, cardiopulmonary or integumentary. All sections of the course use the essential elements of PT practice as an organizing framework and incorporate the review and practical application of recent literature. Every Year, Fall

## PT 746 Spinal Cord Injury Rehabilitation (2 cr.)

This course reviews the examination and treatment of patients with spinal cord injury. This area of neurological rehabilitation is covered in depth to provide the student with the necessary skills to thoroughly examine and treat patients with spinal cord injury throughout the continuum of care. Course consists of lecture and laboratory. Guest patients are incorporated into laboratory experiences. Prerequisite: 1st- and 2nd-year physical therapy course work or permission of instructor; Every Year, Fall

## PT 746L Spinal Cord Injury Rehabilitation Lab

 (0 cr.) Lab to accompany PT 746. (2 lab hrs.) Every Year, Fall
## PT 759 PBL Advanced Clinical Decision-making

 ( 3 cr .) This course features small group, problem-based learning activities. The class includes discussions on integration of client information from the major areas ofPT practice outlined in the Guide to Physical Therapy Practice. Students create ICF models, research and discuss cases, and generate evidence-based practice client-centered models of care. Every Year, Fall

PT 767 Capstone III ( 2 cr .) This is the final course of a three-course series culminating in a project that contributes to the body of knowledge in physical therapy. The respective goals for the three capstone courses are: to identify the purpose of the project and write a detailed justification, including a thorough review of the literature (Capstone I); to develop a detailed description of the project (Capstone II); and to implement and report on the project (Capstone III). Every Year, Fall

PT 781 Clinical Internship II ( 6 cr.) This full-time clinical internship allows students to pursue in-depth practice in areas of interest and gain a variety of clinical experiences. Students practice learned skills in all aspects of care including specialty areas, in a variety of settings including but not limited to acute care, neurological rehabilitation, pediatrics and advanced orthopedic physical therapy. Sequenced objectives ensure progression to entry-level skills and professional behaviors. This course is graded on a pass/fail basis. Every Year, Spring

PT 782 Clinical Internship III ( 6 cr.) This final fulltime clinical experience is the culmination of the physical therapy program, and prepares students for practice as graduate physical therapists. Students are required to achieve entry-level proficiency in all aspects of practice in a wide variety of clinical settings, including but not limited to acute care, advanced orthopedics, neurologic rehabilitation, and pediatric physical therapy. This course is graded on a pass/fail basis. Every Year, Spring

## Physician Assistant (PY)

PY 501 Human Physiology ( 4 cr .) This course takes a system approach to the physiologic and biochemical functions of the human body, including relevant anatomical correlations. Laboratory sessions emphasize clinical application to systemic function. Every Year, Summer

PY 501L Physiology Lab ( 0 cr.) Lab to accompany PY 501. (3 lab hrs.) Every Year, Summer

PY 502 Physical Diagnosis (4 cr.) Students are introduced to the organization and techniques for performing the physical examination including use of equipment, written and oral presentations. Special techniques and maneuvers are covered as part of the focused physical examination. Using a systemsbased approach, lab sessions provide students with
practical experience performing the complete physical examination on the adult patient. Specialty workshops in orthopedics, the exam of the infant and child as well as the male and female genitalia provide students with practical experience in these areas prior to their first interaction with patients. Every Year, Fall

PY 502L Physical Diagnosis Lab (0 cr.) Lab to accompany PY 502. (2 lab hrs.) Every Year, Fall

PY 503 Principles of Interviewing ( $\mathbf{3} \mathbf{~ c r}$.) This course explores the various methods of approaching and interviewing patients focusing on the establishment of a relationship, effects of cultural backgrounds, gender and age on giving and receiving of information in order to obtain an accurate medical history. Every Year, Summer

## PY 504 History, Roles and Responsibilities of the

 PA (1 cr.) This course explores through lecture and discussion the factors affecting the development of the profession and role socialization with emphasis on standards of quality assurance, credentialing of continued competence, policies and regulations governing clinical responsibilities and dynamics of membership on a health care team. Every Year, SpringPY 505 Clinical Pharmacology I (2 cr.) This distance education course covers the classification, mechanism of action, toxicity and clinical use of therapeutics agents. Side effects, indications, dose response and management of therapeutics are emphasized. Every Year, Fall

PY 506 Principles of Internal Medicine ( 6 cr.) This course takes an organ system approach to disease emphasizing the pathogenesis, clinical presentation, differential diagnosis, diagnostic and therapeutic approach to disease processes. Laboratory sessions focus on clinical problem solving through the use of real cases. Every Year, Fall

PY 506L Clinical Correlation Lab ( 0 cr.) Lab to accompany PY 506. (1 lab hr.) Every Year, Fall

PY 507 Principles of Electrocardiography (1 cr.) This course offers a directed approach to understanding the principles of electrocardiography and its applications to clinical practice. Throughout this course, general principles of the etiologies of abnormal EKG patterns, the differential diagnosis and clinical management are discussed to correlate the EKG with clinical situations. Every Year, Summer

PY 507L EKG Lab (0 cr.) Lab to accompany PY 507. (1 lab hr.) Every Year, Summer

PY 508 Diagnostic Methods I (2 cr.) Clinical laboratory medicine is examined with emphasis on indications
for tests, normal values, interpretation of results and correlation with clinical conditions. Laboratory sessions provide students with practical experience performing basic laboratory tests. Every Year, Summer

PY 508L Diagnostic Methods Lab ( 0 cr.) Lab to accompany PY 508. (2 lab hrs.) Every Year, Summer

PY 509 Principles of Obstetrics and Gynecology ( 3 cr .) Anatomy and physiology of the human reproductive system are examined, including the changes in pregnancy, prenatal care, medical and surgical complications of pregnancy, pre- and postpartum care. Common gynecologic conditions, methods and effectiveness of contraception, cancer detection methods and the diagnosis and treatment of sexually transmitted infections in the female are explored. Every Year, Spring

PY 510 Principles of Pediatrics ( $\mathbf{3} \mathrm{cr}$.) This course examines the physical and psychological fundamentals of normal growth and development. Focus is on the major pediatric illnesses and conditions, their signs, symptoms and treatment. Immunization schedules, the various medications used in the pediatric population, their doses and indication are examined; the management of pediatric emergencies such as acute cardiac and respiratory arrest, anaphylaxis, seizures and trauma are also explored. Every Year, Spring

## PY 511 Principles of Surgery And Emergency

Medicine (4 cr.) The fundamentals of surgical disease are explored with discussions on the etiology, pathophysiology, clinical manifestations and appropriate management of major and minor surgical conditions and care of the acutely injured and critically ill patient. Topics are discussed with emphasis on clinical presentation and pre- and post-operative management. The course introduces the principles of life support technique and the initial management of acute medical and traumatic conditions. Laboratory sessions are used to familiarize the student with aseptic technique and basic surgical procedures such as airway control, various catheter placements, surgical bleeding control and wound management. Every Year, Spring

## PY 511L Clinical Skill Lab ( 0 cr.) Lab to accompany PY 511. (1.5 lab hrs.) Every Year, Spring

## PY 512 Psychosocial Issues in Health Care (2 cr.)

This course explores how cultural belief systems and values in a multicultural society relate to the provision of appropriate health care/counseling. Students become familiarized with the biological and psychological attributes contributing to sexual expression as well as societal values that shape perception and expression. Factors associated with communicating with and caring for individuals from different cultures, opposite
genders or differing sexual preference are explored. Lab sessions help students gain experience and develop confidence in approaching patients through preclinical clerkships. Students improve their clinical skills in the areas of eliciting a history, performing a physical exam, presenting an oral report and medical documentation via the patient chart note. Every Year, Spring

PY 512L Psychosocial Issues Lab (0 cr.) Lab to accompany PY 512. (2 lab hrs.) Every Year, Spring

PY 513 Behavioral Medicine ( 3 cr.) Basic psychiatric manifestations and how to work with both patients and families exhibiting psychological problems are examined. Topics include psychiatric diagnosis, the effect of society on behavior, the basis of drug and alcohol abuse, and basic intervention and treatment modalities. Every Year, Spring

PY 514 Diagnostic Methods II (1 cr.) This course covers the basic principles of radiologic and imaging techniques, indication for various tests and recognition of abnormal findings. Every Year, Fall

PY 515 Clinical Pathology ( 3 cr.) Basic human pathology is examined from a systemic and cellular level, pathogenesis and various disease states. Topics include histology, inflammation and repair, endocrine, cardiovascular, pulmonary, musculoskeletal, GI and GU pathology. Every Year, Summer
PY 516 Clinical Pharmacology II ( 2 cr .) This continuation of Clinical Pharmacology I emphasizes commonly prescribed therapeutic agents. Every Year, Spring

PY 517 Human Anatomy (4 cr.) This course focuses on dissection of the human body with particular attention to the embryologic origin and relationship of organ systems. Emphasis is placed on internal organs with clinical correlation to anatomic condition. Every Year, Summer

PY 517L Human Anatomy Lab (0 cr.) Lab to accompany PY 517. (6 lab hrs.) Every Year, Summer

PY 526 Principles of Epidemiology (3 cr.) This graduate-level course in epidemiology directs itself toward application of epidemiological principles. The course involves analysis of prospective and retrospective studies, cross-sectional studies and experimental epidemiology. Both communicable and chronic disease case studies are used, as well as case studies of occupationally induced diseases. Every Year, Summer

PY 536 Biostatistics ( $\mathbf{3}$ cr.) This course covers the application of statistical techniques to the biological and health sciences. Emphasis is on mathematical models,
collection and reduction of data, probabilistic models estimation and hypothesis testing, regression and correlation, experimental designs and non-parametric methods. Every Year, Summer

## PY 546 Ethics in Health Care Delivery ( 3 cr.)

This course provides an opportunity for identifying, analyzing and resolving ethical dilemmas that will be encountered in professional practice. Issues are examined using the basic principles of biomedical ethics that include respect for persons, truth telling, justice, beneficence and integrity. Every Year, Summer

PY 572 Medical Microbiology and Infectious Diseases ( 4 cr .) This detailed study of microorganisms and the diseases they cause in man includes consideration of infectious disease microorganisms including their biochemical, serological and virulence characteristics, and clinical manifestations. An organ system approach is used to examine the fundamentals of pathogenicity, host response, epidemiological aspects of infectious disease, as well as clinical manifestations, diagnosis and treatment of infections. The laboratory stresses techniques used in specimen collection and handling, isolation and identification of microorganisms, and the interpretation of the results and correlation with clinical condition. Every Year, Fall

PY 572L Medical Microbiology Lab (0 cr.) Lab to accompany PY 572. (2 lab hrs.) Every Year, Fall

PY 608 Graduate Seminar ( 4 cr .) This seminar prepares students for the specific requirements of entering professional practice. Faculty active in the profession cover such issues as malpractice coverage, licensure regulation, risk management and legal issues, and aspects of the financing of health care. Lab sessions are designed as small group seminars. Through guided discussion in these small seminar settings, students explore the current literature and thinking on the competencies for the physician assistant profession. Every Year, Summer

PY 608L Graduate Seminar Lab (0 cr.) Lab to accompany PY 608. (1.5 lab hrs.) Every Year, Summer

PY 611 Clinical Residency I ( 3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Summer

PY 612 Clinical Residency II (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Summer

PY 613 Clinical Residency III (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Summer

PY 614 Clinical Residency IV (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Fall

PY 615 Clinical Residency V (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Fall

PY 616 Clinical Residency VI (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Fall

PY 617 Clinical Residency VII (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Spring

PY 618 Clinical Residency VIII (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Spring

PY 619 Clinical Residency IX (3 cr.) Upon successful completion of the didactic phase, the PA student undertakes an intensive course of study requiring the application of skills and concepts acquired during the earlier course work. Each student rotates through seven six-week clinical disciplines and two four-week electives at varying sites throughout Connecticut, Massachusetts and Rhode Island. The core rotations are: family medicine/primary care, internal medicine, general surgery, emergency medicine, obstetrics/gynecology, pediatrics and psychiatry. Supplemental electives include a wide variety of medical, surgical and pediatric subspecialties. Every Year, Spring

PY 676 Comprehensive Examination (2 cr.) This comprehensive examination is a capstone of the physician assistant program. The purpose of the exam is twofold. First, to ascertain if the student has both the broad and specific knowledge expected of someone holding a master's degree. Second, to determine whether the student has been able to integrate knowledge obtained from individual courses into unified concepts that link the students' own specialization to other fields of study. The student is given an oral exam, a written examination and a clinical skills examination in the form of an Objective Score of Clinical Evaluation (OSCE). Every Year, Summer

## Public Relations (STC)

## STC 501 Principles and Theories of Public Relations

 ( 3 cr .) Students are introduced to the growing body of knowledge in the discipline and gain expertise that contributes to professional competence in public relations. Students examine the function of public relations in organizations and society, review contemporary and historical roles of public relations professionals and explore the practice of public relations in various public and private settings. Students also learn the latest theoretical approaches to public relations and apply these approaches to contemporary public relations management practices. Every Year, FallSTC 502 Public Relations Research Methods (3 cr.) This course examines the applied use of research in public relations program development. Students learn methodologies appropriate for conducting secondary analyses and primary research. Both quantitative and qualitative methods are addressed, such as secondary analysis, content analysis, survey research, focus groups, participant observation, case study and experimentation. Every Year, Fall

## STC 503 Public Relations Research Design (3 cr.)

This course focuses on the practical aspects of designing and implementing a public relations research project. Students develop problem statements, conduct literature reviews, write research questions and prepare research proposals. Ethical and methodological issues involved in research design are discussed. The course also familiarizes students with IRB protocols and helps them hone scholarly and professional writing skills, including the proper use of citations. Prerequisites: STC 501, STC 502; Every Year, Spring

## STC 504 Law and Ethics in Public Relations (3 cr.)

Students become familiar with legal and industry standards for legally and ethically practicing public relations. The course aims to instill an appreciation for freedom of expression and the First Amendment; to
impart a functional understanding of legal rules and principles relevant to public relations practice in the U.S.; to enhance students' ability to identify the moral and ethical dimensions of issues that arise in public relations practice; and to develop analytical and critical thinking skills that encourage students to make and justify ethical decisions. Every Year, Fall

STC 505 Public Relations Writing ( 3 cr.) This course helps students develop professional-quality public relations writing skills. Students prepare a variety of public relations materials, such as news releases and other media materials; copy for internal magazines, reports, newsletters, brochures, institutional/advocacy advertising; video/audio scripts; web site copy; and speeches. Upon completion of this course, students have a professional portfolio of public relations writing samples. Every Year, All

STC 506 Public Relations Management (3 cr.) This course focuses on the business management aspects of public relations, such as policy formation, project direction, resource management, client relations, budgeting and counseling. Special emphasis is placed on public relations' contribution to an institution's mission and effectiveness. Prerequisite: PRR 501; Every Year, All

## STC 507 Strategic Planning in Public Relations

 ( 3 cr .) This course familiarizes students with the public relations strategic planning process. Students examine contemporary case studies that demonstrate the public relations planning process and apply what they have learned to the development and presentation of a public relations campaign plan for a client. Prerequisite:STC 501; Every Year, All
STC 510 Crisis Management ( 3 cr .) This course examines institutional crisis communication from a management perspective with an emphasis on crisis prevention, planning and response. Students are required to read and discuss selected articles from the crisis management literature, research and develop case studies of contemporary crises, and participate in simulations designed to develop professional expertise and practical skills in crisis management, including the management of information, management of public communication, strategic planning, problem solving, message production and issues management. Every Year, All

STC 511 International Public Relations (3 cr.) This course focuses on the practice of public relations across borders, as well as on the challenges, opportunities and the worldwide development of public relations. Students review public relations professional standards and practices in a range of nations and examine factors that influence the effectiveness of international public relations programs and campaigns, such as culture,
language, law and economic and social factors. Prerequisite: STC 501; Every Year, All

STC 512 Investor Relations (3 cr.) Students study the function of investor relations in corporations and examine the role of investor relations specialists charged with communicating financial information about companies to the financial media, SEC, financial analysts, shareholders and others in the financial community. Students learn how to integrate finance, communication, marketing and securities law compliance in efforts to maximize shareholder wealth. Every Year, All

## STC 513 Health and Strategic Communications

(3 cr.) In this course, students are exposed to the field of strategic health communications, with particular attention to analysis and practice of health communication relationships and messages. Issues to be discussed include, but are not limited to: history and current challenges of the health communication field; health campaign creation, implementation and evaluation; cultural issues related to health behavior change campaigns; translational research; traditional and social media training for health care professionals; and perspectives of media influence on health attitudes, norms and behaviors. Every Year, All

STC 514 Social and Mobile Media (3 cr.) This course addresses the impact of social and mobile media on public relations. It focuses on conducting public relations campaigns online and responding to public relations issues via such tools as social networking and bookmarking sites, blogs, podcasts/vodcasts, discussion boards and conferences, wikis, mobile and locationbased applications. Every Year, All

## STC 531 Graduate Internship in Public Relations

 ( 3 cr.) Students complete a minimum of 90 hours of professional fieldwork supervised by the program director and a qualified field supervisor. Approval of the program director is required. Every Year, All
## STC 601 Public Relations Professional Project ( 6 cr.)

Students develop a professional research project under the direction of program faculty. Prerequisites: STC 501, STC 502, STC 503; Every Year, All

STC 602 Public Relations Research Thesis ( 6 cr.) Students develop a research thesis under the direction of program faculty. Prerequisites: STC 501, STC 502, STC 503; Every Year, All

STC 603 Candidacy Continuation ( 0 cr .) This course is required of all students who are not registered for any graduate courses in the program but who continue working toward the completion of their degree. Requires permission of the program director. Every Year, All

Courses offered as needed<br>STC 515 Special Topics in Public Relations (3 cr.) STC 606 Independent Study (3 cr.)

## Radiologist Assistant (RA)

RA 505 Clinical Pharmacology I (3 cr.) This education course covers the classification, mechanism of action, toxicity and clinical use of therapeutics agents. Side effects, indications, dose response and management of therapeutics are emphasized. Every Year, Fall

RA 517 Human Anatomy (3 cr.) This course focuses on dissection of the human body with particular attention to the embryologic origin and relationship of organ systems. Emphasis is placed on internal organs with clinical correlation to anatomic condition. Every Year, Summer

RA 517L Human Anatomy Lab (1 cr.) Lab to accompany RA 517. (6 lab hrs.) Every Year, Summer

RA 518 Imaging Pathophysiology ( $\mathbf{3}$ cr.) The content focuses on the characteristics and manifestations of disease caused by alterations or injury to the structure or function of the body. Concepts basic to pathophysiology as well as common disease conditions are studied and serve as prototypes in understanding alterations that occur in the major body systems. Emphasis is placed on the characteristic manifestations and image correlation with these pathologies observed through diagnostic imaging. For radiologist assistant majors only. Every Year, Summer

## RA 520 Radiation Safety and Health Physics (2 cr.)

This course provides an understanding of the protection of individuals from the harmful effects of ionizing radiation. Content includes an overview of the regulatory bodies and patient radiation safety regulations affecting the diagnostic imaging environment. The interaction of ionizing radiation with matter, units of exposure and dose, radiation detection and measurement devices are considered. Practical techniques and QA/QC procedures for reducing patient and operator risk of exposure to ionizing radiation are discussed. Every Year, Summer

## RA 530 Image Critique and Pathologic Pattern

Recognition I (3 cr.) Basic imaging interpretation skills are presented to differentiate normal and abnormal structures in the skeletal, respiratory and cardiovascular systems, head and soft tissue neck across the lifespan. Students develop an understanding of the correlation of anatomy, pathology and physiology as it relates to radiologic imaging and interpretation. Protocols for drafting memoranda of initial observations based on image assessment are included. Guest lectures are provided.

This course also includes imaging post processing. The content is designed to establish knowledge in the fundamentals of digital image post processing that support guided skill development using clinical based imaging workstations. Every Year, Fall

## RA 531 Image Critique and Pathologic Pattern

 Recognition II (3 cr.) Basic imaging interpretation skills are presented to differentiate normal and abnormal structures in breast, gastrointestinal and genitourinary systems across the lifespan. Students develop an understanding of the correlation of anatomy, pathology and physiology as it relates to radiologic imaging and interpretation. Protocols for drafting memoranda of initial observations based on image assessment are included. Guest lectures are provided. This course also includes image post processing. The content is designed to establish a knowledge of the fundamentals of digital image post processing that support guided skill development using clinical based image workstations. Every Year, SpringRA 532 Interventional Procedures I ( $\mathbf{3} \mathbf{~ c r}$.) This course focuses on invasive procedures expected to be performed by the radiologist assistant. Students develop an understanding of the correlation of anatomy, pathology and physiology as it relates to radiologic imaging and interpretation with an assessment of need for interventional procedures across the lifespan. Procedures related to skeletal, respiratory and cardiovascular and head and neck systems are discussed, including but not limited to arthrograms, lumbar punctures, PICC, central venous lines, venogram, fistulograms, organ biopsies and thoracentesis. Quality improvement methods are emphasized. Every Year, Fall

RA 535 Interventional Procedures II (3 cr.) This course focuses on invasive procedures expected to be performed by the radiologist assistant. Students develop an understanding of the correlation of anatomy, pathology and physiology as it relates to radiologic imaging and interpretation with an assessment of need for interventional procedures. Procedures related to the breast, gastrointestinal and genitourinary systems across the lifespan are discussed, including but not limited to breast aspiration, nephrostogram, loopogram, gastric and T-tube check, organ biopsies and paracentesis. Quality improvement methods are emphasized. Every Year, Spring

## RA 542 Patient Assessment, Management and

Education (3 cr.) The course facilitates the student's understanding of the theoretical basis of patient assessment, management and education across the lifespan. The content reinforces the critical thinking model to aid in the development of interviewing skills and assessment techniques. Assessment of body systems, not limited to
genitourinary, gastrointestinal, cardiovascular, breast and central nervous system are introduced. Techniques to develop hypotheses regarding nature and origin of patient's problems are explored. Every Year, Fall

## RA 545 Research Methods and Design ( 3 cr.)

 Students explore ethical issues in medical research, develop a research project, collect data and perform analysis using statistical programs for computers. A presentation is developed and various computer presentation techniques are employed to present student project data. Students work individually on the project and require the approval of the instructor to pursue a particular topic. Every Year, FallRA 550 Clinical Seminar I (1 cr.) This distance education course requires students to present a minimum of two case studies during the academic semester. Based on the case study requirements of the radiologist assistant examination criteria, each student is responsible for patient history, clinical correlation, explanation of imaging procedures, evaluation of imaging studies and identification of pertinent anatomy. Students may choose a minimum of one modality for discussion per case study. Students are required to participate in discussions regarding each weekly case study. Every Year, Spring

RA 551 Clinical Seminar II (1 cr.) This distance education course requires students to present a minimum of two case studies during the academic semester. Based on the case study requirement of the radiologist assistant examination, students are responsible for patient history, clinical correlation, explanation of imaging procedures, evaluation of imaging studies and identification of pertinent anatomy. Every Year, Summer

RA 552 Clinical Seminar III ( $\mathbf{3} \mathbf{c r}$.) This distance education course requires students to present a minimum of two case studies during the academic semester. Based on the case study requirement of the radiologist assistant examination, students are responsible for patient history, clinical correlation, explanation of imaging procedures, evaluation of imaging studies and identification of pertinent anatomy. Every Year, Fall

RA 570 Radiologist Assistant Clinical I (3 cr.) This course provides students with a clinical experience over a 15-week period. Students are required to attend clinical three consecutive days per week. The areas of experience include general radiography, fluoroscopic procedures and interventional procedures. The experience also includes advanced imaging modalities such as magnetic resonance imaging, computer tomography, mammography, positron emission tomography and ultrasound. Application of skills related to patient care and management, radiographic pattern recognition and pro-
cedural variances are employed. Students must complete American Registry of Radiologic Technologists competency requirements. Every Year, Spring

RA 571 Radiologist Assistant Clinical II (5 cr.) This course provides students with a clinical experience over a 15 -week period. Students are required to attend clinical four consecutive days per week. The areas of experience include general radiography, fluoroscopic procedures and interventional procedures. The experience also includes advanced imaging modalities such as magnetic resonance imaging, computer tomography, mammography, positron emission tomography and ultrasound. Application of skills related to patient care and management, radiographic pattern recognition and procedural variances are employed. Students must complete American Registry of Radiologic Technologists competency requirements. Every Year, Summer

RA 572 Radiologist Assistant Clinical III (5 cr.) This course provides students with a clinical experience over a 15 -week period. Students are required to attend clinical five consecutive days per week. The areas of experience include general radiography, fluoroscopic procedures and interventional procedures. In addition, experience includes advanced imaging modalities such as magnetic resonance imaging, computer tomography, mammography, positron emission tomography and ultrasound. Application of skills related to patient care and management, radiographic pattern recognition and procedural variances are employed. Students must complete American Registry of Radiologic Technologists competency requirements. Every Year, Fall

RA 573 Radiologist Assistant Clinical IV (5 cr.) This course provides students with a clinical experience over a 15 -week period. Students are required to attend clinical five consecutive days per week. The areas of experience include general radiography, fluoroscopic procedures and interventional procedures. In addition, experience includes advanced imaging modalities such as magnetic resonance imaging, computer tomography, mammography, positron emission tomography and ultrasound. Application of skills related to patient care and management, radiographic pattern recognition and procedural variances are employed. Students must complete American Registry of Radiologic Technologists competency requirements. Every Year, Spring

RA 590 Thesis I ( $1 \mathbf{c r}$. ) The focus of this course is to further develop the paper written in RA 545. Students work on improving the abstract; introduction and literature review; developing the results, discussion, conclusion and recommendation sections of the thesis. At the conclusion of the course the student should have rough draft of a five-chapter thesis. Every Year, Spring

RA 591 Thesis II ( 2 cr .) This course is a continuation of RA 590 Thesis I. Each student produces a final five-chapter thesis and is required to present the completed thesis. Every Year, Summer

## Social Work (SW)

## SW 500 Foundation Field Education Practicum I

( $\mathbf{3} \mathbf{~ c r}$.) This is the first of two field placements in a social service agency. The foundation field placement is designed to provide a generalist social work experience; it is offered in the academic year from September-May for 16 hours a week (total of 400 hours). The foundation practicum provides an opportunity to develop skills by applying what is taught in the classroom, particularly from the practice classes that are taken concurrently with this practicum. The primary objective is to learn and demonstrate competence of a problem-solving model of practice and the related generalist skills. Students also take a 90 -minute field seminar, held monthly prior to the required practice class, as part of the practicum. Taken concurrently with SW 501. Every Year, Fall

## SW 501 Practice I: Individuals and Families (3 cr.)

This course presents the knowledge and skills necessary for competent generalist social work practice with individuals and families. The values and societal mission of the social work profession guide this course. The course uses an ecological systems perspective model to provide students with knowledge and values promoting purposeful and culturally competent intervention with individuals and families of diverse backgrounds. Students learn about interviewing, problem identification, problem exploration, formulating the presenting complaint, data gathering, differential assessment, planning, beginning intervention, termination and evaluation. Selfawareness and conscious use of self are emphasized. Classroom learning is enhanced through the systematic use of the students' experiences in their placements. Taken concurrently with SW 500. A student must pass Practice I and SW 500 to continue with Practice II and SW 502. Every Year, Fall

## SW 502 Foundation Field Education Practicum II

( 3 cr .) This is the second term of the foundation field placement in a social service agency. The placement is designed to provide a generalist social work experience; it is usually offered in the academic year from September-May for 16 hours a week (total of 400 hours). The foundation practicum provides an opportunity to develop skills by applying what is being taught in the classroom, particularly from the practice classes that are taken concurrently with this practicum. The primary objective is to learn and demonstrate competence of a generic problem-solving model of
practice and the related generalist skills. Students also take a 90 -minute field seminar, held monthly prior to the required practice class, as part of the practicum. Taken concurrently with SW 503. Prerequisites: SW 500, SW 501; Every Year, Spring

## SW 503 Practice II: Groups, Organizations, and

 Communities ( 3 cr .) This course reviews small group theory and research; presents an ecological perspective on groups in clinical and organizational settings; explores group typologies, and teaches concepts of group structure and process. Students are introduced to a wide variety of tools and methods for helping groups achieve their purposes while maintaining the integrity of their interpersonal relations. The course incorporates a fundamental commitment to respecting human differences of all kinds and affirming their importance to group accomplishments and the workings of a pluralistic society. The course also stresses beginning skills and knowledge for practice within social service networks and communities, the context in which all social work practice occurs. Understanding and intervening in the environment are skills consonant with the ecological perspective that provides focus for the foundation curriculum. This course stresses that social system malfunctions and inequities are important sources of individual and familial distress. To proceed into advanced field instruction, the student must pass Practice II and SW 502. Taken concurrently with SW 502.Prerequisites: SW 500, SW 501; Every Year, Spring
SW 504 Social Welfare Policy (3 cr.) This course provides students with a foundation understanding and appraisal of social welfare policies and programs in the United States, and the historical and contemporary forces that have shaped their development. It introduces conceptual approaches to policy analysis and assesses selected social policies, programs and services in the areas of income maintenance, health care and personal social services. The social work profession's role in the formulation and implementation of social policy and its tradition of advocacy, social action and reform are explored. Social work values regarding the meeting of human needs and the right of all citizens to live in an atmosphere of growth and development are emphasized. Every Year, Fall

SW 505 Social Work Research ( 3 cr .) The purpose of this course is to provide the MSW student with a solid foundation in social work research, emphasizing evi-dence-based practice. As both consumers and producers of research, social workers need to understand the core concepts of scientifically sound and rigorous research. Through mastery of the principles of social work research, students are prepared to critically evaluate the wealth of research and evidence available to inform one's practice. Students also learn to synthesize empiri-
cal research into a systematic review of the literature to address a social work practice issue of personal interest. Every Year, Fall

## SW 506 Human Behavior in the Social Environment

 I; Theories for Practice (3 cr.) Within the person/environment framework, this course provides a foundation for social work practice through an understanding of the major theories of individual and family functioning that encompass biophysical, cognitive, emotional, social and spiritual dimensions. Specific attention is paid to the roles that culture and cultural identity play in human development and what constitutes normal behavior. Students master the central concepts and core ideas of theories that provide the conceptual base for many tools of intervention utilized in work with individuals and families, groups, communities and organizations. Students master relevant concepts of genetics and neurobiology to facilitate understanding of human functioning at the biological level. The course emphasizes the interrelationships among social institutions, social structure and social processes on the one hand, and the realities of the lives of families, groups, communities, organizations and societies, on the other. Must be taken prior to or concurrent with SW 500 and SW 501. Every Year, Fall
## SW 507 Human Behavior in the Social Environment II: Issues of Diversity and Oppression (3 cr.) This

 course examines the dynamics of racism and other forms of oppression in our society and within us, and how those dynamics are intertwined with social welfare policy and social work practice. The course places racism, sexism, ethnocentrism and other forms of oppression in the historical and current economic, political and social context of the United States. It prepares students to analyze racism, sexism and ethnocentrism as they operate at the individual, community and institutional levels, and to understand how they shape the lives of men and women of all backgrounds and identities. A major theme of the course is the social worker's professional responsibility to help achieve a non-racist, multicultural and egalitarian society. Prerequisite: SW 506; Every Year, SpringSW 508 Psychopathology ( 3 cr.) This course provides students with extensive knowledge of the major forms of emotional illness and their treatment. Students develop competence in diagnosis by mastering the currently accepted diagnostic code (DSM 5). They develop competence in treatment planning through awareness and understanding of the most modern and accepted treatments for each major category of mental illness. Upon successful completion of the course, students are able to gather and analyze relevant information, make accurate diagnoses based upon that information, assess positive and negative factors affecting treatment decisions,
develop an appropriate and contemporary treatment plan and present it in a form consistent with current practice in the mental health professions. Prerequisites: SW 500, SW 501; Every Year, Spring

## SW 509 Interprofessional Education (IPE) Option (3

 cr.) This course fulfills the IPE requirement for the foundation curriculum. A topic may not be repeated for additional credit. Possible topics include divorce and the divorcing family, IPE in health settings, IPE in school settings, ethics across the professions, and health, society and social justice. The role of inter-professional education and communication is a core component in how the various professions can begin to understand and address the topic of the course. Every Year, Spring and Summer
## SW 600 Advanced Field Education Practicum In Health/Behavioral Health I (4 cr.) This is the first

 semester of the second of two field placements in a social service agency. This advanced concentration field placement offers a specialized social work experience in health/behavioral health, with a focus on a specialization in one of these areas: aging services, health/mental health/substance abuse, child and family welfare and justice, and school social work. The advanced field placement is offered in the academic year from September-May for 24 hours a week (total of 600 hours). A 90-minute field seminar is held monthly, prior to the practice class. SW 600 is taken with SW 601 and SW 602 is taken with SW 603. Prerequisites: SW 502, SW 503; Every Year, Fall
## SW 601 Advanced Clinical Social Work Practice

 ( 3 cr .) This course integrates the knowledge, values and skills of the foundation curriculum with clinical perspectives traditionally associated with social work. Students work directly with adult individuals from diverse client populations and from all socioeconomic levels. Emphasis is placed on social work practice in behavioral health consultation in the health care system. Students acquire major skills such as how to make comprehensive psychosocial assessments and devise treatment plans for clients. The specific models of clinical practice addressed in this course are: cognitive/behavioral, constructivist and psychodynamic. Additional topics include crisis intervention, interpersonal therapy and trans-theoretical models, as well as motivational interviewing. Attention is given to developing students' critical thinking skills and their ability to apply ethical standards to clinical practice. Course is taken concurrently with SW 600. Prerequisites: SW 502, SW 503; Every Year, Fall[^8]placement offers a specialized social work experience in health/behavioral health, with a focus on a specialization in one of these areas: aging services, health/mental health/substance abuse, child and family welfare and justice, and school social work. The advanced field placement is usually offered in the academic year from September-May for 24 hours a week (total of 600 hours). A 90-minute field seminar is held monthly, prior to the practice class. SW 600 is taken with SW 601 and SW 602 is taken with SW 603. Prerequisites: SW 600, SW 601; Every Year, Spring

## SW 603 Advanced Organizational Social Work

 Practice: Program Management, Supervision, Career Development and Professional Ethics (3 cr.) Students expand their knowledge and understanding of human service organizations and learn about approaches for designing and managing human service programs effectively. Organizational and management theories and principles are applied to a range of human services. Students are exposed to various management practices such as strategic and program planning, information systems development, leadership and organizational change. Students learn to understand the meaning of evidence-based practice in the context of human services management and learn to use logic models in the design, implementation and evaluation of intended program outcomes. Emphasis is placed on organizational practice within the field of behavioral health in primary care settings. Career development is discussed. Course is taken concurrently with SW 602. Prerequisites: SW 600, SW 601; Every Year, Spring
## SW 604 Evaluation Research for Social Work

Programs and Practice (2 cr.) This course builds on previously learned research knowledge to elaborate on the conceptual, methodological and administrative aspects of evaluation research. Consideration is given to concepts and approaches for evaluating social interventions, including social work practice, programs and policies. Attention is given to the comparative analysis approach as used for the development of practice knowledge as well as for the utilization of evaluation studies. Prerequisite: SW 505; Every Year, Fall

SW 605 Integrative Seminar/Capstone Project (2 cr.) This course is taken in the final semester of the MSW program. A paper or final project (approved by the instructor) is required to demonstrate an integration of all content areas in the MSW program and competence in the CSWE standards. Students focus on the systematic inquiry of the foundations of advanced practice in the social work profession. An emphasis is on the assessment, planning and evaluation of population/community focused health promotion/disease prevention programs and projects. This capstone course helps the graduating student integrate course and field experienc-
es through review and exploration of the broader issues confronting health and social welfare programs.
Prerequisites: SW 600, SW 601; Every Year, Spring

## SW 609 Interprofessional Education (IPE) Option

( 3 cr .) This course fulfills elective requirements for the advanced concentration curriculum. A topic may not be repeated for additional credit. Possible topics include divorce and the divorcing family, IPE in health settings, IPE in school settings, ethics across the professions, and health, society and social justice. The role of interprofessional education and communication is a core component in how the various professions can begin to understand and address the topic of the course. Every Year, Spring and Summer

## SW 610 Social Work Issues for Services for the Aging Population: Aging in the Social Environment (3 cr.)

 This advanced MSW course provides students with an opportunity to gain a better understanding of aging in the United States. It is designed to prepare students to analyze aging in the sociocultural context and how various factors shape the experience of aging. The course uses multidisciplinary perspectives and examines aging as a process in the sociological, physiological, psychological and societal contexts. A major theme of the course is preparing students to meet the increasing demand of gerontological social work skills and knowledge as they operate at the individual, family, community and institutional levels. This course is required for those with a specialization in aging in the MSW program. Prerequisites: SW 502, SW 503; Every Other Year, SpringSW 611 Social Work in Health-Related Settings (3 cr.) This advanced MSW course focuses on the roles and functions of social workers in a rapidly changing health care industry. A strengths-based, family-centered and culturally sensitive approach to assessment and intervention with diverse populations in a variety of health care settings is presented. Explored are a range of interventions from prevention and health promotion to end-of-life care and critically evaluate how ethical dilemmas and the interdisciplinary environment influence the implementation of these practice interventions. This course or SW 614 is required for those with a specialization in Health/Mental Health/ Substance Abuse. Prerequisites: SW 502, SW 503; Every Other Year, Spring

## SW 612 Social Work Practice in Child and Family

 Welfare Settings (3 cr.) This advanced social work practice course focuses on the characteristics, strengths, and service needs of families and children in the child welfare system. It examines issues and builds practice skills related to families who may be served within traditional child welfare programs, i.e., family preserva-tion, child protective services, out-of-home care, and adoption as well as community agencies. The course considers family events within their ecological context and works to build sensitivity to various family forms and cultural patterns. Skills that are emphasized include: engaging families as partners, interviewing, assessing risk and safety, assessing the child and family, planning and delivering effective treatment, managing the case, evaluating change and risk reduction, and deciding when to close the case. This course (or SW 613, with permission) is required for those specializing in Child and Family Welfare and Justice. Prerequisites: SW 502, SW 503; Every Other Year, Spring

SW 613 Social Work Practice in Schools (3 cr.) This advanced course presents knowledge and critical skills for engaging in social work practice from preschool through high school in educational settings across the continuum from direct or clinical practice, to schooland district-level programming and policy, as well as partnering with communities and organizations to advance programming and policy. This course is required for those specializing in school social work. Prerequisites: SW 502, SW 503; Every Year, Spring

## SW 614 Social Work Issues in Health and Illness

( 3 cr .) This course discusses the importance of cultural and socioeconomic factors in the creation of major health disparities in the United States. Physiological, psychological, social and environmental factors are considered in relationship to cultural and socioeconomic factors in explaining both etiology and consequences of disease. The framework is applied to common diseases in the life course. This course or SW 611 is required for those MSW students specializing in Health/Mental Health/Substance Abuse. Prerequisites: SW 502, SW 503; Every Other Year, Spring

Courses offered as needed
SW 620 International Social Welfare (3 cr.)
Prerequisites: SW 502, SW 503
SW 621 Health Policy (3 cr.) Prerequisite: SW 504
SW 622 Multicultural Practice in Communities and Organizations (3 cr.) Prerequisites: SW 502, SW 503
SW 623 Child and Family Social Services Policy (3 cr.) Prerequisite: SW 504
SW 630 Clinical Social Work With Military Service Members and Families ( 3 cr.) Prerequisites: SW 600, SW 601
SW 631 Clinical Social Work with Aging and Families (3 cr.) Prerequisites: SW 502, SW 503
SW 632 Art Therapy for Clinical Social Work
Practice (3 cr.) Prerequisites: SW 502, SW 503
SW 633 Clinical Social Work Practice and Stress Management Techniques (3 cr.) Prerequisites: SW 502, SW 503

SW 634 Clinical Social Work with Substance Abuse and Addictive Behaviors Abuse and Addictive
Behaviors (3 cr.) Prerequisites: SW 502, SW 503
SW 635 Clinical Social Work Evidence-based Treatment with Children and Adolescents (3 cr.) Prerequisites: SW 502, SW 503
SW 636 Clinical Social Work in Relation to Death, Dying, Bereavement, and Life-Threatening Illness (3 cr.) Prerequisites: SW 502, SW 503
SW 637 Clinical Social Work with Couples ( 3 cr .) Prerequisites: SW 502, SW 503
SW 638 Clinical Social Work Treatment of Adults with Chronic Mental Illness ( 3 cr .) Prerequisites: SW 600, SW 601
SW 639 Inter-Personal Therapy (IPT) for Clinical Social Work Practice (3 cr.) Prerequisites: SW 600, SW 601
SW 640 Clinical Social Work Practice with Adult Trauma (3 cr.) Prerequisites: SW 600, SW 601 SW 699 Special Topics in Social Work (3 cr.)

## Spanish (SP)

SP 501 Spanish Grammar (3 cr.) This intensive study of the Spanish language at the advanced level builds on students' prior knowledge of the forms and paradigms of Spanish. Students receive instruction in verb tense usage, sentence syntax, lexical choices, nuances of word order and idiomatic usage. Emphasis is placed on composition skills and clarity of expression. Exercises to solidify knowledge are used extensively. Every Third Year, Fall and Spring

SP 528 Spanish-American Literature (3 cr.) This study of the major literary productions from Spanish America begins with the Conquest, continues through the Colonial period, Independence, modernism, and early 20 th-century realism, and concludes with manifestations of late 20th-century experimentation. Every Third Year, Fall

SP 535 Nineteenth-Century Literature of Spain (3 cr.) Students in this course study the major works of poetry, drama and novel of 19th-century Spain. Movements include romanticism, realism and naturalism. Major authors considered are Espronceda, Zorrilla, Perez Galdos, and Alarcon. Every Third Year, Spring

SP 548 Golden Age Drama and Poetry ( 3 cr.) This study of the major dramatists and poets of the Siglo de Oro (16th and 17th centuries) of Spain covers Renaissance and Baroque styles. Major authors considered include Lope de Vega, Tirso de Molina, Calderon de la Barca, Garcilaso and Gongora. Every Third Year, Spring

SP 551L Spanish Lab (1 cr.) Lab to accompany a graduate MAT Spanish course. Every Year, Spring

SP 552L Spanish Lab (1 cr.) Lab to accompany a graduate MAT Spanish course. Every Year, Fall

SP 553L Spanish Lab (1 cr.) Lab to accompany a graduate MAT Spanish course. Every Year, Fall

SP 565 Contemp Spanish-American Fiction: Cien años de soledad and La casa de los espíritus (3 cr.)
This course pairs two of the most highly acclaimed and frequently discussed novels of the second half of 20th-century Spanish America: Cien años de soledad by Nobel Prize winner, Colombian, Gabriel Garcia Marquez (1967) and La casa de los espíritus by Chilean, Isabel Allende (1982). Students read and discuss both novels in depth in terms of their portrayals of Spanish-American history and culture and analyze the relationship between the two novels to develop an understanding of Allende's challenge to Marquez's cosmovision and sense of telos. Prerequisites: three literature courses taught in Spanish or acceptance into the MAT program in Spanish. Every Other Year, Fall

SP 570 The Modern Spanish Short Story ( 3 cr.) The short story as a genre as well as 19th- and 20th-century masterpieces written in Spain and Latin America are explored with close literary and linguistic analysis of each text and also consideration of its cultural context. Every Year, Summer

SP 571 The Romance Languages ( 3 cr .) This linguistics course examines the origins and development of Romance languages with particular attention to Spanish. Every Year, All

SP 573 Contemporary Drama (3 cr.) Contemporary drama from Spain and Spanish America is studied in depth with close literary analysis of texts in combination with a consideration of their cultural contexts. Every Third Year, Fall

SP 576 The Spanish Caribbean ( 3 cr .) This course studies the peoples, history and society of Puerto Rico, Cuba and the Dominican Republic as well as their artistic and literary expression. Also, features of the Spanish language (semantics and grammar) as spoken in the Caribbean are examined. Every Third Year, Spring

Courses offered as needed
SP 517 Literary Genres (3 cr.)
SP 572 Hispanic Culture (3 cr.)

## Special Education

SPED 545 Introduction to the Exceptional Child ( 4 cr .) This course provides students with a broad overview of exceptional learners. It is a basic overview/ survey of all areas and categories of special education. The purpose is to provide an introduction to students with exceptionalities for education as well as noneducation majors. Target subject areas include: knowledge of categorical labels, educational law, program planning and terminology used in the field. Must be a senior in the five-year MAT program or candidate in the graduate MAT program. Every Year, January and Summer

SPED 552 Teaching in the Inclusive Classroom (3 cr.) Treatment of exceptional individuals throughout history and the importance of the values of societies regarding differences form the basis for students' understanding of special education from its inception to current practices. Topics of discussion include: history and philosophy, laws, guidelines and procedures related to providing special education; the needs of students with exceptionalities, including giftedness; the particular needs of students for whom English is a second language; and instructional considerations for students with exceptionalities in inclusive settings. From a philosophic perspective, students learn skills to include children with exceptionalities into their elementary classrooms. Prerequisite: ED 468 or ED 568; Every Year, Fall and Summer

## SPED 565 Characteristics of Students with Emotional and Learning Disabilities (4 cr.)

The purpose of this course is to teach educational practitioners in-depth theories and specific conditions in learning disabilities and emotional disorders. Students examine the impact of these learning and behavioral differences on academic and social/emotional performances. Diversity within student populations is addressed throughout the course. Experiential, observational and interactive strategies-including use of technological advances-are used to facilitate fulfillment of the outcomes established for the course. Prerequisite: SPED 482, SPED 552 or SPED 582; Every Year, January and Summer

## SPED 566 Autism and Related Communication

 Disorders (4 cr.) This purpose of this course is to teach educational practitioners with the knowledge base for, and the instructional strategies associated with, identifying and educating students diagnosed with Autism Spectrum Disorders and related communication disorders. Experiential, observational and interactive strat-egies-including use of technological advances-are used to facilitate fulfillment of the outcomes establishedfor the course. Prerequisite: SPED 482, SPED 552 or SPED 582; Every Year, January and Summer

## SPED 567 Independent Research in Special

Education (1 cr.) This course focuses on research in the field of special education as it relates to students in the educational setting. The research project should include the application of evidence-based practice, the role of families in the educational process and the effects of the disability on lifelong learning. Specific topics/projects must meet with faculty approval. Prerequisite: SPED 565 or SPED 566; Every Year, Spring and Summer

SPED 582 Special Education ( 3 cr .) This course focuses on the characteristics of students with exceptionalities as well as methods of meeting these students' educational needs in the general education classroom. The course is concerned with providing prospective teachers with an understanding of the growth and development of students with disabilities as well as students with particular gifts and talents. Every Year, Fall

## Sports Journalism (JRN)

JRN 530 Independent Study ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ i s ~ a ~ s p e c i a l ~}$ course offered to accommodate students who seek advanced practical training or advanced research in an area not directly included in the curriculum. The topic and scope of the course is development by the student in consultation with a faculty adviser, subject to approval by the dean. Every Year, All

JRN 531 Graduate Internship ( $\mathbf{3}$ cr.) Experience in association with working professionals is essential to securing career opportunities. Students completing an elective internship to secure such experience are required to work a minimum of 120 hours in a supervised environment, approved by the program director. Every Year, All

JRN 550 Sportswriting Traditions (3 cr.) The history of sportswriting stretches from classical Greece to Bristol, Conn., home to ESPN, documenting the phenomenon described by writer Geoff Dyer as the biggest thing on the planet-possibly the universe, sports. Students study the works of the great writers who did much more than keep score across the ages. Every Year, Fall

JRN 560 Multimedia Sports Reporting ( 3 cr.) Sports coverage has expanded beyond the immediacy of the games and now includes culture, health and other areas once seen as disconnected from the fields, gyms, rinks and half pipes where competition occurs. This course focuses on covering sports as both a game and an essential part of culture. Every Year, All

JRN 562 Sports Law and Ethics ( $\mathbf{3}$ cr.) Federal antitrust law and regulations show that college and professional sports are treated as special components of American culture. This course examines the legal structure that grants special privileges to sports and to the ethical challenges sports journalists confront in going beyond the games to find the story. Every Year, Spring

JRN 563 Sports Analytics (3 cr.) Deciphering the volumes of data produced by high school, college and professional sports team is an essential part of sports reporting. This course introduces students to the ever-growing volumes of statistics across major sports and shows how to transform such data into useful information. Every Year, Fall

## JRN 564 Presenting and Producing Radio Sports

( 3 cr .) Radio remains an essential and effective medium for listening to games and for engaging the audience with live talk shows that discuss teams, players, sports and the action of the competition. This course presents students with the principles and practices of radio sports. Every Year, Fall

JRN 565 Presenting and Producing Television Sports:
Remote ( 3 cr.) Federal antitrust law and regulations show that college and professional sports are treated as special components of American culture. This course examines the legal structure that grants special privileges to sports and to the ethical challenges sports journalists confront in going beyond the games to find the story. Every Year, Spring

JRN 566 Presenting and Producing Television Sports: Studio (3 cr.) Pre-game, post-game and intermission reports are among the most important aspects of televised sports, as each reveals and promotes the storylines through which games are covered. This course introduces students to the concepts and content behind the production of studio shows. Every Year, Spring

JRN 573 Sports Literature ( $\mathbf{3}$ cr.) Sports serve as a critical metaphor for American life in nonfiction works such as Friday Night Lights, in novels such as End Zone, in plays such as Death of a Salesman and in films such as Raging Bull. This course examines why sports are prominent in cultural works that attempt to reveal the meaning of America. Every Year, Spring

JRN 574 Crafting the Sports Feature (3 cr.) Feature writers capture athletes when they are most noble, frail or otherwise vulnerable or heroic. They also capture the moment when a game means more than that. This course teaches students to apply creative vitality to their ideas and writing on sports outside of game stories. Every Year, All

JRN 580 Investigative Reporting ( $\mathbf{3} \mathbf{~ c r . ) ~ T h e ~ p u r p o s e ~}$ of this class is to prepare students to recognize investigative opportunities in all stories and to equip them with the practical skills necessary to succeed in investigative and project reporting, including knowledge of state and federal laws regarding access to governmental information. Every Year, Spring

JRN 582 American Sports History (3 cr.) This course examines how sports such as baseball, basketball and football tunneled their way into American consciousness in the 19th and 20th centuries and have sustained the attention of spectators despite the proliferation of other distractions. Every Year, Fall

JRN 588 Researching and Writing the Sports Documentary ( 3 cr.) ESPN's Sports Century and 30 for 30 series and the NFL Network's A Football Life express in cinematic form the totality of the triumph and tragedy of contemporary sports. This course instructs students on how to develop and complete a documentary script. Every Year, Fall

JRN 589 Critical Issues in Sports (3 cr.) From health concerns to labor conflicts, the workaday world often intrudes on the bubble that protects the mythology of sport. Through reason, analysis and writing, students interact with vital issues that emerge from the seemingly routine day-to-day coverage of games. Every Year, All

JRN 595 Sports Clinical (3 cr.) Students completing the sports journalism program must participate in the Sports Clinical. This course focuses on advanced broadcast, multimedia, documentary and long-form reporting and to deepen the experience and training in a given area of specialization in terms of platform and subject matter. Every Year, All

JRN 601 Master's Project ( 3 cr.) Students completing the journalism program must complete either a master's project or thesis. The project option requires students to create an original, in-depth print, broadcast or multimedia journalistic piece. The graduate program director and dean must approve the topic. Every Year, All

JRN 602 Thesis ( $\mathbf{3} \mathrm{cr}$.) Students completing the journalism program must complete either a master's project or thesis. The thesis option requires students to research and write a scholarly paper that explores an aspect of journalism. The graduate program director and dean must approve the topic. Every Year, All

Courses offered as needed
JRN 500 Special Topics in Journalism ( 3 cr .)
JRN 542 Graduate Seminar (3 cr.)

## Strategy (STR)

STR 620 Technology and Innovation Management (3 cr.) Technology and innovation have become key resources for corporate profitability and competitive advantage in firms. Managed properly, technological innovations are a primary source of competitive advantage for firms. This course explores the strategic role of technology and innovation in the success of firms. Classroom learning is facilitated primarily through case analyses. Every Year, Fall

Courses offered as needed
STR 610 Business Sustainability ( 3 cr.)
STR 630 Corporate Governance ( 3 cr .)

## Academic Awards and Honor Societies

## Academic Affairs

## BRAMS Scholar Award

This award is presented annually to a graduating high school senior who is part of the Quinnipiac University/ Betsy Ross Arts Magnet School Partnership. Award recipients are selected based on academic achievement.

## President's Scholarship Award

This award by the president of Quinnipiac goes to the student who has attained the highest scholastic standing in his or her graduating class and who has completed at least 90 credits at Quinnipiac.

## Writing Across the Disciplines Student Award Quinnipiac University's Writing Across the Curriculum (QUWAC) program awards two $\$ 250$ writing prizes to students nominated by faculty for having produced writing deemed exemplary for the discipline. An impartial subcommittee of QUWAC chooses the winners. The prize works are then published in the First-Year-Writing Program's handbook for the next year.

## Alumni/Parent Relations

Alumni Association Academic Achievement Awards At graduation, the Alumni Association presents an award to the honors student from each of the undergraduate schools who has attained the highest scholastic standing and who has completed 90 credits at QU. These awards are made possible by the Alumni Association National Board of Governors.

## Alumni Award for Holistic Nursing Practice

This award recognizes clinical excellence and exceptional potential in the discipline of nursing. It is presented to the senior nursing student who has demonstrated a strong commitment to the unity of body, mind, emotion and spirit in the delivery of health care. The award is supported by the Quinnipiac University Nursing Alumni Fund, which was established by the Class of 1998.

## Alumni Chair Award

This award honors the graduating senior who has demonstrated outstanding leadership, commitment to creating student awareness of the Alumni Association and facilitating increased interaction between alumni and students.

## College of Arts and Sciences

## Christopher Becker Memorial Prize in History

The History Department awards the Becker Prize to the graduating senior with the highest overall grade point average.

## Mitchell Berkun Prize in Psychology

Each year, the student majoring in psychology who has completed the Research Methods sequence (PS 206, $307,308)$ with the highest grades receives this award. It honors the individual who founded the psychology department.

## Beta Beta Beta Award

This award is presented to the graduating senior in the Department of Biological Sciences who is a member of the Beta Beta Beta National Biological Honor Society (Upsilon Chapter) and has attained the highest academic standing.

James Fickes Award for Excellence in Mathematics This award is given to the senior mathematics major who has shown the greatest achievement and future promise as a mathematician, and who has demonstrated leadership both in and outside the classroom.

## Barry Fritz Award in Psychology

This prize is given each spring to a senior in psychology who has completed an independent study project that is both creative and relevant. These two qualities characterized the research of Professor Barry Fritz, in whose honor the award was established. To be considered, the project must be completed by the fall of senior year, but also could be completed in previous years.

## Joan Phillips Gordon Prize in Sociology

This award, in honor of Joan Phillips Gordon, former chair of the sociology department, is presented annually to a senior in sociology, social services, criminal justice or gerontology, who demonstrates outstanding academic and leadership qualities.

## Legal Studies Book Award

This prize is given annually to the senior legal studies student with the highest grade point average who has demonstrated exceptional ability in the major.

## Modern Languages Department Spanish Writing Award

The Department of Modern Languages sponsors an annual Spanish writing contest. Eligible students write an essay in Spanish, which is judged by departmental professors. The recipients are honored at the College
of Arts and Sciences award dinner and receive a commendation and a monetary prize.

## R. Gordon Pauluccy Graduation Prize in Psychology

 This award, established by the Pauluccy family, is made annually to the senior major in psychology who has the highest overall grade point average.
## Political Science Outstanding Senior Award

This award recognizes a senior in political science who has shown high academic achievement, made a significant contribution to campus life and/or shown excellent leadership qualities.

## Political Science Best Senior Thesis Award

The political science faculty has established this award to recognize graduating senior students in political science who have submitted outstanding as well as original theses.

## Political Science Best Research Project Award

The political science faculty has established this award to recognize graduating senior student(s) in political science who have completed an outstanding, as well as original, research project.

## The Matt Rafferty Memorial Economics Department Student Achievement Award

This award is given to the student majoring in economics who has shown outstanding academic achievement and contributed significantly to the department.

## Rachel Ranis Prize in Social Justice

This award, conferred in recognition of Professor Ranis, is presented to a senior in sociology, social services, criminal justice or gerontology, who demonstrates a passion for social justice.

## Alice B. Remail Memorial Award

This award is presented to the graduating student majoring in English with the highest academic record and is given in memory of a distinguished member of the department.

## Aurea C. Schoonmaker Spanish Award

 In honor of Professor Aurea C. Schoonmaker's 43 years of exemplary teaching at Quinnipiac University, this prize is awarded to the senior Spanish major with the highest grade point average.
## Senior Service Prize in Criminal Justice

This award is presented to the senior criminal justice major who exhibits extraordinary service to the program, campus life and community.

## Alfred P. Stiernotte Memorial Prize

This award is presented to the graduating student who has earned distinction in the study of philosophy.

Orville J. Sweeting Memorial Chemistry Award This award, in memory of Orville J. Sweeting, former faculty member and Quinnipiac provost, is presented to a graduating senior who has exhibited outstanding achievement in both the academic and senior research setting in chemistry or biochemistry.

## West Educational Publishing Student Award

This award is given annually to two legal studies students who have demonstrated achievement and professional growth.

## College of Arts and Sciences Award for Special Achievement

This award is given to the graduating senior in the College of Arts and Sciences who has a record of exceptional achievement in the face of adversity. The award was established in honor of Morris Woskow, former professor of psychology and dean.

## School of Business and Engineering

## Advertising/Biomedical Marketing Department Student Achievement Award

This award is presented to a graduating student exhibiting outstanding scholarship, independent creativity and extracurricular activities directly related to advertising or biomedical marketing.

## Entrepreneurship Student Achievement Award

 This award is presented to the senior entrepreneurship major who has demonstrated outstanding achievement in entrepreneurial activities and academic performance.The Civil Engineering Outstanding Senior Award This award is presented to the outstanding civil engineering senior in recognition of academic excellence and student leadership.

## The Industrial Engineering

## Outstanding Senior Award

This award is presented to the outstanding industrial engineering senior in recognition of academic excellence and student leadership.

## The Mechanical Engineering <br> Outstanding Senior Award

This award is presented to the outstanding mechanical engineering senior in recognition of academic excellence and student leadership.

The Software Engineering Outstanding Senior Award This award is presented to the outstanding software engineering senior in recognition of academic excellence and student leadership.

## Computer Information Systems <br> Outstanding Senior Award

This award is presented to an outstanding CIS senior in recognition of academic excellence and student leadership.

## International Business Award

This award is given to a graduating senior in international business for demonstrating academic excellence and professional qualities within the international business program.

## Management Department Award

At the end of each academic year, the management department faculty members nominate, vote and select a senior Management Department Student of the Year. The recipient is someone who will demonstrate superior academic performance, a high level of campus and/or community involvement and leadership.

## Ronald Marangell Award

This award is presented to an outstanding graduating accounting major in memory of Ronald Marangell, a former Quinnipiac accounting student.

## Marketing Department Student Achievement Award

 This award is presented to a student possessing expertise in marketing who has made contributions to the field and the marketing department.
## Edward J. Scannell Prize (QU PIN)

This award, in memory of a former trustee, is given to two graduating business students who have demonstrated outstanding citizenship.

Finance Department Outstanding Senior Award This award is presented to a graduating senior for academic achievement in finance.

## School of Communications

## Highest Grade Point Average in Communications

This award is presented to a graduating senior from the School of Communications with the highest grade point average, who also has made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Journalism

This award is presented to a graduating senior from the journalism program who has shown high academic achievement, made significant contributions to the program, campus life and/or shown excellent leadership qualities on campus.

## Outstanding Achievement in Media Studies

This award is presented to a graduating senior from the media studies program who has shown academic achievement, made significant contributions to the program, campus life and/or shown excellent leadership qualities on campus.

Outstanding Achievement in Public Relations This award is presented to a graduating senior from the School of Communications in the public relations program, who has shown high academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Advertising and Integrated Communications

This award is presented to a graduating senior from the School of Communications in the advertising and integrated communications program, who has shown high academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Film, Television and Media Arts

This award is presented to a graduating senior from the School of Communications in the film, television and media arts program, who has shown high academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Interactive Digital Design

This award is presented to a graduating senior from the School of Communications in the interactive digital design program, who has shown high academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Overall Achievement Award

This award is presented to a graduating senior from the School of Communications who has shown high academic achievement, made significant contributions to the program, campus life and/or shown excellent leadership qualities on campus.

## School of Health Sciences

## Athletic Training Student Achievement Award

 This award is given each year to a senior majoring in athletic training who has shown exceptional achievement and who has contributed significantly to the department.
## Biomedical Sciences Achievement Award

This award is given each year to a senior majoring in biomedical sciences who has demonstrated exceptional academic achievement and who has contributed significantly through service to the Quinnipiac community and to the greater community beyond the University.

## Diagnostic Imaging Student Achievement Award

 This award is given each year to a senior majoring in diagnostic imaging who has shown exceptional academic achievement and who has contributed significantly to the department.
## Health Science Studies Student Achievement Award

 This award is given each year to a senior majoring in health science studies who has shown exceptional academic achievement and has contributed to the community through volunteer work and/or research.
## Microbiology and Immunology Student Achievement Award

This award is presented annually to a senior microbiology and immunology major who has demonstrated exceptional academic achievement, and who has contributed significantly to the understanding, promotion and advancement of microbiology and immunology.

Occupational Therapy Community Service Award This award recognizes a graduating senior who has demonstrated distinguished service in the field of occupational therapy within the Quinnipiac community and the greater community of occupational therapy within the state or nation.

Occupational Therapy Leadership Award
This award is presented from the faculty to a graduating senior who has shown outstanding leadership in academic work, laboratory performance and initiatives within the department.

## Ryan J. O'Neil Entry-level Master's Physician Assistant Award

This award is presented to the senior ELMPA student who most exemplifies excellent leadership, academic excellence, a cooperative attitude and the strength of character of a future health care professional. The award is in memory of Ryan J. O'Neil, a former ELMPA student.

## Harold Potts Memorial Physical Therapy Award

 The award, given in memory of Harold Potts, former chairman, professor and founder of the physical therapy program at Quinnipiac, is presented from the faculty to a third- or fourth-year physical therapy student who has demonstrated academic and leadership excellence, as well as exemplary service to the program and physical therapy profession.
## School of Nursing

## Benjamin and Juliette Trewin Award for Academic Excellence in Nursing

This award recognizes academic excellence and exceptional potential in the discipline of nursing. It is presented to nursing students with the highest overall grade point average. The award is supported by the Benjamin and Juliette Trewin Memorial Endowed Fund, which was established for the nursing program by Estelle Trewin Beecher in memory of her parents.

## Benjamin and Juliette Trewin Award for Professional Leadership in Nursing

This award recognizes outstanding leadership and exceptional potential in the discipline of nursing. It is presented to nursing students who have made significant contributions to the nursing program and the greater community of nursing. The award is supported by the Benjamin and Juliette Trewin Memorial Endowed Fund, which was established for the nursing program by Estelle Trewin Beecher in memory of her parents.

## Alumni Award for Holistic Nursing Practice

This award recognizes clinical excellence and exceptional potential in the discipline of nursing. It is presented to the senior nursing student who has demonstrated a strong commitment to the unity of body, mind, emotion and spirit in the delivery of health care. The award is supported by the Quinnipiac University Nursing Alumni Fund, which was established by the class of 1998.

## Department of Athletics and Recreation

## Senior Female Scholar Athlete

This award is presented to a letter-winner who has given extra effort for the athletic department, shown strength of character and high academic average, and was a valuable member of her team.

## Senior Male Scholar Athlete

This award is presented to a letter-winner who has given extra effort for the athletic department, shown strength of character and high academic average, and was a valuable member of his team.

## Division of Student Affairs

## Albert H. Jente Memorial Prize

A silver key in memory of Albert H. Jente, former treasurer of Quinnipiac, is awarded annually to a member of the sophomore class who has done the most for his or her class through loyalty, cooperation and teamwork.

## Olive Kennedy Memorial Scholarship

The award, made to part-time undergraduate women, was established by Olive Kennedy's family and friends in recognition of the valuable assistance she lent as a counselor to adult students.

## Robert G. Leonard Award

The Quinnipiac Sigma Xi chapter sponsors this annual award for excellence in research by outstanding undergraduate and graduate students in science, mathematics and computers.

## Outstanding Community Service Awards

These three awards are given to students in the freshman, sophomore and junior class who have a C+ average or better, and have participated in volunteer service to the community beyond Quinnipiac.

## Outstanding Freshman Award

This award is given to a student who has a 2.75 GPA or better, is involved in one activity and has demonstrated interest in others.

## Outstanding Sophomore Award

This award is given to a student with a 3.0 GPA or better who is involved in activities, with a clearly demonstrated leadership role in at least one activity.

## Outstanding Junior Award

This award is given to a student who has a 3.0 GPA or better and is involved in a variety of activities, with a clearly demonstrated leadership role in one activity and whose strength of character has affected the Quinnipiac community.

## Outstanding Senior Award

This award recognizes a senior who has a 3.0 GPA or better for service, dedication and contribution to Quinnipiac throughout his or her four years.

## Outstanding Student Affairs Leadership Award

 This award is given to students who have demonstrated outstanding leadership qualities, a cooperative attitude and a commitment to improving the quality of life at Quinnipiac.H. Pearce Family Community Leadership Award This award is given to a senior who has best exemplified the spirit of volunteer community service while at Quinnipiac University.

## Philip Troup Achievement Prize

In honor of the first president of Quinnipiac, this prize is given to a graduating senior who has contributed most to the welfare of Quinnipiac through strength of character and qualities of leadership.

## Student Involvement Award

An award to an outstanding student is presented by the Student Government Association.

## Honor Societies

## Alpha Delta Sigma Society

The Alpha Delta Sigma Society is a national honor society recognizing scholastic achievement in advertising studies. It is sponsored by the American Advertising Federation to encourage scholarship among students of advertising.

## Alpha Eta Honor Society

Alpha Eta is the national honor society that recognizes scholarship and academic achievement of health professions students enrolled in undergraduate and graduate programs.

## Alpha Kappa Delta

Alpha Kappa Delta is an international sociology honor society designed to stimulate scholarship and promote the scientific study of society.

## Alpha Mu Alpha

Sponsored by the American Marketing Association, this National Marketing Honorary Award is given to graduating seniors who are in the top 10 percent of the seniors in marketing.

## Alpha Psi Omega

Alpha Psi Omega, the largest national honor society in America, recognizes excellence in all areas of theater study and production. Membership is based on cumulative grade point average and achievement during the University main stage theater production season in the areas of performance, technical production and theater administration.

## Alpha Sigma Lambda

Alpha Sigma Lambda was the first and remains the only chapter-based honor society established to honor both full-time and part-time adult students who are pursuing their undergraduate degrees. Founded in 1946, the Alpha Sigma Lambda national honor society provides recognition to highly motivated adult students who are continuing their education while managing the responsibilities of work and family.

## Beta Alpha Psi

Beta Alpha Psi is an honorary organization for financial information students and professionals. Membership is open to accounting majors and is based on cumulative grade point average and achievement in accounting courses.

## Beta Gamma Sigma

Beta Gamma Sigma is the National Business Honor Society. Only Schools of Business accredited by AACSB International-The Association to Advance Collegiate Schools of Business, may have a chapter of this society. Membership is by invitation only, and invitees must be a junior or senior in the top 10 percent of their class.

## Financial Management Association International-National Honor Society

The FMA National Honor Society recognizes scholastic achievement of students who have demonstrated superior scholarship. Individuals accepted for membership have the distinction of belonging to the only honorary society that specifically recognizes the achievement of finance majors who demonstrate expertise in finance and financial decision making.

## Lambda Epsilon Chi

Lambda Epsilon Chi is the national honor society for legal studies/paralegal students and recognizes students who have demonstrated superior academic performance in a legal studies program.

## Lambda Pi Eta

Lambda Pi Eta is the communication studies honor society. Quinnipiac's Tau Delta chapter seeks to recognize, foster and reward outstanding scholastic achievement, promote and encourage professional development, promote closer relationships between faculty and students and explore options for graduate education in communication studies.

## Phi Alpha Theta History Honors Society

The Quinnipiac chapter runs events on campus for students interested in history. The chapter sponsors trips to historical sites and museums as well as regional and national history conferences. Students are eligible to join if they have Quinnipiac credit for at least four collegelevel history courses. Three of the history courses must be completed at QU. Students need a 3.0 GPA overall and a 3.1 in history courses.

## Phi Sigma Biological Honors Society

Phi Sigma is an organization devoted to the promotion of research and academic excellence in the biological sciences. Undergraduate students are invited to become members if they have achieved junior status, have an overall GPA of 3.5 and are actively engaged in, or have participated in research at Quinnipiac in an area related to the biological sciences. Graduate students who meet the same criteria also are eligible.

## Phi Theta Epsilon

Phi Theta Epsilon is a national honor society that recognizes outstanding scholarship and service to the occupational therapy profession.

## Pi Sigma Alpha

Pi Sigma Alpha, the National Political Science Honor Society, is the only honor society for college students of political science and government in the U.S. Its purpose is to stimulate scholarship and intelligent interest in political science, and to honor political science majors who display leadership and academic achievement.

## Psi Chi

Psi Chi is the national psychology honor society, founded for the purposes of encouraging, stimulating and maintaining excellence in scholarship and advancing the science of psychology.

## Sigma Delta Pi

Sigma Delta Pi, national honor society in Spanish, honors students who attain excellence in the study of Spanish language and the literatures and cultures of Spanish speaking people. To be considered for membership in Sigma Delta Pi, a student must: be a junior, have a GPA of 3.2 overall, maintain a GPA of 3.2 in all Spanish courses, and have completed 18 credits in Spanish at the 200 level or above, including two semesters of advanced Spanish language courses, as well as an advanced course in Hispanic literature or culture.

## Sigma Phi Omega

Sigma Phi Omega, the national academic honor society in gerontology, recognizes the excellence of those who study gerontology/aging. The society seeks to promote scholarship, professionalism, friendship and services to older persons, and to recognize exemplary achievement in gerontology/aging studies and related fields.

## Sigma Tau Delta

## International English Honor Society

Sigma Tau Delta's central purpose is to confer distinction upon students of the English language and literature in undergraduate, graduate and professional studies. Our members have the opportunity to be recognized for their outstanding achievements, enrich their education and advance their careers.

## Sigma Theta Tau International Honor Society of Nursing

Tau Rho is the Quinnipiac University chapter of Sigma Theta Tau International Honor Society of Nursing. This global community of nurses seeks to improve the health of the world's people by increasing the scientific basis of nursing practice. The organization provides leadership and scholarship in practice, education and research. Membership is by invitation to undergraduate and graduate nursing students who demonstrate academic excellence, and to nurse leaders in the community who exhibit exceptional achievement in nursing.

## Graduate Academic Honors

## Academic Awards and Honor Societies

## Faculty Award for Academic Excellence

These awards recognize the outstanding achievement of the student who has maintained the highest GPA in his or her program of study, and who has distinguished him/ herself by a superior academic project and/or contribution to the program, as determined by the faculty.
Master of Business Administration
Master of Science in Business Analytics
Master of Science in Information Technology
Master of Science in Instructional Design
Master of Science in Interactive Media
Master of Science in Journalism
Master of Science in Organizational Leadership
Master of Science in Public Relations
Master of Science in Sports Journalism

## Academic Excellence Awards

These awards recognize the outstanding academic achievement of graduate students who have completed their programs of study. In the opinion of the program directors, these graduates have excelled in both the didactic and clinical/laboratory phases of their post-bachelor's degree education.
Master of Health Science/Medical Laboratory Sciences
Master of Health Science/Pathologists' Assistant
Master of Health Science/Physician Assistant
Master of Health Science/Radiologist Assistant
Master of Science in Molecular and Cell Biology
Master of Science in Nursing
Doctor of Nursing Practice
Entry-level Master's in Occupational Therapy Post-professional Doctor of Occupational Therapy Master of Social Work

## Alpha Eta Honor Society

Alpha Eta is the national honor society that recognizes scholarship and academic achievement of health professions students enrolled in undergraduate and graduate programs.

## Beta Gamma Sigma

Beta Gamma Sigma is the National Business Honor Society. Only schools of business that are accredited by the Association to Advance Collegiate Schools of Business (AACSB) may have a chapter of this society. Membership is by invitation only and invitees must meet the criteria established by Beta Gamma Sigma.

## Academic Excellence Award, Entry-level Master's in Occupational Therapy

The Department of Occupational Therapy presents an award to a graduate student who has exhibited outstanding
scholarship in academics and fieldwork and who has contributed significantly to the program and to Quinnipiac.

## Excellence in Teaching and Scholarship Award in Elementary Education

The Excellence in Teaching and Scholarship Award in Elementary Education is presented to the teacher candidate who has demonstrated excellence in teaching as well as scholarship during his or her tenure in the master of arts in teaching program in elementary education.

## Excellence in Teaching and Scholarship Award in Secondary Education

The Excellence in Teaching and Scholarship Award in Secondary Education is presented to the teacher candidate who has demonstrated excellence in teaching as well as scholarship during his or her tenure in the master of arts in teaching program in secondary education.

## Excellence in Scholarship and Leadership Award in Educational Leadership

The Excellence in Scholarship and Leadership Award is presented to the candidate who has demonstrated exceptional scholarship as well as a thorough understanding of national leadership standards and their application to school administration throughout the sixth-year diploma in educational leadership program.

## Excellence in Scholarship and Leadership Award in Teacher Leadership

The Excellence in Scholarship and Leadership Award is presented to the candidate who has demonstrated exceptional scholarship as well as a thorough understanding of national leadership standards and their application to school administration throughout the master of science in teacher leadership program.

## Gaylord Specialty Healthcare Carissa Neubig Scholarship for Physical Therapy

This award is given by Gaylord Hospital to a third-year graduate student majoring in physical therapy. The award is given in honor of Carissa Neubig, a former graduate of the Quinnipiac physical therapy program and longtime employee of Gaylord Hospital, where she served as chief operating officer. The award gives recognition to a student who exemplifies Gaylord Hospital's five values: integrity, compassion, accountability, respect and excellence. These values are the foundation in helping Gaylord provide and achieve the dedicated caring service that has become the hallmark of its employee philosophy.

## William B. Shaffer Jr. Award

The cardiovascular perfusion program presents this award to a graduate student who exhibits outstanding performance in both academic and clinical areas of study. The individual is chosen based on high moral character, leadership qualities and a significant contribution to both the program and to Quinnipiac University.

## Sigma Theta Tau International Honor Society of Nursing

Tau Rho is the Quinnipiac University chapter of Sigma Theta Tau International Honor Society of Nursing. This global community of nurses seeks to improve the health of the world's people by increasing the scientific basis of nursing practice. The organization provides leadership and scholarship in practice, education and research. Membership is by invitation to graduate nursing students who demonstrate academic excellence.

## Mark F. Tantorski Memorial Award

In memory of Mark F. Tantorski, a 1980 graduate of the physical therapy program, an award is made to a third-year graduate student majoring in physical therapy who has exhibited academic excellence, high moral character and leadership qualities and, through extracurricular activities in the area of physical therapy, has added to his or her professional growth.

## Personnel

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## Board of Trustees

The Board of Trustees is composed of public members, alumni, faculty and student representatives, and 13 emeriti members.

## Public Members

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## Administration

Please visit www.quinnipiac.edu/administration for a list of administrative personnel. This list is intended to help students and their parents obtain information about Quinnipiac University and its programs.

## Faculty

To view a list of full-time faculty members, visit the website at www.quinnipiac.edu/ftfaculty.

To view a list of part-time faculty members, visit the website at www.quinnipiac.edu/ptfaculty.


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## York Hill Campus




## College of Arts and Sciences

Todd Hancock Ahern (2011), Assistant Professor of Psychology (BA, Oberlin College; PhD, Emory University)
Luis O. Arata (1991), Professor of Modern Languages (BS, University of Pittsburgh; MA, SUNY Center Stony Brook; PhD, Cornell University)
Sarah Rebecca Bamford (2012), Assistant Professor of Philosophy (BA, MA, PhD, Durham University England)
Rajintha M. Bandaranayake (2014), Assistant Teaching Professor of Biochemistry (BS, Ramapo College of New Jersey; PhD, University of Massachusetts)
Fodei J. Batty (2011), Assistant Professor of Political Science (MIDA, PhD, Western Michigan University; MPA, Indiana State University)
Elena Germain Bertozzi (2013), Associate Professor of Game Design and Development (BA, Williams College; MLS, MS, Indiana University Bloomington; PhD, European Graduate School Leuk Stadt)
Adrienne J Betz (2009), Associate Professor of Psychology (BA, MA, PhD, University of Connecticut)
Anat Biletzki (2007), Schweitzer Professor of Philosophy (BA, MA, PhD, Tel Aviv University)
Jonathan D. Blake (2000), Professor of Computer Science (BSE, Princeton University; MS, PhD, Northwestern University)
Karen M. Bliss (2012), Assistant Professor of Mathematics (BS, University of Missouri-Rolla; MS, PhD, North Carolina St University Raleigh)
Daryll C. Borst (1968), Professor of Biology (BS, Ferris State University; MA, Central Michigan University; PhD, University of Illinois-Urbana)
Crystal Brian (2000), Professor of Theater (BA, Baylor University; MFA, PhD, University of California-Los Angeles)
Khalilah L. Brown-Dean (2011), Associate Professor of Political Science (BA, University of Virginia; MA, PhD , The Ohio State University)
Alan S. Bruce (2001), Professor of Sociology (MA, PhD, Bowling Green State University)
Sasha Turner Bryson (2010), Assistant Professor of History (BA, University of West Indies; MPhil, PhD , University of Cambridge)
Donald Paul Buckley (1999), Professor of Biology (BS, MS, University of Massachusetts; PhD, Ohio University)

Carrie A. Bulger (2000), Professor of Psychology (BA, University of Minnesota-Morris; MA, PhD, University of Connecticut)
Nancy C. Burns (2010), Instructor of Biology (BS, University of New Haven; MPhil, MS, Yale University)
Steven J. Carleton (1988), Professor of Biology (BS, University of Connecticut; DVM, Purdue University)
Nicolas N. Carrasco (2011), Assistant Professor of Biochemistry (BS, Brooklyn College; PhD, The City University of New York)
Xi Chen (2007), Assistant Professor of Sociology (BA, Renmin University of China; MS, PhD, Texas A\&M University)
Michael J. Chiarappa (2011), Associate Professor of History (BA, Ursinus College PA; MA, PhD, University of Pennsylvania)
Linda M. Chicoine (2010), Assistant Professor of Biology (BS, PhD, University of Connecticut; MS, Southern Connecticut State University)
Deborah J. Clark (1992), Professor of Biology (BA, Williams College; PhD, Cornell University)
Mark A. Collins (2011), Assistant Professor of Chemistry (BS, PhD, University of London; MBA, Adelphi University)
Dawn M. Colomb-Lippa (2008), Instructor of Biology (MHS, Quinnipiac University)
Patricia Comitini (1998), Professor of English (BA, Brooklyn College; PhD, SUNY Center Stony Brook)
Lisa Connelly (2006), Laboratory Instructor, Department of Biological Sciences (BS, Kings College; MS, Georgetown University)
Kathy J. Cooke (1995), Professor of History (BA, Calvin College; MA, PhD, The University of Chicago)
Kenneth P. Cormier (2010), Assistant Professor of English (BA, MA, PhD, University of Connecticut; MA, Eastern Michigan University)
Peter Cortland (1966), Associate Professor of English (BS, Cornell University; MA, Columbia University; PhD, Syracuse University)
Kevin J. Daly (2009), Assistant Teaching Professor of Theater (BA, Quinnipiac University; MFA, Indiana University)
Timothy T. Dansdill (2002), Associate Professor of English (BA, Sarah Lawrence College NY; MA, University of Massachusetts Boston; PhD, University of New Hampshire)
Asantewa McIntosh Dawson (2005), Instructor of Mathematics (BS, MS, Clark Atlanta University)

Alexandre de Lencastre (2013), Assistant Professor of Biology (PhD, Columbia University)
Louis A. Deaett (2011), Assistant Professor of Mathematics (BA, BS, University of Rochester; PhD , University of Wisconsin-Madison)
Aileen C. Dever (2000), Associate Professor of Modern Languages (BA, Western Connecticut State University; MA, Middlebury College; PhD, University of Connecticut)
Jasvinder K. Dhillon (2011), Assistant Professor of Biology (MS, PhD, Nagpur University)
Sean P. Duffy (1998), Professor of Political Science (BA, Brown University; MA, Johns Hopkins University; PhD , Yale University)
Christian A. Duncan (2012), Associate Professor of Computer Science (BS, MSE, PhD, Johns Hopkins University)
Anne O'Donnell Eisbach (2001), Associate Professor of Psychology (BA, Fairfield University; MA, PhD, Stanford University)
Jill R. Fehleison (2004), Professor of History (BBA, MA, Texas Tech University; PhD, The Ohio State University)
Carol Fenn (1992), Associate Professor of Chemistry (BA, St. Josephs College Ct; PhD, University of Massachusetts)
Robert D. Fischetti (2013), Assistant Teaching Professor of Physics (BS, SUNY College New Paltz; MS, PhD, University of Connecticut)
Linda R. Fisher (2015), Assistant Teaching Professor of Economics (BS, Syracuse University; PhD, University of Connecticut)
Jeffrey Evan Foy (2014), Assistant Professor of Psychology (BA, Skidmore College; MA, PhD, SUNY at Stony Brook)
Sujata Gadkar-Wilcox (2011), Assistant Professor of Legal Studies (BA, Cornell University; JD, University of Pennsylvania)
Gregory P. Garvey (1999), Professor of Game Design and Development (BS, MFA, University of Wisconsin-Madison; MS, Massachusetts Institute of Technology)
Michelle Mattie Geremia (1988), Professor of Biology (BA, Wheaton College; PhD, New Jersey Medical School)
Julia I. Giblin (2012), Assistant Professor of Anthropology (BA, Florida State University; MA, PhD , The Ohio State University)
Gary W. Giumetti (2012), Assistant Professor of Psychology (BA, MS, Villanova University; PhD, Clemson University)

Mark P. Gius (1994), Professor of Economics (BA, MA, PhD, Pennsylvania State UniversityUniversity Park)
Laurie Grace (2008), Visiting Assistant Professor of Interactive Media (BA, University of Connecticut; MFA, Lesley University)
Robert P. Grosso (2007), Assistant Professor of Chemistry (BA, BS, MS, University of Connecticut; PhD , University of Massachusetts-Amherst)
Hillary Jeanne Haldane (2007), Associate Professor of Anthropology (BA, San Diego State University; MA, PhD, University of California Santa Barbara)
Charlotte Ida Hammond (1995), Professor of Biology (BS, University of Illinois-Urbana; PhD, University of Connecticut)
Pattie Belle Hastings (2001), Professor of Interactive Media and Design (BFA, Atlanta College of Art; MFA, Norwich University)
Justin A Hayes (2007), Instructor of English (BA, Colgate University; MA, Trinity College)
Stephen Henderson (2002), Professor of Fine Arts (BFA, Maryland Institute College of Art; MFA, University of Cincinnati)
David Herscovici (2001), Professor of Mathematics and Computer Science (BA, Princeton University; PhD, Massachusetts Institute Technology)
Alex R. Hodges (2012), Assistant Professor of Physics (BS, Wright State University; PhD, University of Cincinnati)
Mark E. Hoffman (2001), Professor of Computer Science (BS, MS, University of New Haven; PhD, Polytechnic University Brooklyn)
Lisa T. Hollman (2010), Assistant Professor of Mathematics (BS, Trinity College; MS, PhD, University of Connecticut)
Suzanne Hudd (2000), Professor of Sociology (BA, MA, PhD, Yale University; MPH, University of Connecticut)
Jessica G. Hynes (1999), Associate Professor of Legal Studies (BS, Cornell University; JD, Boston College Law School)
William A. Jellison (2006), Associate Professor of Psychology (BA, San Diego State University; MA, PhD, Michigan State University)
Donn M. Johnson (1996), Professor of Economics (BS, PhD, Colorado State University; MA, Washington State University)
Lisa A.E. Kaplan (2006), Associate Professor of Biology (BS, MS, PhD, University of Connecticut)
Ruth A. Kaplan (2011), Assistant Professor of English (BA, Yale University; MA, PhD, Stanford University)

Adam L. Katz (2005), Assistant Professor of English (BA, SUNY at Stony Brook; MA, Hebrew University of Jerusalem IS; PhD, Syracuse University)
Lani C. Keller (2012), Assistant Professor of Biology (BS, University of Puget Sound; PhD, University of California-San Francisco)
Keith T. Kerr (2007), Associate Professor of Sociology (BSAS, MA, Texas State University; PhD, Texas A\&M University)
Christine Kinealy (2013), Professor of History (PhD, Trinity College)
James F. Kirby (1996), Associate Professor of Chemistry (BS, Trinity College; MEd, University of Massachusetts; PhD, Georgetown University)
Jason Koo (2012), Assistant Professor of English (BA, Yale University; MFA, University of Houston/University Pa; PhD, University of Missouri-Columbia)
Carl J. Kovelowski (2009), Assistant Professor of Biology (BA, Temple University; MD, St Georges College; PhD, University of Arizona)
Erik M. Kubik (2012), Assistant Professor of Physics (BS, MS, PhD, University of Connecticut)
Penny Leisring (2001), Professor of Psychology (BA, Connecticut College; PhD, SUNY at Stony Brook)
Stephen A. Listro (2008), Assistant Professor of English (BS, MS, Southern Connecticut State University; MFA, University of Miami; PhD, University of Indianapolis)
Kathy Livingston (1993), Professor of Sociology (BS, Mercy College NY; MS, Queens College; PhD, Graduate School \& University Center CUNY)
Paul C. LoCasto (2006), Associate Professor of Psychology (BA, MA, PhD, State University of New York at Binghamton)
Thornton Lockwood (2012), Assistant Professor of Philosophy (BA, Hamilton College; MA, St. Johns College MD; PhD, Boston University)
Theresa I. Luersen (2004), Laboratory Instructor, Dept of Chemistry and Physical Sciences (BS, Western New England College; MS, University of Connecticut)
Craig Magie (2012), Assistant Professor of Biology (BS, University of California-Davis; PhD, University of Washington)
Antonio A. Magliaro (2005), Assistant Professor of Mathematics (BS, Yale University; MS, Michigan State University; PhD, Boston University)
Sharon Magnarelli (1994), Professor of Modern Languages (BA, SUNY College Oswego; PhD, Cornell University)

Courtney L. Marchese (2009), Assistant Professor of Interactive Media and Design (BA, Quinnipiac University; MFA, Savannah College Art \& Design)
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Jill E. Martin (1985), Professor of Legal Studies (BA, Keuka College; MA, Yale University; JD, Union University)
Courtney L. McGinnis (2011), Assistant Professor of Biology (BS, Post University; PhD, University of Connecticut)
Stephen Crandall McGuinn (2013), Assistant Professor of Criminal Justice (AB, The University of Chicago; MS, Columbia University; PhD, University of Maryland-College Park)
Scott L. McLean (1995), Professor of Political Science (BA, Whitman College; PhD, Rutgers-The State University of NJ)
Michael Midgley (2012), Instructor of Biology (BS, MS, University of Western Ontario)
Michelle D. Miller (2012), Assistant Professor of Legal Studies (BS, Pennsylvania State UniversityUniv Park; MPH, Yale University; JD, Cornell University)
Stacy Missari (2012), Assistant Teaching Professor of Sociology and Internship Coordinator (BA, Pennsylvania State University-Univ Park; MA, PhD , University of Connecticut)
Michael Nabel (1971), Professor of Mathematics (BS, Rensselaer Polytechnic Institute; MS, Trinity College; PhD, New York University)
Filippo Naitana (2012), Assistant Professor of Modern Languages (MPhil, PhD, Yale University)
Cornelius Nelan (1994), Professor of Mathematics (BA, PhD, Johns Hopkins University)
Kimberly L. O'Neill (2011), Assistant Professor of English (BA, University of Montana; MA, PhD, University of Illinois-Urbana)
Kathryn A. Phillips (2010), Assistant Professor of Biology (BS, PhD, Cardiff University)
Nita Verma Prasad (2007), Associate Professor of History (BA, PhD, University of California Berkeley; MA, Georgetown University)
Glenda Pritchett (2005), Assistant Professor of English (BA, University of Houston-Downtown; MA, PhD, University of Chicago)
Thomas Pruzinsky (1991), Professor of Psychology (BA, University of Connecticut; MS, PhD, Pennsylvania State University)
Harry M. Pylypiw (1998), Professor of Chemistry (BS, Drexel University; PhD, Temple University)

Thomas J. Reitz (2005), Assistant Professor of Chemistry (BA, Wittenburg University; PhD, Michigan State University)
Dennis J. Richardson (1996), Professor of Biology (BS, Arkansas Tech University; MS, University of Central Arkansas; PhD, University of NebraskaLincoln)
Kristen Elizabeth Richardson (2005), Laboratory Instructor, Department of Biological Sciences (BS, University of Nebraska-Lincoln; MAT, Quinnipiac University)
Nicholas Robinette (2013), Assistant Professor of English (BA, Hiram College; MA, Western Washington University; PhD, University Minnesota Minneapolis)
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Jennifer S. Sacco (2006), Associate Professor of Political Science (BA, Denison University OH; MA, PhD, Rutgers-State University of NJ)
Lauren M. Sardi (2009), Assistant Professor of Sociology (BA, Stonehill College; MA, PhD, University of Connecticut)
Donald C. Sawyer (2012), Assistant Professor of Sociology (BA, Hartwick College; MA, MS, PhD, Syracuse University)
Glenn A. Seseske (1980), Associate Professor of Mathematics (BS, Central Connecticut State University; MAT, Fairfield University)
Jill Shahverdian (2003), Associate Professor of Mathematics (BA, Bates College; MS, PhD, Northern Illinois University)
Michael J. Sheehan (2011), Assistant Professor of Psychology (BS, The Ohio State University; PhD, Brandeis University)
Andri L. Smith (2000), Associate Professor of Chemistry (BS, Yale University; MA, PhD, Princeton University)
Valerie M. Smith (2001), Associate Professor of English (BA, Wesleyan University; MA, PhD, University of Connecticut)
Catherine Richards Solomon (2004), Professor of Sociology (BA, University of Oregon; MA, PhD, Syracuse University; MS, Oregon State University)
George A. Sprengelmeyer (2011), Associate Professor of Music (DMA, Johns Hopkins University; BM, MM, Hartt College of Music)

Maura O. Stevenson (2011), Associate Professor of Biology (BS, Ithaca College; MS, University of Wisconsin-La Crosse; PhD, American University)
Lori K. Sudderth (2000), Professor of Sociology (BA, University of Texas-Austin; MA, PhD, Indiana University Bloomington)
Lise R. Thomas (2007), Associate Professor of Biology (BA, Swarthmore College; PhD, Harvard University)
A. Thomas Torello (2015), Assistant Teaching Professor of Biology (BA, Ithaca College; PhD, Harvard University)
Renee Tursi (2004), Associate Professor of English (BS, Syracuse University; PhD, Columbia University)
Jaime M. Ullinger (2011), Assistant Professor of Anthropology (BA, University of Notre Dame; MA, Arizona State University; PhD, Ohio State University)
David A. Valone (2006), Professor of History (AB, Princeton University; PhD, The University of Chicago)
Joel M. Vaughan (2012), Assistant Professor of Mathematics (BS, Northeastern University; MEd, Salem State College; PhD, University of Michigan)
Clorinda Eileen Velez (2014), Assistant Professor of Psychology (BA, Columbia University; MA, PhD, Arizona State University)
Cassandra Rachel Veney (2013), Associate Professor of Political Science (PhD, University of MissouriColumbia)
Michael Vieth (2009), Instructor of Biology (BS, University of Illinois-Urbana; MEd, University of Maine Orono; MS, University of Iowa)
Sharlene Walbaum (1991), Professor of Psychology (BA, University of Oregon; MA, PhD, University of California-Davis)
Angela Walker (2003), Associate Professor of Psychology (BA, University of Notre Dame; BS, Grand Valley State University; MA, PhD, University of Connecticut)
Jonah Brierly Warren (2014), Assistant Professor of Game Design and Development (BA, Bowdoin College; MFA, Parsons School of Design)
Joseph J. Woods (1970), Professor of Biology (BS, St. Josephs University; PhD, Rutgers University)
Grace B. Yukich (2011), Assistant Professor of Sociology (BA, University of Alabama; MA, Indiana University; PhD, New York University)

## School of Business

Henry Adobor (1999), Professor of Entrepreneurship and Strategy (BS, University of Ghana; MBA, Baruch College; PhD, Concordia University Sir Geo Wms Can)
Nelson U. Alino (2009), Assistant Professor of Accounting (MBA, University of Nigeria; PhD, University of South Carolina-Columbia)
Janice L. Ammons (1997), Professor of Accounting (BS, Virginia Commonwealth University; PhD, University of Michigan-Ann Arbor; CPA)
Anthony K. Asare (2007), Associate Professor of Marketing (BA, University of Cape Coast; MBA, PhD , University of Massachusetts-Amherst)
Iddrisu Awudu (2014), Assistant Professor of Management (BS, University of Ghana; PhD, North Dakota St University Fargo)
Francis P. Bellizzi (1983), Professor of Management (BS, Boston College; MS, Fairfield University; EdD, University of Massachusetts-Amherst)
Blaine J. Branchik (2004), Associate Professor of Marketing (BA, MBA, George Washington University; PhD, Florida Atlantic University)
Charles Marcine Brooks (1996), Professor of Marketing (BA, Emory University; BS, Quinnipiac University; MS, PhD, Georgia State University)
Lynn K. Byers (2013), Professor of Mechanical Engineering (BS, United States Military Academy; MS, PhD, Pennsylvania State University Univ Park)
Wendy A. Ceccucci (1995), Professor of Computer Information Systems (BS, Union College; MA, PhD, Virginia Polytechnic Institute \& State University)
Gayle Lynn Chaky (2015), Instructor of Accounting Surya Chelikani (2009), Assistant Professor of Finance (BS, Andhra University; MBA, University Central Oklahoma; PhD, Oklahoma State University)
Stefan Christov (2014), Assistant Professor of Software Engineering (BS, SUNY College Brockport; MS, PhD, University of MassachusettsAmherst)
Thomas S. Coe (1999), Associate Professor of Finance (BSBA, University of Akron; MBA, John Carroll University; MA, PhD, University of New Orleans)
Darcie Marie Costello (2014), Assistant Professor of Accounting (MTA, University of Colorado-Denver; BSBA, Xavier University OH; PhD, Washington State University)

Bobby Grant Crawford (2014), Professor of Mechanical Engineering (MAE, Georgia Institute of Tech; BS, United States Military Academy; PhD, University of Kansas)
Mary M. Dunaway (2014), Assistant Professor of Computer Information Systems (BS, Southern University Baton Rouge; MBA, Amberton University; PhD, University of ArkansasFayetteville)
Mohammad Elahee (1999), Professor of International Business (BCM, University of Dhaka-Bangladesh; MBA, University of New Brunswick; PhD, University Texas Pan American)
Ruby ElKharboutly (2013), Assistant Professor of Software Engineering (BS, MS, American University in Cairo; PhD, University of Connecticut)
Robert L. Engle (2002), Professor of International Business (BS, University of Baltimore; MEd, Towson State University; MPS, Quinnipiac University; DBA, Nova Southeastern University)
Priscilla C. Fonseca (2014), Assistant Professor of Civil Engineering (BS, Massachusetts Institute Technology; MSE, University of Michigan-Ann Arbor; PhD, Northwestern University)
Julia M. Fullick-Jagiela (2013), Assistant Professor of Management (BS, MS, PhD, University of Central Florida)
Joseph P. Gaspar (2013), Assistant Professor of Management (BS, Pennsylvania State University; PhD, Rutgers University)
Judy Gedge (2006), Assistant Professor of Business Law (BA, Emory University; JD, University of Connecticut School of Law)
Tilottama Ghosh Chowdhury (2005), Associate Professor of Marketing (BS, University of Calcutta; MS, Bond University; PhD, University of Connecticut)
Margaret A. Goralski (2010), Assistant Teaching Professor of Entrepreneurship and Strategy (BA, Charter Oak State College; MA, Southern Connecticut State University; PhD, International School of Management)
John E. Greenleaf (2013), Assistant Professor of Civil Engineering (PhD, Lehigh University)
Xiaohong He (1991), Professor of International Business (BS, Jilin Institute of Technology; MA, MS, PhD, University of Texas-Dallas)
Mary Phillips Ho (2013), Assistant Professor of Mechanical Engineering (BS, University of Notre Dame; MS, PhD, University of California Berkeley)

Christopher D. Hodgdon (2011), Assistant Professor of Accounting (BA, University of ColoradoBoulder; MS, American University; PhD, Virginia Commonwealth University)
Dale Jasinski (2000), Associate Professor of Entrepreneurship and Strategy (BS, The University of Arizona; PhD, University of Colorado-Boulder)
Xiaoyue Jiang (2015), Visiting Assistant Professor of Industrial Engineering (BS, Renmin University of China)
Brian Jones (2003), Professor of Marketing and Advertising (BCom, University of Manitoba; PhD, Queens University Canada)
Kiku Jones (2013), Assistant Professor of Computer Information Systems (BS, MBA, Western Kentucky University; PhD, University of Kentucky)
Moon Soo Kang (2015), Visiting Assistant Professor of Finance (BBA, MBA, Seoul National University; MS, University of Texas at Austin; PhD, University of Colorado-Boulder)
Patricia S. Kelly (2011), Instructor of Management (AS, BS, MS, Quinnipiac University)
A. Corey Kiassat (2013), Assistant Professor of Industrial Engineering (MBA, York University; PhD , University of Toronto Faculty of Applied Science and Engineering)
Osman Kilic (1997), Professor of Finance (BS, Istanbul Tech; MBA, University South Alabama; MA, PhD, University of New Orleans)
Saravanan Kuppusamy (2014), Assistant Professor of Management (BS, Coimbatore Institute of Technology; MS, West Virginia University; PhD, University of Cincinnati)
Scott J. Lane (2008), Associate Professor of Accounting (BS, University of Massachusetts Lowell; MS, Texas A \& M University; PhD, University of Kentucky)
Guido Lang (2012), Assistant Professor of Computer Information Systems (BS, CA State University Long Beach; MS, University of Berne; PhD, City University of New York)
Choonsik Lee (2011), Assistant Professor of Finance (PhD, SUNY University at Buffalo)
Ben S. Liu (2007), Professor of Marketing (MA, Trinity Evangelical Divinity School; PhD, SUNY University at Buffalo)
Patrice A. Luoma (1997), Professor of Entrepreneurship and Strategy (BA, MBA, St. Cloud State University; PhD, Washington State University)

Catherine Anitha Manohar (2015), Assistant Teaching Professor of Finance (BA, Agnes Scott College; PhD, University of South Carolina)
Angela Mattie (2003), Associate Professor of Management (BS, Quinnipiac University; MPH, Yale University; JD, University of Connecticut)
Richard V. McCarthy (2001), Professor of Computer Information Systems (BS, Central Connecticut State University; MBA, Western New England College; DBA, Nova Southeastern University)
D'Lisa Nicole McKee (2014), Assistant Professor of Management (BA, MBA, Drury University; PhD, Mississippi State University)
Chao Meng (2015), Visiting Assistant Professor of Management (MS, PhD, The University of Arizona)
Nicholas C. Misenti (2015), Assistant Teaching Professor of Business Law
Chadwick C. Nehrt (1997), Professor of International Business (BA, University of Pennsylvania; MBA, Columbia University; PhD, University of Michigan-Ann Arbor)
Patricia Norberg (2003), Associate Professor of Marketing/Advertising (BS, MBA, PhD, University of Rhode Island)
Mario Norbis (1993), Professor of Management (MS, University of Massachusetts Boston; PhD, University of Massachusetts)
Amy K. Paros (2015), Visiting Assistant Professor of Management (BA, Hamilton College; MS, MBA, Rensselaer Polytechnic Institute; PhD, Northcentral University)
Nitish Patidar (2014), Assistant Professor of Management (MBBS, DAVV University; MHA, University of Kentucky College of Public Health; PhD , University of Alabama At Birmingham)
Erika L. Paulson (2014), Assistant Professor of Marketing and Advertising (BA, University of Minnesota-Morris; MBA, PhD, University of Wisconsin-Madison)
Angel Ari Perez (2014), Assistant Professor of Civil Engineering (BS, Universidad Tecnologica Centroamericana; MS, PhD, University of South Carolina-Columbia)
Robert L. Porter (2004), Associate Professor of Finance (BA, PhD, Rutgers-State University of NJ; MA, Trinity College)
John Reap (2012), Assistant Professor of Mechanical Engineering (BS, Lafayette College; MS, PhD, Georgia Institute of Tech)
Jose A. Riofrio (2015), Assistant Teaching Professor of Mechanical Engineering (BS, Elizabethtown College; MS, PhD, Vanderbilt University)

Abhik Roy (2001), Professor of Advertising (BTech, Indian Institute of Technology; MBA, Indian University of Management; PhD, University of California-Los Angeles)
Kenneth N. Ryack (2012), Assistant Professor of Accounting (BS, University of Connecticut; MS, Bentley College; PhD, University of Massachusetts-Amherst)
Farid Sadrieh (1999), Associate Professor of International Business (BA, MA, Universite de Paris; MBA, Fordham University-Business Admin; PhD, Temple University)
David A. Sauer (2010), Professor of Finance (BA, Pacific Lutheran University; MBA, University of Oregon; PhD, University of Michigan)
Bruce M. Saulnier (1972), Professor of Computer Information Systems (BS, Defiance College; MS, Georgia Institute of Tech)
Mary E. Schramm (2011), Assistant Professor of Marketing and Advertising (BA, Hiram College; BA, Baldwin Wallace College OH; MBA, University of Wisconsin; PhD, Kent State University)
Aamer Sheikh (2006), Associate Professor of Accounting (CPA, PhD, University of Georgia; BBA, The College of William and Mary; MAS, University of Illinois at Urbana-Champaign; CPA, Virginia; CBM, ABA)
Kathleen A. Simione (1987), Associate Professor of Accounting (CPA, MBA, Quinnipiac University; BS, Bentley College; CPA, Connecticut)
Therese A. Sprinkle (2014), Assistant Professor of Management (BA, College of Mount St. Joseph; MS, University of Kentucky School of Library \& Information Science; MA, PhD, University of Cincinnati)
Michelle M. Stronz (2011), Executive in Residence (BS, Ohio University; MPA, University of Washington; EdD, Columbia University)
Ramesh Subramanian (2002), Gabriel Ferrucci Professor of Computer Information Systems (BS, University of Madras; MBA, PhD, Rutgers University)
Teresa Tai (1998), Associate Professor of Management (BA, Boise State University; MA, Washington State University; PhD, Texas A\&M University)
Emre Tokgoz (2014), Assistant Professor of Industrial Engineering (BS, University of Ankara; MA, MS, PhD, University of Oklahoma)
David A. Tomezyk (2010), Assistant Professor of Entrepreneurship and Strategy (BA, Denison

University OH; MA, Miami University; PhD, George Washington University)
Vijaya K. Vemuri (2015), Visiting Assistant Professor of Accounting
Robert Mayfield Yawson (2013), Assistant Professor of Management (BS, MPhil, University of Ghana; MS, PhD, University Minnesota Minneapolis)

## School of Communications

Rebecca L. Abbott (1999), Professor of Film, Television, and Media Arts (BA, Dartmouth College; MA, Yale University; MFA, School of the Art Institute Chicago)
David E. Atkins (2012), Assistant Professor of Film, Television, and Media Arts (BA, University of Vermont; MFA, Columbia University)
Ben J. Bogardus (2010), Assistant Professor of Journalism (BA, Johns Hopkins University; MA, University of Virginia; MS, Syracuse University)
Lisa Burns (2003), Professor of Media Studies (BA, MA, Duquesne University PA; PhD, University of Maryland -College Park)
Ewa Callahan (2007), Associate Professor of Interactive Media and Design (MIS, PhD, Indiana University Bloomington; MA, Jagiellonian University)
Kevin R. Convey (2014), Assistant Professor of Journalism (BA, Colby College; MA, City University of New York)
Phillip L. Cunningham (2011), Assistant Professor of Media Studies (BA, Ohio University; MA, Temple University; PhD , Bowling Green State University)
Scott DeFrancesco (2015), Associate Teaching Professor of Strategic Communication (BA University of Tennessee; PhD New York University)
Margarita Diaz (2003), Associate Professor of Journalism (BA, University of Puerto Rico Sec.; MA, New School for Social Research; MA, Wesleyan University)
Raymond Foery (1982), Professor of Film, Television, and Media Arts (BA, University of Notre Dame; MA, MFA, MPhil, PhD, Columbia University)
Hilary K. Fussell Sisco (2008), Associate Professor of Strategic Communication (BA, Virginia Tech; MS, Radford University)
Kent B. Golden (2008), Instructor of Interactive Media and Design (BA, Quinnipiac University; MS, University of Connecticut)
Richard F. Hanley (2001), Associate Professor of Journalism (BA, University of New Haven; MA, Wesleyan University)
Alexander Laskin (2008), Associate Professor of Strategic Communication (MA, PhD, University of Florida; MA, University of Northern Iowa)
William T. O'Brien (2001), Professor of Film, Television, and Media Arts (BA, Fairfield University; MA, University of Rhode Island; MFA, School of the Art Institute Chicago)

Katie R. Place (2014), Assistant Professor of Strategic Communication (BA, MA, Virginia Tech; PhD, University of Maryland)
Karin Schwanbeck (2003), Associate Professor of Journalism (BA, Indiana University Bloomington; MS, Northwestern University; MS, Wesleyan University)
Frederick Keith Staudmyer (2012), Asst. Teaching Professor of Communications (BA, New York University; MFA, Columbia University)
Vicki Todd (2003), Assistant Professor of Public Relations (BA, MA, EdD, Texas Tech University)
Antoneta Miorita Vanc (2009), Assistant Professor of Strategic Communication (Certificate, The Soros Foundation; BA, Banatul University; MS, Jackson State University; PhD, University of TennesseeKnoxville)
Amy S. Walker (2013), Assistant Professor of Journalism (BS, Trinity College; MA, MS, Columbia University)
Kearston Lee Wesner (2015), Assistant Teaching Professor of Media Studies
Laura Elizabeth Willis (2014), Assistant Professor of Strategic Communication (BA, MA, PhD, The Ohio State University)
Nancy E. Worthington (1999), Professor of Media Studies (BA, University of California-Davis; MS, University of Oregon; PhD, Indiana University Bloomington)
Molly K. Yanity (2013), Assistant Professor of Journalism (BA, Point Loma Nazarene College; MS, PhD, Ohio University)

## School of Education

Monica L. Cavender (2002), Assistant Professor of Education (BS, MA, University of South Florida; EdD, University of Phoenix)
Susan R. Clarke (1999), Associate Professor of Education (BA, Westfield State College; MA, PhD, University of Massachusetts)
Jessica L. Devine (2009), Assistant Teaching Professor of Education (BA, Colby College; MS, EdD, Western Connecticut State University)
Anne M. Dichele (1999), Professor of Education (BS, Northeastern University; EdM, Harvard University; PhD , University of Connecticut)
Judith L. Falaro (2004), Visiting Assistant Professor of Education (Certificate, BS, Southern Connecticut State University; MA, Fairfield University; JD, Western New England College)
Gail Ann Gilmore (2015), Associate Professor of Education
Mordechai Gordon (2001), Professor of Education (BA, Ohio University; MA, Duquesne University PA; MPhil, PhD, Columbia University Teachers College; Master of Philosophy, Columbia University (Teachers College))
Cindy L. Kern (2015), Visiting Assistant Professor of Education
Christina M. Pavlak (2013), Assistant Professor of Education (BA, Colgate University; MA, Columbia University Teachers College; PhD, Boston College)
Ruth N. Schwartz (2013), Assistant Professor of Education (AB, EdM, Harvard University; PhD, New York University)

## School of Health Sciences

Lisa M. Barratt (1998), Clinical Associate Professor of Physician Assistant Studies (BS, University of Connecticut; MS, St. Josephs College Ct; PA Certificate, Yale University School of Medicine)
Salvador L. Bondoc (2006), Professor of Occupational Therapy (BS, University of the Phillipines; OTD, Creighton University)
Julie T. Booth (2010), Clinical Assistant Professor of Physical Therapy (BA, Colby College; DPT, University of Michigan-Flint)
Todd Botto (2000), Professor of Athletic Training and Sports Medicine (BS, Southern Connecticut State University; MS, PhD, University of Southern Mississippi)
Dwayne W. Boucaud (2007), Professor of Biomedical Sciences (BS, PhD, SUNY University at Buffalo)
Thomas C. Brady (1980), Professor of Biomedical Sciences (BA, BS, St. Mary's College; MS, Long Island University Southampton; PhD, University of Connecticut)
Michelle Brodersen Broggi (1997), Clinical Associate Professor of Physical Therapy (BS, Quinnipiac University; MS, PhD, University of Connecticut)
Dennis J. Brown (2012), Clinical Assistant Professor of Physician Assistant Studies (BS, MPH, Hahnemann University; MPH, Southern Connecticut State University)
Denise Cameron (1977), Associate Professor of Physical Therapy (BA, MPE, Springfield College; Cer, Columbia University School of International Affairs; PhD, University of Connecticut; Certificate in Physical Therapy: Columbia University)
John W. Candler (2011), Clinical Assistant Professor of Diagnostic Imaging (BGS, Eastern Connecticut State University; MHS, Quinnipiac University)
Sarah Clark (2015), Clinical Assistant Professor of Physician Assistant Studies (DIP, Baystate Medical Center; AA, Holyoke Community College; MHS, Quinnipiac University)
Samantha M. Cofsky (2008), Assistant Teaching Professor of Diagnostic Imaging (Dipl, Walpole High School; BS, Quinnipiac University)
Robert Daniel Cottrell (2015), Assistant Teaching Professor of Biomedical Sciences (BA, MHS, Quinnipiac University)
Lisa A. Cuchara (2006), Professor of Biomedical Sciences (NG4, Quinnipiac University; BS, SUNY College New Paltz; MS, Rensselaer Polytechnic Institute; MS, PhD, Albany Medical College)

Maria Cusson (1996), Clinical Associate Professor of Physical Therapy (BS, MS, University of Connecticut; JD, Quinnipiac University)
Johanna L. D’Addario (2011), Clinical Assistant Professor of Physician Assistant Studies (BS, MHS, Quinnipiac University)
Erica A. Defrancesco (2010), Clinical Assistant Professor of Occupational Therapy (BS, University of Florida; MS, Tufts University)
Maya Helene Doyle (2014), Assistant Professor of Social Work (BA, The State University of New York, University At Buffalo Law; MSW, PhD, New York University School of Social Work)
Christian H. Eggers (2007), Associate Professor of Biomedical Sciences (BS, Colorado State University; PhD, University of Montana)
Sarah Elisabeth Ferrero (2012), Clinical Assistant Professor for Clinical Integration PT (BS, University of Connecticut; DPT, Russell Sage College)
Christine G. Fitzgerald (1985), Professor of Health Sciences (BA, MHS, Quinnipiac University; PhD, University of Connecticut)
Juan C. Garbalosa (2004), Clinical Associate Professor of Physical Therapy (BS, University of Connecticut; MMS, Emory University; PhD, Pennsylvania State University-Univ Park)
Alicia A. Giaimo (2005), Clinical Assistant Professor of Diagnostic Imaging (BS, MHS, MBA, Quinnipiac University)
Tara J. Glennon (1994), Professor of Occupational Therapy (BS, Quinnipiac University; MS, Southern Connecticut State University; EdD, Argosy University/Sarasota)
Donnasue Graesser (2014), Assistant Teaching Professor of Biomedical Sciences (BS, Valparaiso University; MPhil, MS, PhD, Yale University)
Tania Grgurich (2005), Clinical Assistant Professor of Diagnostic Imaging (BS, MHS, Quinnipiac University)
Katherine S. Harris (2003), Associate Professor of Physical Therapy (BS, Russell Sage College; MS, Southern Connecticut State University; PhD, Nova Southeastern University)
Kimberly D. Hartmann (1985), Professor of Occupational Therapy (BS, MHS, Quinnipiac University; PhD, University of Connecticut)
Maureen E. Helgren (1994), Associate Professor of Physical Therapy (BS, Quinnipiac University; PhD, University of Pennsylvania Dntl/Med)

William F. Hennessy (1994), Clinical Professor of Diagnostic Imaging (BS, Montclair State University; MHS, Quinnipiac University)
Pamela G. Hewitt (2009), Clinical Assistant Professor of Occupational Therapy (MSOT, BS, Quinnipiac University)
Stephanie A. Jacobson (2013), Assistant Professor of Social Work (BA, University of Pennsylvania; MSW, New York University; PhD, City University of New York)
Lennart D. Johns (2000), Professor of Athletic Training and Sports Medicine (BS, Lock Haven University; MS, Bucknell University; PhD, University of Vermont)
Christine J. Kasinskas (1996), Clinical Assistant Professor of Physical Therapy (BA, BS, University of Connecticut; MS, Southern Connecticut State University; DPT, Simmons College)
Edward J. Kavanagh (2007), Professor Teaching of Biomedical Sciences (BA, Marist College; PhD, University of New Hampshire)
Kathleen K. Kelley (1995), Associate Professor of Physical Therapy (BS, University of Connecticut; MS, Boston University; PhD, Argosy University/Sarasota)
Amber Rae Kelly (2014), Assistant Professor of Social Work (BS, University of Florida; MSW, Florida State University; PhD, Smith College)
Leo J. Kelly (1981), Clinical Associate Professor of Biomedical Sciences (BS, MHS, Quinnipiac University)
Kenneth A. Kosior (2011), Clinical Assistant Prof Athletic Training and Sports Medicine (BS, MPT, Quinnipiac University)
Donald Sergey Kowalsky (1979), Associate Professor of Physical Therapy (BS, Quinnipiac University; MS, Long Island University; EdD, University of Bridgeport)
Donna M. Latella (1996), Professor of Occupational Therapy (BS, MA, University of Connecticut; Cer, Quinnipiac University; EdD, University of Bridgeport)
Meghan A. Lewis (2006), Clinical Assistant Professor and Laboratory Coordinator (BA, University of Connecticut; MA, University of North Carolina at Chapel Hill)
Thomas G. Martin (2010), Assistant Professor of Biomedical Sciences (BS, MHS, Quinnipiac University; PhD, University of Connecticut)
Emily McCave (2013), Assistant Professor of Social Work (BSW, Juniata College; MSW, Washington University; PhD, University of Kansas)

Miranda McGuire-Schwartz (2002), Visiting Assistant Professor of Social Work (BA, Brown University; MSW, Columbia University; MA, Wesleyan University)
Bernadette M. Mele (2007), Clinical Assistant Professor of Diagnostic Imaging (BS, MHS, MBA, Quinnipiac University; DHS, Nova Southeastern University)
Catherine Bourque Meriano (1995), Professor of Occupational Therapy (BS, MHS, JD, Quinnipiac University)
Martine M. Mirrione (2013), Assistant Professor of Biomedical Sciences (BS, Marist College; PhD, SUNY at Stony Brook)
Jeffrey Mital (2012), Assistant Professor of Biomedical Sciences (BS, SUNY College Geneseo; PhD , University of Vermont)
Laura Mutrie (2013), Clinical Instructor of Social Work (BA, Fairfield University; MSW, Fordham University)
Barbara E. Nadeau (2009), Clinical Assistant Professor of Occupational Therapy (BS, University of Wisconsin-Madison; MA, University of Hartford)
Susan Norkus (2000), Professor of Athletic Training and Sports Medicine (BS, Springfield College; MS, Kansas State University; PhD, University of Toledo)
Terry Spahr O’Donnell (1999), Clinical Associate Professor of Physician Assistant Studies (BS, Michigan State University; MAT, Antioch College; MHS, Quinnipiac University)
Rachel W. Pata (2010), Clinical Assistant Professor of Physical Therapy (BS, MPT, Quinnipiac University; DPT, Simmons College)
Natalie A. Pelletier (2009), Clinical Assistant Professor of Diagnostic Imaging (AS, Naugatuck Valley Community Tech Col; BS, MHS, Quinnipiac University)
Deanna Lynn Proulx-Sepelak (2000), Clinical Associate Professor of Occupational Therapy (BS, MHA, Quinnipiac University)
Sheree M. Rascati (2011), Clinical Assistant Professor of Physician Assistant Studies (BS, MHS, Quinnipiac University)
Deborah Rejent (2012), Associate Professor of Social Work (BA, MA, University of California-Los Angeles; MS, PhD, Columbia University)
Courtney G. Richards (2007), Assistant Teaching Professor of Occupational Therapy (NG1, OTD, Quinnipiac University; BS, Marist College; MS, New York University)

Cindy M. Rossi (1998), Clinical Associate Professor of Physician Assistant Studies (PA, Yale University; BS, University of Connecticut; MHS, Quinnipiac University; PA Certificate, Yale School of Medicine)
Martha J. Sanders (1993), Associate Professor of Occupational Therapy (BS, Tufts University; MA, University of Southern California; MSOSH, University of New Haven)
Francine M. Seruya (2010), Clinical Associate Professor of Occupational Therapy (BA, John Jay Clg Criminal Justice; MA, PhD, New York University)
Michael J. Smith (1990), Professor of Cardiovascular Perfusion (BS, MS, PhD, University of Waterloo)
Fiore F. Soviero (2010), Clinical Assistant Professor of Physician Assistant Studies (Certificate, Yale University; BS, Fairfield University; MHS, Quinnipiac University)
Valerie E. Beckert Strange (2011), Clinical Assistant Professor of Occupational Therapy (MSOT, BS, Quinnipiac University)
Stephen J. Straub (2001), Professor of Athletic Training and Sports Medicine (BA, Kean University; MS, University of Virginia; PhD, Temple University)
Marisa L. Testa (2011), Clinical Assistant Professor of Diagnostic Imaging (BS, MHS, Quinnipiac University)
Roseanna C. Tufano (1984), Clinical Associate Professor of Occupational Therapy (MFT, Southern Connecticut State University; BS, Quinnipiac University; MFT, Southern Connecticut State University)
Camber K. Uhlman (2012), Clinical Instructor of Diagnostic Imaging (AS, Gateway Community College; BS, Charter Oak State College; MS, Quinnipiac University)
Tracy L. Van Oss (1998), Clinical Associate Professor of Occupational Therapy (BS, MPH, Southern Connecticut State University; Cer, Quinnipiac University; DHS, Nova Southeastern University)
Tracy E. Wall (2005), Clinical Associate Professor of Physical Therapy (BS, MS, Quinnipiac University; PhD , Nova Southeastern University)
David A Wallace (2006), Associate Professor of Physical Therapy (BS, Quinnipiac University; MS, University of Southern California; PhD, Oregon State University)

Ellen Wetherbee-McDevitt (2013), Clinical Associate Professor of Physical Therapy (BS, St. Lawrence University; MPT, University of Indianapolis; MEd, University of Hartford; DPT, Simmons College)
Dana A. White (2012), Clinical Assistant Professor of Athletic Training and Sports Medicine (BS, Quinnipiac University; MS, Columbia University Teachers College)

## School of Law

Kevin M. Barry (2008), Professor of Law (BA, Boston College; JD, Boston College Law School; JD, LLM, Georgetown University)
Dale Carlson (2000), Distinguished Practitioner in Residence, IP Law (BS, MBA, SUNY University at Buffalo; JD, Syracuse University; LLM, New York University)
Jeffrey A. Cooper (2006), Professor of Law (AB, Harvard University; JD, Yale University; LLM, New York University)
William Dunlap (1983), Professor of Law (BA, New School for Social Research; MPhil, University of Cambridge; JD, Yale University)
Leonard A. Dwarica (2010), Distinguished Practitioner in Residence, Health Law (BA, St Peters College; MS, New York University; JD, Pace University School of Law)
Robert C. Farrell (1984), Professor of Law (BA, Trinity College; JD, Harvard University)
Marilyn J. Ford (1977), Professor of Law (BA, Southern Illinois University Carbondale; JD, Rutgers University)
Stephen G. Gilles (1995), Professor of Law (BA, St. Johns College MD; JD, The University of Chicago)
Jennifer L. Herbst (2011), Associate Professor of Law and Medical Sciences (MBIO, JD, University of Pennsylvania; AB, Dartmouth College; LLM, Temple University)
Carolyn Wilkes Kaas (1989), Associate Professor of Law (BA, Cornell University; JD, University of Connecticut)
David S. King (1978), Associate Professor of Law (AB, Dartmouth College; JD, Cleveland St. University, Cleveland-Marshall College of Law; LLM, Harvard University)
Stanton D. Krauss (1990), Professor of Law (BA, Yale University; JD, University of Michigan-Ann Arbor)
Sandra Lax (2005), Distinguished Practitioner in Residence, Family Law (BA, Brooklyn College; MLS, Queens College; JD, University of Bridgeport)
Leonard J Long (1996), Professor of Law (BS, Illinois Institute of Technology; MA, PhD, University of Illinois at Chicago; JD, The University of Chicago)
Alexander M. Meiklejohn (1981), Professor of Law (AB, Amherst College; JD, University of Chicago)
Linda R. Meyer (1992), Professor of Law (BA, University of Kansas; JD, PhD, University of California Berkeley)

Suzanne H. Nathanson (1999), Assistant Professor of Legal Skills (AB, Harvard University; JD, Case Western Reserve University)
Charles Pillsbury (2011), Distinguished Practitioner in Residence, Dispute Resolution (BA, Yale University; JD, Boston University)
Emanuel Psarakis (2006), Distinguished Practitioner in Residence, Employment Law (AB, University of Connecticut; JD, Boston University; LLM, Columbia University)
Sarah F. Russell (2011), Professor of Law (BA, JD, Yale University)
Brad Saxton (2002), Professor of Law (BA, College of William and Mary; JD, University of Virginia)
Mark Schroeder (2001), Assistant Professor of Legal Skills (BA, Williams College; JD, University of Connecticut)
Sara V. Spodick (2004), Director of the Tax Clinic (BA, Southern Connecticut State University; JD, Quinnipiac University)
W. John Thomas (1988), Professor of Law (BA, JD, University of Arizona; MPH, LLM, Yale University)

## School of Medicine

Abayomi O. Akanji (2013), Professor of Medical Sciences (MD, MSC, University Ibadan Nigeria; PhD , Oxford University)
Robert D. Bona (2011), Professor of Medical Sciences (BS, St. John's University; MD, SUNY Upstate Medical Center)
Todd Cassese (2011), Associate Professor of Medical Sciences (AB, Harvard University; MD, University of Chicago)
Chunghun Chang (2015), Assistant Professor of Medical Sciences (BA, University of California, Berkeley; MD, New York Medical College)
Lisa H. Conti (2012), Assistant Professor of Medical Sciences (BA, University of Rhode Island; MA, PhD , University of Vermont)
J. Nathan Davis (2013), Associate Professor of Medical Sciences (BS, University Arkansas at Little Rock; PhD, University of Texas-Austin)
Richard S. Feinn (2013), Assistant Professor of Medical Sciences (BA, MS, Southern Connecticut State University; MA, Central Connecticut State University; PhD, University of Connecticut)
Victor P. Francone (2012), Assistant Professor of Medical Sciences (BS, MS, PhD, University of Barcelona)
Maurice Fremont-Smith (2015), Assistant Professor of Medical Sciences (BA, University of Massachusetts; MD, University of Navarra Medical School)
Richard Gonzalez (2012), Assistant Professor of Medical Sciences (BA, MA, Wichita State University; MS, PhD, SUNY University at Buffalo)
Neil G. Haycocks (2011), Assistant Professor of Medical Sciences (BS, Mary Washington College; MD, Virginia Commonwealth University)
Norbert K. Herzog (2012), Professor of Medical Sciences (BA, University of California-Los Angeles; MS, CA State University; PhD, University of Texas - Austin)
David R. Hill (2012), Professor of Medical Sciences (BA, Williams College; MD, University of Rochester)
Carolyn M. Macica (2012), Assistant Professor of Medical Sciences (BA, SUNY at Potsdam; MS, PhD, New York Medical College)
Gregg Mastropolo (2013), Assistant Professor of Medical Sciences (MS, Emory University School of Medicine)

Douglas McHugh (2012), Assistant Professor of Medical Sciences (BS, PhD, University of Aberdeen)
Thomas Scot Murray (2011), Associate Professor of Medical Sciences (BS, Tulane University; MD, PhD , University of Connecticut)
Christine Niekrash (2011), Associate Professor of Medical Sciences (DMD, MDENT, University of Connecticut; BS, Brown University)
A. William Paulsen (2012), Professor of Medical Sciences (MMSC, PhD, Emory University; BS, University of Akron; PhD, University of Mississippi)
Anthony M. Payne (2012), Assistant Professor of Medical Sciences (BS, Winthrop University; MS, University of Florida; PhD, Wake Forest University)
Kim-Thu C. Pham (2013), Associate Professor of Medical Sciences
Barbara R. Pober (2013), Professor of Medical Sciences (BA, Yale University; MD, Yale University School of Medicine; MPH, Harvard School Public Heath)
Victoria E. Richards (2011), Associate Professor of Medical Sciences (BS, University of California Extension Irvine; MAS, University of Nevada-Las Vegas; PhD, University of Arizona)
Jennifer Rockfeld (2015), Assistant Professor of Medical Sciences (BS, Cornell University; MD, Albert Einstein College of Medicine)
Howard Andrew Selinger (2013), Chair of Family Medicine (MD, University of Pennsylvania)
Listy Thomas (2012), Associate Professor of Medical Sciences (MD, SUNY Downstate Medical Center)
Lynn C. Tommasini (2013), Assistant Professor of Medical Sciences (BA, Columbia University; MA, PhD , Arizona State University)
Anna-leila Williams (2011), Associate Professor of Medical Sciences (PA, PhD, Yale University; BA, Clark University; MPH, Southern Connecticut State University)
Nancy K. Wills (2012), Professor of Medical Sciences (BS, The Ohio State University; MA, PhD, University of Virginia)
Mark F. Yeckel (2012), Professor of Medical Sciences (BA, University of California, San Diego; PhD, University of Southern California)
Rebecca Zucconi (2015), Assistant Professor of Medical Sciences

## School of Nursing

Cynthia C. Barrere (2004), Professor of Nursing (BSN, Western Connecticut State University; MA, MS, PhD, University of Connecticut)
Cory A. Boyd (2007), Associate Professor of Nursing (MEd, EdD, Columbia University Teachers College; MS, Adelphi University)
Angela V. Carrano (2008), Clinical Assistant Professor of Nursing (BSN, Sacred Heart University; MSN, University of Hartford; DNP, Quinnipiac University)
Mary Ann Cordeau (2007), Associate Professor of Nursing (AS, BS, Quinnipiac University; MSN, Southern Connecticut State University; PhD, University of Connecticut)
Susan D'Agostino (2013), Assistant Professor of Nursing (BS, Salve Regina University; MS, Fairfield University; DNP, University of Connecticut)
Anne E. Durkin (2000), Professor of Nursing (BS, Fairfield University; MS, Hartford Graduate Center; MSN, Boston College; PhD, University of Connecticut)
Heather L Evans (2014), Assistant Professor of Nursing (BSN, PhD, University of Arizona; Cer, Defense Language Institute)
Barbara C. Glynn (2011), Assistant Professor of Nursing (AS, St. Vincent's College of Nursing; BSN, Sacred Heart University; MSN, Southern Connecticut State University; DNP, Case Western Reserve University)
Margaret W. Gray (2013), Assistant Professor of Nursing (DNP, Case Western Reserve University School of Law)
Mary A. Helming (2001), Professor of Nursing (BSN, Boston College; MSN, Yale University; PhD, Union Institute \& University)
Karita Elsy Kack (2013), Assistant Professor of Nursing (DR, Virginia Commonwealth University; MS, Central Connecticut State University)
Laima M. Karosas (2010), Clinical Professor of Nursing (BA, PhD, University of Connecticut; MSN, Yale University)
Jeanne LeVasseur (1998), Professor of Nursing (BA, Beloit College; MFA, Norwich University; MS, Pace University; PhD, University of Connecticut)
Susan H. Lynch (2006), Assistant Professor of Nursing (BA, University of Hartford; MSN, Quinnipiac University; DNP, University of Connecticut)
Karen M. Myrick (2012), Assistant Professor of Nursing (BS, MS, DNP, University of Connecticut)

Nicholas R Nicholson (2012), Assistant Professor of Nursing (BS, MPH, MS, University of Connecticut; PhD , Yale University)
Lynn Price (2004), Professor of Nursing (BA, MS, University of Florida; MPH, MSN, Yale University; JD, George Washington University)
Leonie Rose Bovino (2014), Assistant Professor of Nursing (PhD, Yale University)
Rhea C. Sanford (2011), Clinical Associate Professor of Nursing (BS, PhD, University of Connecticut; MSN, Yale University)
Janice M. Thompson (1995), Professor of Nursing (AS, Pace University; BSN, Mount Saint Mary College; MSN, Western Connecticut State University; MSN, Quinnipiac University; PhD, Adelphi University)
Judy Thompson (2013), Clinical Assistant Professor of Nursing (ASN, University of Bridgeport; DNAP, Virginia Commonwealth University; BA, Adelphi University; MS, Southern Connecticut State University)
Teresa C. Twomey (2005), Assistant Professor of Nursing (BSN, Catholic University of America; MSN, EdD, University of Hartford)

## College of Arts \& Sciences

Gina L. Abbott (2004), Part-Time Faculty (BA, Connecticut College; MA, PhD, SUNY at Stony Brook)
Hazza Abo Rabia (2007), Part-Time Faculty (MA, Hartford Seminary Foundation; MA, University of Connecticut)
Cheryl Abrams (2001), Part-Time Faculty (BS, MS, University of New Haven)
Tracie M. Addy (2010), Part-Time Faculty (BS, Duke University NC; MS, Yale University; PhD, North Carolina State University)
Diana Aldrete (2014), Part-Time Faculty
Michaela I. Alexandru (2002), Part-Time Faculty
Ann K. Anderson (1999), Part-Time Faculty (BA, Bucknell University; JD, University of Connecticut)
Juan L. Andreu (2001), Part-Time Faculty (BFA, MFA, PhD, University of Valencia)
John P. Andrulatis (2004), Part-Time Faculty (BS, University of New Haven; MS, Southern Connecticut State University)
Stephen J. Antoinetti (1994), Part-Time Faculty
Anita C. Appelbaum (2007), Part-Time Faculty (BA, Princeton University; MA, PhD, Cornell University)
Oriana R. Aragon (2013), Part-Time Faculty (BA, California State University - San Marcos; MPhil, MS, Yale University)
Mizuho Aussicker (2005), Part-Time Faculty (MS, Central Connecticut State University)
Duke W. Austin (2012), Part-Time Faculty (BA, University of Texas - Austin; MA, PhD, University of Colorado-Boulder)
Joseph R. Avitable (2010), Part-Time Faculty (BA, Central Connecticut State University; MA, Trinity College; PhD, University of Rochester)
Yifat Avner (2013), Part-Time Faculty
Edward R. Azzaro (2005), Part-Time Faculty (BA, Western New England College; MS, Southern Connecticut State University)
Melissa J. Bader (2010), Part-Time Faculty (BA, University of Connecticut; MS, University of New Haven)
Janet M. Bahgat (2007), Part-Time Faculty (BA, Iona College; MA, Hunter College)
Keely Elizabeth Baisden (2002), Part-Time Faculty (BA, New York University Tisch School of Arts)
Jason E. Bakutis (2013), Part-Time Faculty (BFA, School Visual Arts NY)
Stephen Balkaran (2011), Part-Time Faculty (BA, MA, University of Connecticut)

Charmaine A. Banach (2012), Part-Time Faculty (BFA, MFA, University of Iowa; MA, Savannah College Art \& Design; MA, University of Iowa)
David G. Barber (2005), Part-Time Faculty
Jillian L. Barnych (2014), Part-Time Faculty (BA, MAT, Quinnipiac University)
Richard J. Barone (1993), Part-Time Faculty (BS, MA, Fairfield University)
Catherine M. Barrett (2011), Part-Time Faculty (BA, Wesleyan University; MA, University of California, San Diego)
Lisa M. Bartone (2003), Part-Time Faculty (BS, Sacred Heart University; JD, Western New England College)
Jeffery C. Batis (2013), Part-Time Faculty (BA, Utah State University; MA, PhD, Wayne State University)
Leon J. Battista (2002), Part-Time Faculty
Monica E. Bauer (2008), Part-Time Faculty (BA, Brown University; MA, University of NebraskaOmaha; MA, Boston University)
Sara A. Beddow (2010), Part-Time Faculty (BS, University of Illinois at Chicago)
Siri L. Belgum (2012), Part-Time Faculty (BA, University Minnesota Minneapolis; MA, Columbia University Teachers College)
Emily C. Benedetto (2003), Part-Time Faculty (BS, Quinnipiac University)
Vinit A. Bhuva (2007), Part-Time Faculty (BS, University of Connecticut; MS, MBA, Quinnipiac University)
Diane Biegel (2011), Part-Time Faculty (AB, Mount Holyoke College; PhD, New York University)
Anthony F. Bisceglio (2014), Part-Time Faculty (BA, MBA, University of Rhode Island; MA, Brown University; PhD, Fordham University)
Ryan A. Black (2007), Part-Time Faculty (BA, Florida International University; MS, PhD, Nova Southeastern University)
Peggy A. Bloomer (2006), Part-Time Faculty (BA, Fairleigh Dickinson University Madison; MA, Southern Connecticut State University)
Jean E. Blue (2001), Part-Time Faculty (BA, Carleton College MN; JD, University of Connecticut)
Max P. Blum (2012), Part-Time Faculty (BA, MM, Yale University)
Betty Lou P. Blumberg (2001), Part-Time Faculty (BA, Vassar College NY; MA, CAS, Wesleyan University; MS, Southern Connecticut State University)
Renee B. Bollier (2011), Part-Time Faculty (BA, Fairfield University; JD, St. Louis University)

Norman D. Bond (2004), Part-Time Faculty (BS, University of Massachusetts; EdM, Boston University; PhD, University of Texas - Austin)
Daniel M. Bonitata (1977), Part-Time Faculty (BA, Quinnipiac University)
Kenneth J. Borowski (2009), Part-Time Faculty (BA, Merrimack College; MS, Worcester Polytechnic Institute; PhD, Rensselaer Polytechnic Institute)
Barbara L. Borst (2006), Part-Time Faculty (BS, Quinnipiac University; MLS, Southern Connecticut State University; MS, University of Connecticut)
Brennan B. Bowker (2010), Part-Time Faculty (Dipl, Villa Walsh Academy; BS, MHS, Quinnipiac University)
Alfred D. Bradshaw (2006), Part-Time Faculty (BA, PhD, Syracuse University)
Kristen M. Brandt (2009), Part-Time Faculty (BA, Fairfield University; JD, Quinnipiac University)
Margaret I. Bratsenis (1992), Part-Time Faculty (BA, Drew University; MA, Southern Connecticut State University)
Sarah E. Braun (2011), Part-Time Faculty (BS, Trinity College; PhD, Cornell University)
Robert Bresnick (2005), Part-Time Faculty (BA, University of Hartford; MFA, New York University)
Harry Brielmann (2013), Part-Time Faculty (BS, University of Connecticut; MS, University of Massachusetts; PhD, Wesleyan University)
Anthony P. Brisson (2012), Part-Time Faculty (BA, MAT, Quinnipiac University)
Stephen P. Broker (2007), Part-Time Faculty (BA, MAT, Wesleyan University; MFS, Yale University)
Pearl LeBlanc Brown (1966), Professor Emerita (BA, Southeastern Louisiana University; MA, PhD, University of Arkansas-Fayetteville)
Mark Bruno (1991), Part-Time Faculty (BS, Southern Connecticut State University; MS, University of Connecticut)
Jason G. Buening (2008), Part-Time Faculty (BFA, Marlboro College; MFA, American University)
Linda C. Bullions (2011), Part-Time Faculty (BS, Allegheny College; PhD, Johns Hopkins University)
Edward C. Burt (1987), Part-Time Faculty (BS, Fairfield University; JD, Western New England College)
Mary C. Burt (2002), Part-Time Faculty (JD, Western New England College)
Manuel H. Cadena (2014), Part-Time Faculty

David A. Calabrese (2011), Part-Time Faculty (BFA, University of Hartford; MFA, Savannah College Art \& Design)
Sarah Calabrese (2013), Part-Time Faculty (BS, Hobart \& William College; MPhil, PhD, George Washington University)
Costel Calin (2010), Part-Time Faculty (PhD, University of Tennessee-Knoxville)
Joseph M. Calise (2006), Part-Time Faculty (BA, Dickinson College; PhD, University of EdinburghScotland)
Alison Carrano (2011), Part-Time Faculty (BS, Fordham University; MHS, Quinnipiac University)
Andrew L. Carrano (2013), Part-Time Faculty
Patricia A. Carrano (2000), Part-Time Faculty (BS, Southern Connecticut State University; MEd, University of Hartford)
Tcho Caulker (2013), Part-Time Faculty (BA, Sacred Heart University; PhD, Michigan State University)
Saumitra K. Chowdhury (2009), Part-Time Faculty (BA, Queens College; MA, Wayne State University; PhD, University of Connecticut)
John Christie (2010), Part-Time Faculty (BA, MA, Southern Connecticut State University)
Anne Marie Chuckrey (1989), Part-Time Faculty (MBA, University of New Haven)
Lois Lake Church (2009), Part-Time Faculty (BA, Syracuse University; MA, Southern Connecticut State University)
Susan F. Clark (2011), Part-Time Faculty (BA, Rockford College; MA, Emerson College; PhD, Tufts University)
Kari B. Clifton (2012), Part-Time Faculty (BS, Valparaiso University; MS, University of South Florida; PhD, University of Florida)
Grace E. Cloutier (2014), Part-Time Faculty (MM, Yale University)
Fiona C. Coffey (2014), Part-Time Faculty (BA, Stanford University; MFA, Trinity College; PhD, Tufts University)
John R. Congo (2009), Part-Time Faculty (BS, Western Connecticut State University; MS, University of Bridgeport)
Steven D. Coppage (2010), Part-Time Faculty (AB, Brown University; JD, Yale University; PhD, Wesleyan University)
Dominic J. Corraro (2006), Part-Time Faculty (SYC, Quinnipiac University; BS, MS, Southern Connecticut State University)
David John Corso (1994), Part-Time Faculty (BA, Quinnipiac University; JD, New York University)

Sam R. Costanzo (1959), Professor Emeritus (BME, MME, University of Hartford)
Andrew D. Crakes (2011), Part-Time Faculty (BA, Boston University; MA, Southern Connecticut State University)
Gary A. Crisanti (2002), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Frank T. Crohn (2000), Part-Time Faculty
Joanne Cunningham (2010), Part-Time Faculty (BA, New York University; MPA, Columbia University; PhD, University of Michigan)
Katherine L. Czepiel (2004), Part-Time Faculty (BA, Dickinson College; MA, New York University)
Alecia D. Dager (2009), Part-Time Faculty (BA, PhD, University of California, San Diego)
Linda L. Dalpe (2014), Part-Time Faculty (BS, Central Connecticut State University; MA, University of Connecticut)
Robert G. Davis (2008), Part-Time Faculty (BS, Pennsylvania State University-University Park; PhD , Purdue University)
Anthony J. DeCristofaro (2010), Part-Time Faculty (BS, Union College; MS, Southern Connecticut State University)
Susan M. DeLeonardo (2010), Part-Time Faculty (BA, MA, SUNY Binghamton)
Anthony DeQuattro (2002), Part-Time Faculty (DMA, Boston University; BM, University of Hartford; MM, Yale University)
Shelley Ann G. Des Etages-Wong (2013), Part-Time Faculty (BS, Pace University; Cer, Temple University; PhD, Rutgers University)
Giancarlo DeStefanis (2011), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Adria M. DiBenedetto (2007), Part-Time Faculty (BA, University of New Haven; MA, PhD, SUNY Binghamton)
Anne M. Dileone (2009), Part-Time Faculty (BS, University of Rhode Island; DVM, Iowa State University)
Margaret A. Doenges (2000), Part-Time Faculty (BS, MA, CAS, Eastern Connecticut State University)
Matthew S. Dole (2007), Part-Time Faculty (BS, Keene State College; MA, Wesleyan University)
John D. Domijan (1969), Professor Emeritus (BS, Central Connecticut State University; MS, Northeastern University; PhD, Boston College)
Fonyue Donn (2012), Part-Time Faculty (BM, University of Michigan-Ann Arbor; MM, Boston University)

Patricia A. Dowcett (2005), Part-Time Faculty (BA, Colorado State University; MA, University of Vermont)
Adrienne M. Dowd (2011), Part-Time Faculty (BA, University of Oregon; MA, University of Connecticut)
Jean P. Downing (1969), Associate Professor Emerita (AB, College of St Elizabeth; MS, Southern Connecticut State University)
John Patrick Doyle (2001), Part-Time Faculty (JD, Quinnipiac University)
Vincent R. Driscoll (1966), Professor Emeritus (BS, St Peters College; MBA, New York University; PhD, New School for Social Research)
Mary Alice Duchesne (1997), Part-Time Faculty (BA, Bucknell University; MA, University of Wisconsin)
Kenneth F Dula (2005), Part-Time Faculty (BA, Rutgers University Clg New Brns; MA, University of Connecticut)
V. Rao Durvasula (2000), Part-Time Faculty (MS, Georgia Institute of Tech; PhD, University of No Dakota-Grand Forks)
Rebecca L. Dyer (2013), Part-Time Faculty (BA, Haverford College; MPhil, MS, Yale University)
Thomas A. Edwards (1998), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Alexis M. Elder (2014), Part-Time Faculty (BA, Southern Connecticut State University; MA, PhD, University of Connecticut)
George T. Emond (2015), Part-Time Faculty (BA, University of Connecticut; MA, St. Joseph's College Ct; MS, Rensselaer Polytechnic Institute)
Leonard W. Engel (1964), Professor Emeritus (BA, Rutgers-State University of NJ; MA, PhD, Fordham University)
Robin T. Esposito (2011), Part-Time Faculty (BS, Western Connecticut State University; JD, Quinnipiac University School of Law; JD, University of Bridgeport)
Jeana A. Favat (2013), Part-Time Faculty (Dipl, Eastern High School; BA, MAT, Quinnipiac University)
Deserine A. Fernandes (2009), Part-Time Faculty (BA, New Mexico State University-University Pk.; MBA, Devry University; MFA, University of Utah)
Angelina V. Field (2010), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Paul M. Figura (1999), Part-Time Faculty (BA, PhD, SUNY Binghamton)
Stephanie H. Fischer (2011), Part-Time Faculty (BA, Barnard College; MA, University of Iowa; MBA, Rutgers University Clg Newark)

Jean T. Fitzgerald (2011), Part-Time Faculty (BA, Pace University New York NY; MS, Long Island University Brooklyn Center)
Elizabeth H. Flanagan (2009), Part-Time Faculty (BA, Reed College; MS, PhD, Auburn University)
Susan I. Fowler (2006), Part-Time Faculty (BA, Southern Connecticut State University; MDiv, STM, Yale University; PhD, Graduate Theological Foundation)
Bruce T. Fox (1998), Part-Time Faculty (AB, Bates College; MA, Trinity College)
D. Bruce Franklin (2006), Part-Time Faculty (MA, EdD, Columbia University Teachers College)
Karin J. Fransen (2014), Part-Time Faculty (BA, Gordon College; MPhil, PhD, Yale University)
Lynn G. Gabbard (2011), Part-Time Faculty (MS, Southern Connecticut State University)
Marisa L. Gabrielle (2010), Part-Time Faculty (BA, Salve Regina Newport; MA, Albertus Magnus College)
Gregg Gallatin (2014), Part-Time Faculty (BS, PhD, Pennsylvania State University)
Coralie Gallet (2012), Part-Time Faculty (BM, Manhattan School Music NY; MM, Brooklyn College)
Narasimhan Ganapathisubramanian (1998), PartTime Faculty (PhD, Indian Institute of Technology)
Laura Garcia-Bohnet (2013), Part-Time Faculty (BS, Louisiana State University; MA, University of West Georgia)
Rachel S. Garron (2012), Part-Time Faculty (BA, Smith College; JD, American University)
Bertram E. Garskof (1971), Part-Time Faculty (BA, Roosevelt University; PhD, University of MichiganAnn Arbor)
Brendan J. Geelan (2005), Part-Time Faculty (BS, Worcester Polytechnic Institute; MS, Massachusetts Institute Technology)
Julie M. Gelgauda (2008), Part-Time Faculty (BA, University of New Haven; MS, MSW, Southern Connecticut State University)
Mayumi Gianoli (2012), Part-Time Faculty (BA, MA, PhD , Washington University)
Melissa Ann Gibbons (2007), Part-Time Faculty (AS, Gateway Community College; BA, MAT, Quinnipiac University)
Katherine M. Glynn (2006), Part-Time Faculty (BA, Quinnipiac University; MCJ, University of New Haven)
Philip A. Goduti (2000), Part-Time Faculty (BA, Quinnipiac University; MA, Providence College; MA, University of Connecticut)

Linda A. Goodman (2012), Part-Time Faculty (BS, SUNY Albany)
Jennifer L. Gordon (2004), Part-Time Faculty
Sarah H. Gordon (1989), Part-Time Faculty (AB, Smith College; MA, PhD, The University of Chicago)
Lori A. Grace (2013), Part-Time Faculty (BS, University of Maryland; MAT, Bridgewater State University; EdD, Southern Connecticut State University)
Sean P. Grace (2007), Part-Time Faculty (BS, University of Maryland -College Park; MS, PhD, University of Rhode Island)
John S. Graham (2015), Part-Time Faculty (BS, PhD, University of Missouri-Columbia)
Nicole Granucci (2015), Part-Time Faculty (BS, University of Connecticut; MS, University of New Haven)
Robert R.J. Grispino (2007), Part-Time Faculty (BS, Pennsylvania State University; MA, Temple University)
Elena Grossman (2012), Part-Time Faculty (BA, Columbia University; MFA, Yale University)
Elisabeth G. Grudberg (2006), Part-Time Faculty (JD, Quinnipiac University)
Douglas J. Guarnieri (2010), Part-Time Faculty (BA, BS, University of Notre Dame; PhD, Stanford University)
Torrance C. Hanley (2011), Part-Time Faculty (BA, Cornell University; PhD, Yale University)
Barbara A. Harder (1998), Part-Time Faculty (BA, Marymount College NY)
Brian D. Harmon (2009), Part-Time Faculty (BA, Stanford University; MPhil, PhD, Columbia University)
Leslie A. Harshfield (2012), Part-Time Faculty (BA, Randolph-Macon College; MA, University of Pittsburgh)
Gregory A. Hays (2012), Part-Time Faculty (BA, MA, University of Connecticut; MA, The University of York, England)
Kim Healy (2002), Part-Time Faculty
Ronald Heiferman (1970), Professor Emeritus (BA, Brooklyn College; MA, Yale University; PhD, New York University)
Andrew S. Heisel (2012), Part-Time Faculty (BA, University of Missouri-Columbia; PhD, Yale University)
Susan Henderson (1981), Professor Emeritus (BA, Hunter College; MS, PhD, University of Massachusetts)

Van Hendrickson (1990), Part-Time Faculty (MA, Temple University)
David J. Herndon (2003), Part-Time Faculty (BS, MAT, Quinnipiac University)
Kathryn A. Higgins (2011), Part-Time Faculty (BA, University of California Berkeley; MFA, Sarah Lawrence College NY)
Jason C. Hillman (2008), Part-Time Faculty (BA, JD, Quinnipiac University)
Tung Hoang (2004), Part-Time Faculty (BFA, Southern Connecticut State University; MFA, Rochester Institute Of Tech.)
Lynne G. Hodgson (1980), Professor Emeritus (BA, University of Pennsylvania; MA, PhD, Cornell University)
Michele Hoffnung (1970), Professor Emeritus (AB, Rutgers University Douglass College; PhD, University of Michigan-Ann Arbor)
Michael J. Honsberger (2013), Part-Time Faculty
Richard W. Hooper (2015), Part-Time Faculty (BA, MPhil, PhD, Yale University)
John Greg Howe (2005), Part-Time Faculty
Dorothy J. Howell (2004), Part-Time Faculty (BA, Goucher College; MS, University of Connecticut; JD, John Marshall Law School; PhD, Antioch New England Grad School)
Bronwyn A. Hunter (2014), Part-Time Faculty (BA, Southern Connecticut State University; MA, PhD, DePaul University)
Martin P. Isenberg (2013), Part-Time Faculty
Rachel A. Jeffrey (2012), Part-Time Faculty (BS, Yale University; PhD, University of California-Los Angeles)
Sharon A. Jenkins (2009), Part-Time Faculty (BA, Duke University NC; MBA, University of Bridgeport; JD, North Carolina Central University)
Maryam M. Jernigan (2011), Part-Time Faculty (BA, Fisk University; MA, Vanderbilt University; PhD, Boston College)
Margaret E. Johansson (2009), Part-Time Faculty (BA, University of Hartford; MA, Wesleyan University; MA, Hunter College; MS, Fordham University; PhD, Columbia University School of Nursing)
Boyd E. Johnson (1996), Part-Time Faculty (BA, MAT, Quinnipiac University)
Allison E. Kaas (2014), Part-Time Faculty (BA, Simmons College; JD, Quinnipiac University)
Tamara Kaliszewski (2015), Part-Time Faculty (BS, Wake Forest University; MS, George Washington University)

Melissa A. Kaplan-Charkow (2005), Part-Time Faculty (BA, MA, Syracuse University)
Saroj Kapoor (1985), Part-Time Faculty (MS, New York University)
Genevieve Francine Karbowski (2000), Part-Time Faculty (BS, MHS, Quinnipiac University; MS, University of Connecticut)
Jane M. Kessler (1999), Part-Time Faculty (CAGS, MS, Southern Connecticut State University)
Douglas Marshall Kibbey (2011), Part-Time Faculty (BA, University of South Carolina-Columbia; MA, MPhil, Yale University)
Erin McCarthy King (2013), Part-Time Faculty (BA, MA, PhD, Yale University)
Noelle King (2007), Part-Time Faculty (BA, University of California; MA, Columbia University)
Mark J. Kirschner (2004), Part-Time Faculty (AB, University of Michigan; MA, University of Dayton; PhD, Ohio University)
Stephen Klema (2004), Part-Time Faculty (MFA, University of Hartford)
Richard M. Koch (1998), Part-Time Faculty (PhD, University of Connecticut)
Frank Joseph Kolb (2006), Part-Time Faculty (BA, MBA, JD, Quinnipiac University)
Ruth E. Koleske (2008), Part-Time Faculty (BS, MS, Massachusetts Institute Technology)
Grace Kong (2013), Part-Time Faculty (BA, University of Rochester; MA, PhD, St. John's University)
Hedda Kopf (1981), Part-Time Faculty
Katarzyna Maria Kowalczyk (2015), Part-Time Faculty (MA, Warsaw University; PhD, University of Illinois at Chicago)
Robert Krause (2000), Part-Time Faculty (BA, Western Connecticut State University; MSN, Yale University)
Lindsey A. Kupec (2014), Part-Time Faculty (MES, 6EP, BA, University of Connecticut)
Richard C. Kurker (2015), Part-Time Faculty (BS, Providence College; PhD, University of Notre Dame)
Christon R. Kurker-Stewart (2013), Part-Time Faculty (BA, JD, Quinnipiac University)
Michael J. LaMonica (2012), Part-Time Faculty (BA, Mary Washington College; JD, Quinnipiac University)
Dominic J. Landolfi (1998), Part-Time Faculty (BS, Quinnipiac University)
Diane M. Langlan-Wortz (2013), Part-Time Faculty (BA, Central Connecticut State University; MA, John Jay Clg Criminal Justice)

Daniel M. Lanpher (2008), Part-Time Faculty (BA, University of Wisconsin-Madison; MA, MPhil, Yale University)
William A. Larsen (2013), Part-Time Faculty (BS, Massachusetts Institute Technology; PhD, Lehigh University)
Barbara H. Lathrop (2009), Part-Time Faculty (BA, University of Connecticut; MA, Southern Connecticut State University)
Kevin Daniel Lawlor (1999), Part-Time Faculty (JD, Quinnipiac University)
Marilyn G. Lazare (1992), Part-Time Faculty (MA, Harvard University; MFA, Brigham Young University)
Gail M. Leach (2004), Part-Time Faculty (BS, MA, Central Connecticut State University)
Joo-Hwan Lee (2006), Part-Time Faculty (BA, MA, Yale University)
Timothy Joseph Lee (2005), Part-Time Faculty (JD, Quinnipiac University)
William J. Lee (2015), Part-Time Faculty (BS, SUNY College Oneonta; MS, New York University)
Katherine M. Lehnes (2011), Part-Time Faculty (BA, SUNY Binghamton; MA, Montclair State University)
Molly L. Letitia (2007), Part-Time Faculty (SYC, Quinnipiac University; BA, Eugene Lang College; BA, The New School; MA, Columbia University Teachers College)
Lawrence H. Levine (1968), Professor Emeritus (BA, City College; MS, Pennsylvania State University)
Cher Lin (2013), Part-Time Faculty (MA, SUNY University at Buffalo; DBA, California Pacific University)
Lauren E. Linn (2013), Part-Time Faculty (BA, Southern Methodist University; MA, PhD, Hofstra University)
Luc Litwinionek (2007), Part-Time Faculty (BA, MA, PhD , University of Montreal)
Martin M. Looney (2000), Part-Time Faculty (BA, Fairfield University; MA, JD, University of Connecticut)
Carrie L. Lukens (2010), Part-Time Faculty (BA, University of Wisconsin-Stevns Pnt; MA, PhD, University of Hawaii-Manoa)
Frank E. Lussier (2003), Part-Time Faculty (BS, MS, College of the Holy Cross)
Nicole K. Lynch (2014), Part-Time Faculty (BA, University of Connecticut)
Brad MacDonald (2015), Part-Time Faculty (BA, Western Michigan University)

Scott Thomas Macdowall (2006), Part-Time Faculty (AS, Gateway Technical Community College; BS, University of New Haven; MAT, Quinnipiac University)
Bruce MacInnis (2003), Part-Time Faculty (BS, Massachusetts Institute Technology; MAT, MS, Quinnipiac University; JD, University of Connecticut)
John J. MacKey (2013), Part-Time Faculty (6THYR, BA, MA, Southern Connecticut State University)
Shahin Madison (2009), Part-Time Faculty (PhD, Boston University)
Stephen Madison (2013), Part-Time Faculty
Thomas J. Malchodi (2000), Part-Time Faculty (MA, Southern Connecticut State University)
Steven G. Malliaris (2013), Part-Time Faculty (BS, Massachusetts Institute Technology; MA, MPhil, Yale University)
Moira A. Malone (2003), Part-Time Faculty
Carla Mangano-Almonte (2012), Part-Time Faculty (PhD, Graduate School \& University Center CUNY)
Leo P. Mariani (2001), Part-Time Faculty (PhD, Pennsylvania State University)
Thaddius S. Martin (2012), Part-Time Faculty (BA, MS, Southern Connecticut State University)
Isamir Martinez (2013), Part-Time Faculty (BS, University of Puerto Rico Sec.; PhD, University of Connecticut)
Robert M. Martinez (1972), Associate Professor Emeritus (BS, Niagara University NY; PhD, University of California Berkeley)
Daniel Martorella (1996), Part-Time Faculty (MS, Southern Connecticut State University)
Matthew D. Mason (2011), Part-Time Faculty (BA, Humbolt State University; MA, PhD, University of Memphis; MA, University of Wisconsin-Madison)
Robert P. Maturo (2011), Part-Time Faculty (BS, University of New Haven; MS, Southern Connecticut State University)
Kimberly A. McClure (2001), Part-Time Faculty (BS, University of Connecticut; DVM, Auburn University)
Katrina L. McCoy (2005), Part-Time Faculty (BA, Quinnipiac University; MA, University of New Haven)
Kathryn S. McDonough (2008), Part-Time Faculty (BA, University of California Berkeley; MFA, Sarah Lawrence College NY)
Isabel B. McEachern (2013), Part-Time Faculty (BA, Loyola College; MA, Northeastern University)
Peter J. McEachern (2006), Part-Time Faculty

Gina M. McLane (2001), Part-Time Faculty (MS, University of Connecticut)
Ihrie W. Means (2007), Part-Time Faculty (BFA, Maryland Institute College of Art; MFA, Yale University)
Vesna Mehinovic (2012), Part-Time Faculty (BA, University of Sarajevo; MM, Wesleyan University)
Britta K. Meredith (2014), Part-Time Faculty (MA, University of Connecticut)
Stefania Mereu (2011), Part-Time Faculty
Michele Merlo (2015), Part-Time Faculty (BA, Albertus Magnus College; MA, Southern Connecticut State University)
Amanda J. Meyer (2011), Part-Time Faculty (BS, University of Iowa; MS, Yale University)
Stacey Marie Miranda (2007), Part-Time Faculty (JD, Quinnipiac University)
Gail A. Mirza (2014), Part-Time Faculty (BA, University of Kansas; MA, PhD, SUNY Binghamton)
Mohie-Eldin Y. Mohie-Eldin (2010), Part-Time Faculty (PhD, Tufts University)
Paul Ford Moore (1999), Part-Time Faculty (BS, MS, Southern Connecticut State University; PhD, New School University)
John A. Morra (2004), Part-Time Faculty (BA, MA, University of Hartford)
Leonard A. Moskowitz (2007), Part-Time Faculty
Aaron H. Moss (2014), Part-Time Faculty (BA, University of Maryland; MFA, Yale University)
Marilyn H. Moss (2010), Part-Time Faculty (BA, The University of New Hampshire; MD, Drexel University)
Robert F. Mullins (2006), Part-Time Faculty (BA, Central Connecticut State University; JD, Quinnipiac University)
Richard E. Murphy (2013), Part-Time Faculty
Soonsook Myung (2013), Part-Time Faculty (DMA, University of Wisconsin; BM, Seoul National University; MM, Indiana University Bloomington)
Barbara F. Nangle (2001), Part-Time Faculty
Sharyn C. Nelson (1995), Part-Time Faculty (BA, Southern Connecticut State University; MFA, Vermont College Union Institute \& University)
Lee E. Netter (2005), Part-Time Faculty (BS, University of Arizona; MS, Long Island U C W Post)
James J. Newton (1993), Part-Time Faculty (MAT, Quinnipiac University)
Reuben C. Ng (2011), Part-Time Faculty (MA, Nanyang Ntu; MSC, Oxford University)

Christopher A. Nixon (2013), Part-Time Faculty (BA, University of California Santa Barbara; MA, MPhil, Yale University)
James R. Noble (2013), Part-Time Faculty (DMA, Manhattan School Music NY)
Brian R. Noell (2008), Part-Time Faculty (MA, University of Maryland-Balt County; PhD, Yale University)
Carolyn G. Nuzzi (1997), Part-Time Faculty (AB, Syracuse University; MAT, Antioch College)
Ralph Anthony Nuzzo (1976), Part-Time Faculty (BA, Quinnipiac University; MS, University of Bridgeport)
Sigrid L. Nystrom (2004), Part-Time Faculty (BA, University of Montana; MA, Duquesne University PA; MA, Georgia State University)
Robert V. O'Brien (2008), Part-Time Faculty (BA, The University of New Hampshire; MS, Southern Connecticut State University)
Giuliana C. O'Connell (2007), Part-Time Faculty (BA, MA, MS, Central Connecticut State University)
Jerome F. O'Keefe (2012), Part-Time Faculty (AB, University of Pennsylvania; PhD, Pennsylvania State University Univ Park)
Lauren E. O'Leary (2008), Part-Time Faculty (BA, Quinnipiac University; MA, Wesleyan University; MFA, University of Nebraska-Omaha)
Shannon K. O'Roarke (2001), Part-Time Faculty (PhD, University of Connecticut)
Marcela Ocampo (2014), Part-Time Faculty
Robert Orescovich (1994), Part-Time Faculty (PhD, University of Connecticut)
Stephanie M. Ostapchuk (2013), Part-Time Faculty (Dipl, Middletown High School; BA, MAT, Quinnipiac University)
Benjamin B. Page (1972), Professor Emeritus (BA, Harvard University; MS, PhD, Florida State University)
Elaine M. Pagliaro (2001), Part-Time Faculty (BA, St. Josephs College Ct; MS, University of New Haven; JD, Quinnipiac University)
Suzanne M. Palmieri (2008), Part-Time Faculty (BA, Albertus Magnus College; MA, Fordham University Fordham College NY)
Ferdinand A Pasqua (2005), Part-Time Faculty (DMA, Columbia University; BA, MA, Boston Conservatory of Music)
Beth J. Patrizzi (2014), Part-Time Faculty (BS, University of Connecticut; MS, Southern Connecticut State University)

Louise M Pelizzari (2001), Part-Time Faculty (BS, University of Connecticut)
Ryan B. Pelto (2011), Part-Time Faculty (BS, Central Connecticut State University; PhD, Wesleyan University)
William Thomas Pepper (2014), Part-Time Faculty (AA, Suffolk County C.C.; BA, Bloomsburg University; BA, PhD, SUNY Center Stony Brook)
Stacey J. Pesak (2010), Part-Time Faculty (BS, Allegheny College; PhD, University of IllinoisUrbana)
David J. Pietraszewski (2011), Part-Time Faculty (BA, Ithaca College; PhD, University of California Santa Barbara)
Vincent J. Pitts (2009), Part-Time Faculty (AB, Yale University; AM, PhD, Harvard University)
Deborah M. Pollak (2007), Part-Time Faculty (BA, Brandeis University; JD, Georgetown University)
Beverly Ponzillo (2000), Part-Time Faculty (BA, Connecticut College; MS, Southern Connecticut State University)
Gina M. Poole (2013), Part-Time Faculty (BA, Quinnipiac University)
Stephanie Porcelli (2013), Part-Time Faculty
Rebecca J. Purcell (2011), Part-Time Faculty (BS, University of Connecticut; MS, St. Josephs College $\mathrm{Ct})$
Alana Querze (2013), Part-Time Faculty (BA, University of Maine-Farmington; MA, PhD, University of Kansas)
Ronald J. Quirk (1972), Professor Emeritus (BA, Trinity College; MA, PhD, Brown University)
Leigh A. Radziwon (2013), Part-Time Faculty (BA, Central Connecticut State University; MS, University of New Haven)
John F. Ranciato (2007), Part-Time Faculty (BS, Southern Connecticut State University; MS, University of Vermont)
Rachel Ranis (1967), Professor Emerita (BA, Brandeis University; MS, Yale University)
Ines Reardon (2013), Part-Time Faculty (BS, Tufts University; MD, University of Maryland)
Alexander M. Reiss (2013), Part-Time Faculty (BS, MS, University of Connecticut)
Christopher L. Rempfer (2012), Part-Time Faculty (BA, Connecticut College; MFA, The City College of New York)
Candace M. Reno (2013), Part-Time Faculty (BS, MS, California State University San Bernardino; PhD, Washington University)
Maria Rethis (2014), Part-Time Faculty (BS, Southern Connecticut State University)

Thomas C. Reynolds (2013), Part-Time Faculty (BS, University of New Haven; MA, Trinity College)
Antonio C. Robaina (2000), Part-Time Faculty (JD, University of Connecticut)
Patricia E. Rondini (2003), Part-Time Faculty
Richard E. Rosol (2009), Part-Time Faculty (BA, MA, Central Connecticut State University)
Jonathan W Rounds (2008), Part-Time Faculty (BA, MA, Penn State Harrisburg)
Marie C Ruiz-Martinez (2010), Part-Time Faculty (BS, University of Massachusetts-Amherst; PhD, Northeastern University)
Julie G. Russitano (2001), Part-Time Faculty (BA, Trinity College; MS, Southern Connecticut State University)
Joanne Maugeri Ryan (2014), Part-Time Faculty (BFA, University of Hartford; MS, University of Connecticut; JD, University of Bridgeport)
Sarah J. Saiano (2011), Part-Time Faculty (MA, Southern Connecticut State University)
Tina N. Santiago (2010), Part-Time Faculty (BS, Quinnipiac University; MS, St. Josephs College Ct)
Kyle Saulnier (2011), Part-Time Faculty (BA, Berklee College of Music; MA, Manhattan School Music NY)
LaToya L. Sawyer (2012), Part-Time Faculty (BA, Hartwick College; MA, PhD, Syracuse University)
Margot M Schilpp (2010), Part-Time Faculty (BA, MA, Southern Illinois University Carbondale; MFA, University of Utah)
Gerald A Schultz (2010), Part-Time Faculty
Thomas R. Schuttenhelm (2011), Part-Time Faculty (DMA, University of Hartford; BA, College of St Rose)
Kay Lynn Schwader (2012), Part-Time Faculty (AB, Harvard University; MPhil, MS, Yale University)
Thomas R. Schwans (2009), Part-Time Faculty (BA, Minnesota State University, Mankato; MFA, Brown University)
Andrew P Scott (2000), Part-Time Faculty
Marsha Scott (2015), Part-Time Faculty (BS, Pennsylvania State University; MS, Long Island University)
Alireza G. Senejani (2014), Part-Time Faculty (MSC, Mannheim American Hs Dod; PhD, University of Connecticut)
Mariah Sage Seymour (2005), Part-Time Faculty (BFA, New York University Tisch School of Arts; MFA, Brown University)
Cheryl A. Sharp (2006), Part-Time Faculty
Michael W. Shaw (2012), Part-Time Faculty (MA, MPhil, Fordham University)

Neil F. Sherman (2012), Part-Time Faculty
Hyeyoung Shin (2014), Part-Time Faculty (BA, PhD, University of Maryland -College Park; MA, New York University)
Emily P. Sigalow (2015), Part-Time Faculty (BA, Swarthmore College; MA, Ben Gurion University; PhD , Brandeis University)
Michael A. Simon (2009), Part-Time Faculty (BS, Cooper Union NY; MS, New York University)
Nicolas P. Simon (2008), Part-Time Faculty
Michael A. Sletcher (2006), Part-Time Faculty (BA, Carleton University; PhD, University of Cambridge)
Melissa J. Sloat (2009), Part-Time Faculty (BA, University of Connecticut; MS, Central Connecticut State University)
Donna R. Smith (2015), Part-Time Faculty (AS, Naugatuck Valley Community Coll; MS, Southern Connecticut State University)
Doreen E. Soldato (2009), Part-Time Faculty (BS, University of Rhode Island; PhD, Brown University)
Sandra K. Soucie (2010), Part-Time Faculty (BS, Central Connecticut State University; MA, Southern Connecticut State University)
Rose M. Spielman (2009), Part-Time Faculty (BA, William Smith College)
Holly Smith Starkman (2007), Part-Time Faculty (BS, The City University of New York; MSW, Hunter College; PhD, New York University)
Aleta E. Staton (2011), Part-Time Faculty (BA, Wesleyan University; MA, Goucher College)
Ellen J. Steele (1996), Part-Time Faculty
Marshall F. Sternberg (2008), Part-Time Faculty (BS, SUNY Albany; MS, University of WisconsinMadison)
James J. Stevens (1983), Associate Professor Emeritus (BS, Fairfield University; MS, PhD, University of Connecticut)
David Stilwell (2013), Part-Time Faculty (BS, PhD, University of New Mexico)
Michael P. Stone (2010), Part-Time Faculty (BA, SUNY Binghamton; MA, JD, PhD, University of Connecticut)
Steven Strange (2007), Part-Time Faculty (MA, Pennsylvania State University; MS, Central Connecticut State University)
Sara E. Strecker (2013), Part-Time Faculty (BS, Worcester Polytechnic Institute)
Mark Stricker (2006), Part-Time Faculty

Drew A. Stutsman (2014), Part-Time Faculty (BA, California State University; MFA, University of Nebraska-Omaha)
Ahmadali Tabatabai (2004), Part-Time Faculty
Francis J. Tagliaferro (2012), Part-Time Faculty (BS, Manhattan College; MS, Polytechnic Institute of NYU)
Catherine G. Takizawa (2010), Part-Time Faculty (BA, University of California, San Diego; PhD, University of Calif-Santa Cruz)
Jeffrey S. Tedone (2000), Part-Time Faculty (MS, University of Connecticut)
Susan M. Temme (2010), Part-Time Faculty (BA, Rutgers University Douglass College; MA, The University of Chicago)
Anahit Ter-Stepanian (2012), Part-Time Faculty (MS, Yerevan State Institute of Architecture and Construction)
David R. Terfera (2005), Part-Time Faculty (BS, University of Massachusetts; PhD, SUNY Upstate Medical University)
Don Edgerton Therkildsen (2003), Part-Time Faculty (JD, Quinnipiac University)
Erika M. Tindill (2000), Part-Time Faculty (BA, Bucknell University; JD, Albany Law School)
Michelle L. Tipton (2012), Part-Time Faculty (BS, University of Rhode Island; MS, Central Connecticut State University; PhD, Wesleyan University)
Doris P. Tishkoff (2004), Part-Time Faculty (BS, Simmons College; MA, Boston University; PhD, Michigan State University)
Suzanne E. Tobin (2015), Part-Time Faculty (BA, Providence College; MA, CUNY Queens College; PhD, Graduate School \& University Center (cuny))
David Totman (1990), Part-Time Faculty
Stephanie I. Troiano (2012), Part-Time Faculty (BS, MS, Southern Connecticut State University)
David R. Vance (2011), Part-Time Faculty (BA, College of Idaho; MA, University of Washington)
George A. Vasu (1997), Part-Time Faculty (BS, University c. I. Parhon; PhD, University of Bucharest)
Patricia C. Vener-Saavedra (2009), Part-Time Faculty (BS, SUNY Empire State College; MS, Rensselaer Polytechnic Institute)
Karen Rose Veselits (2010), Part-Time Faculty (BA, Quinnipiac University; MA, University of Connecticut; PhD, The College of William and Mary)

Marianna M. Vieira (2007), Part-Time Faculty (BA, Russell Sage College; MA, SUNY Albany; MS, University of Bridgeport)
Lydia Viscardi (2012), Part-Time Faculty (BFA, Long Island University Southampton; MFA, William Paterson University)
Cheryl M. Wahl (2006), Part-Time Faculty (BA, Southern Connecticut State University; MPhil, PhD, Graduate School \& University Center (cuny))
George A Waldron (1997), Part-Time Faculty (BS, University of New Haven; JD, Quinnipiac University School of Law; JD, University of Bridgeport)
Jerry Waldron (2014), Part-Time Faculty (BS, Villanova University; MBA, Wright State University; PhD, Duke University NC)
Matthew R. Walsh (2011), Part-Time Faculty (BA, University of Virginia; PhD, University of CalifRiverside)
Steven Walsh (2009), Part-Time Faculty (BA, Fairfield University; JD, New York Law School)
Chung-Lan Wang (2009), Part-Time Faculty (PhD, Yale University)
John F. Ward (2010), Part-Time Faculty (BS, Lesley University; MA, Trinity College)
Richard Stephen Waters (2013), Part-Time Faculty (PSYD, MA, California Institute of Integral Studies; BA, LeMoyne College; MA, Pacifica Graduate Institute)
June Watzl (2015), Part-Time Faculty (PhD, University of Sydney)
Julia M. Webb (2011), Part-Time Faculty (BA, Dartmouth College; MEd, Columbia University Teachers College)
Ronald E. Webb (1983), Part-Time Faculty (MA, MS, University of Oregon)
Nicole H. Weiss (2014), Part-Time Faculty (BA, Syracuse University; PhD, Jackson State University)
Pavelle G. Wesser-Mitra (2011), Part-Time Faculty (6THYR, Southern Connecticut State University; BA, Hunter College; MA, Columbia University Teachers College)
Margaret C. Wheeler (2011), Part-Time Faculty (6THYR, MS, Southern Connecticut State University; BA, Albertus Magnus College)
Jason C. White (1997), Part-Time Faculty (PhD, Cornell University)
Sharon B. Wrzosek (1998), Part-Time Faculty
Yee-Fun Yin (2010), Part-Time Faculty (BA, Yale University; MFA, University of Hartford)

Mengxi Ying (2013), Part-Time Faculty (MA, University of Connecticut)
Kelley Leigh Young (2007), Part-Time Faculty (BS, MHS, Quinnipiac University)
Julia Zeeck (2013), Part-Time Faculty (MA, University of Connecticut)
Stefan M. Znosko (2012), Part-Time Faculty (BA, Charter Oak State College; MFA, Art Institute of Boston)

## School of Business

Benjamin A. Abugri (2013), Part-Time Faculty
Monika M. Advocate (2004), Part-Time Faculty (MA, Yale University)
Raymond F. Angelo (2012), Part-Time Faculty (BA, Trinity College; MA, University of Hartford; PhD, Nova Southeastern University)
Rosalyn R. Ben-Chitrit (2009), Part-Time Faculty (BS, Quinnipiac University; MPA, New York University)
Robert L. Bogdanoff (1998), Part-Time Faculty (BS, Quinnipiac University)
William D. Brown (2012), Part-Time Faculty (BA, PhD, University of Massachusetts-Amherst)
David Cadden (1983), Professor Emeritus (BS, MS, Polytechnic University Brooklyn; PhD, Baruch College)
Alan R. Carniol (2012), Part-Time Faculty (BA, University of Pennsylvania; MBA, Yale University)
Vivian M. Ciampi (2015), Part-Time Faculty (BA, Fairfield University; MBA, University of Connecticut)
Donna R. Coelho (2009), Part-Time Faculty (BS, Southern Connecticut State University; MS, Albertus Magnus College)
Richard Jr. Collins (2010), Part-Time Faculty (BS, Central Connecticut State University; MBA, Quinnipiac University)
William Patrick Connolly (2008), Part-Time Faculty (BS, Southern Connecticut State University; MS, University of Hartford)
Constance A. Cranos (2005), Part-Time Faculty (BS, Boston University; MBA, University of Pennsylvania)
Sarah Crystal (2009), Part-Time Faculty (BS, Cornell University; MBA, Drexel University; MS, Southern Connecticut State University)
Douglas C. Dalena (2014), Part-Time Faculty (BS, Boston University; MS, Columbia University; JD, University of Connecticut)
Nicole M. Davison (2012), Part-Time Faculty (BS, Mount St Marys College \& Seminary; MS, Central Connecticut State University)
John Benedict DeRosa (1993), Part-Time Faculty (BS, MBA, Quinnipiac University)
Vincent R. Driscoll (1966), Professor Emeritus (BS, St Peters College; MBA, New York University; PhD, New School for Social Research)
Anthony Peter Esposito (2010), Part-Time Faculty (BS, Quinnipiac University; MS, University of New Haven)

Christopher G. Galatioto (2012), Part-Time Faculty (BS, MBA, Quinnipiac University)
Michael A. Gavagni (2013), Part-Time Faculty (BS, MS, Quinnipiac University)
Terry W. Goodwin (2005), Part-Time Faculty (BS, Quinnipiac University; MBA, University of New Haven)
Martin L Gosman (1996), Professor Emeritus (CPA, BBA, MBA, PhD, University of WisconsinMadison)
Anne M. Harrigan (2004), Part-Time Faculty (BA, University of Maine Orono; MA, PhD, University of Wyoming)
Charles Alfred Harris (2009), Part-Time Faculty (BS, MBA, Quinnipiac University)
David O. Hartman (2009), Part-Time Faculty (DPS, Pace University New York NY; BS, MBA, University of Miami)
Christopher J. Jagiela (2014), Part-Time Faculty (BS, University of Florida; MS, University of Central Florida)
Arianna Kalian (2014), Part-Time Faculty (ME, Columbia University; BA, Cooper Union NY; MS, Rensselaer Polytechnic Institute)
Justin W. Kohlhepp (2015), Part-Time Faculty (BS, Quinnipiac University)
Leonard LaBonia (2010), Part-Time Faculty (BA, Providence College; MS, Rensselaer Polytechnic Institute)
Todd J. Liu (2010), Part-Time Faculty (BA, Wake Forest University; MHA, JD, Quinnipiac University)
Richard C. Lutz (2006), Part-Time Faculty (BS, Sacred Heart University; MBA, University of New Haven; DBA, Argosy University/Sarasota)
Hengameh Mahdavi (2014), Part-Time Faculty (BA, University of Tehran; MS, PhD, Marywood College PA)
Khawaja Saeed Mamun (2012), Part-Time Faculty (MA, PhD, Southern Methodist University)
Carolyn C Mancini (2007), Part-Time Faculty (AS, BA, Bentley College; MBA, University of Hartford)
Janelle P. Margolies (2012), Part-Time Faculty (BA, Lehigh University; MBA, University of New Haven)
Ronald S. McMullen (1990), Professor Emeritus (BA, Boston University; EdD, University of Massachusetts-Amherst)
John T. Morgan (1978), Professor Emeritus of Law (BA, Southwest Missouri State University; JD, Washington University; LLM, Harvard University)

Ralph C. Neclerio (2003), Part-Time Faculty (MBA, Quinnipiac University)
Joseph Pajor (1980), Part-Time Faculty (MPH, Yale University; MBA, University of Bridgeport)
Andrew Papadopoulos (2010), Part-Time Faculty (PhD, HEC Montreal)
James J. Patchen (2007), Part-Time Faculty (BA, Sacred Heart University; MA, MPS, Quinnipiac University)
Kenneth John Pia (2014), Part-Time Faculty (BS, Quinnipiac University)
Sean F. Reid (2007), Part-Time Faculty (BS, U.S. Naval Academy; MBA, Incarnate Word College; PhD , University of Rhode Island)
Tara B. Rothman (2012), Part-Time Faculty (AS, Quinnipiac University; BS, University of Wisconsin; MS, Central Connecticut State University)
Jean A. Rozett (2006), Part-Time Faculty (BA, Vassar College NY; MS, Simmons College; MBA, Quinnipiac University)
Ronald T. Rozett (2000), Part-Time Faculty (BA, New York University; MD, Harvard Medical School; MPH, Harvard School Public Heath)
Ryan N. Schmidt (2014), Part-Time Faculty (BA, Montana State University; MA, Louisiana Tech University; MS, Texas Tech University Health Sciences Center; PhD, University of South Carolina-Columbia)
Riffat Shaheen (2014), Part-Time Faculty (MS, University of Karachi)
Carol H. Stewart (2007), Part-Time Faculty (BS, MBA, Southern Connecticut State University; PhD, Regent University School of Law)
Robert O. Watson (2000), Part-Time Faculty
Robert D. Werner (2014), Part-Time Faculty (BS, University of Vermont; MBA, Cornell University)
Bruce A. White (2000), Professor Emeritus (BS, MS, Winona State University; PhD, University of Nebraska-Lincoln)

## School of Communications

James W. Abrams (2006), Part-Time Faculty (BA, Trinity College; JD, University of Connecticut)
Edward Alwood (2002), Professor Emeritus (BA, PhD , University of North Carolina at Chapel Hill; MA, American University)
Jo A. Amatulli (2000), Part-Time Faculty
Nicole Ball (2013), Part-Time Faculty (BA, Temple University)
Beau J. Berman (2012), Part-Time Faculty (BS, Pennsylvania State University-Univ Park)
Jennifer L. Bernstein (2011), Part-Time Faculty (BA, Union College)
Mira Reym Binford (1983), Professor Emerita (BA, Long Island University; $\mathrm{MA}, \mathrm{PhD}$, University of Wisconsin-Madison)
Jennifer L. Bouchard (2012), Part-Time Faculty (BA, University of Massachusetts-Amherst; MEd, Framingham State College; MFA, Western Connecticut State University)
Sean P. Bowley (2012), Part-Time Faculty
Sharon L. Burke (2015), Part-Time Faculty (BA, Franklin Pierce University; MA, University of Hartford)
Janice Bush (2013), Part-Time Faculty (BA, Wichita State University; MS, Quinnipiac University)
Lisa M. Campana (2013), Part-Time Faculty (BFA, Syracuse University)
John A. Cavanaugh (2001), Part-Time Faculty (BA, Syracuse University)
Samuel Harris Cohen (2007), Part-Time Faculty (AS, Holyoke Community College; BA, Westfield State College; MS, Quinnipiac University)
Carrie T. Comerford (2011), Part-Time Faculty (BA, Xavier University OH; MS, Syracuse University)
Joseph H. Cooper (1999), Part-Time Faculty (BS, JD, University of Pennsylvania)
Agnes T. Corigliano (2011), Part-Time Faculty (BA, Wheaton College; JD, Suffolk University Law School)
Anthony Corso (2010), Part-Time Faculty (BS, Southern Connecticut State University; MS, Quinnipiac University)
Thomas R. Craver (2013), Part-Time Faculty (BS, Rochester Institute Of Tech.)
Jeanne C. Criscola (2004), Part-Time Faculty (BFA, Rhode Island School of Design; MFA, DonauUniversitat Krems-Transart Institute)
Carol A. Dannhauser (2013), Part-Time Faculty (MSJ, Columbia University; BA, University of Connecticut)

John R. Deats (2011), Part-Time Faculty (BA, Louisiana St University Shreveport; MA, University of Missouri-Columbia)
John F Dileo (2004), Part-Time Faculty (BA, Charter Oak State College; MEd, University of Hartford)
Cara Friedman (2015), Part-Time Faculty (BA, MA, University At Albany; JD, St. John's University)
Paul E. Friedman (2011), Part-Time Faculty (BA, Princeton University; MS, Columbia University)
Jordana M. George (2015), Part-Time Faculty (Dipl, Rye Neck Un. Free High School; BA, MS, Quinnipiac University)
John M. Gourlie (1968), Professor Emeritus (BA, Yale University; MA, PhD, New York University)
Susan A, Grantham (2012), Part-Time Faculty (BA, MA, PhD, University of Florida)
Leeanne Griffin (2010), Part-Time Faculty (BA, Assumption College; MS, Quinnipiac University)
Paul E.B. Gruhn (2012), Part-Time Faculty (BA, Azusa Pacific University; MDiv, Anderson University)
Fred Guida (1996), Part-Time Faculty
Leslie Gura (1997), Part-Time Faculty
Paul A. Hammons (2011), Part-Time Faculty (BA, University of Calif-Los Angeles)
Thomas A. Hanson (2013), Part-Time Faculty (BS, Hodges University; MS, Quinnipiac University)
Kenneth Guy Harper (2013), Part-Time Faculty (BA, Iona College)
Genifer V. Herman (1995), Part-Time Faculty (BA, MS, SUNY College Cortland)
Anthony L Hoffmann (2010), Part-Time Faculty (MLIS, University of Wisconsin)
Eleanor Hong (2013), Part-Time Faculty (BS, University of Maryland -College Park)
Tiffany D. Hopkins (2008), Part-Time Faculty (AA, Hill College; BA, MS, Quinnipiac University)
Carl Paul Janensch (1995), Professor Emeritus (BA, Georgetown University; MS, Columbia University)
Gregory R. Johnson (2008), Part-Time Faculty (BA, Bowdoin College; MBA, Yale University)
Maria M. Johnson (2014), Part-Time Faculty (BA, University of Connecticut; MA, Connecticut College)
Geralyn A. Johnson-Reis (2008), Part-Time Faculty (BA, Simmons College; MBA, University of Connecticut)
Joanne F. Kabak (2007), Part-Time Faculty (BA, Barnard College; MBA, Columbia University)
William C. Kaempffer (2012), Part-Time Faculty (BA, Pennsylvania State University Univ Park)

Robert D. Kalm (2010), Part-Time Faculty (BFA, New York University; MFA, Western Connecticut State University)
Matthew W. Kauffman (2006), Part-Time Faculty (BA, Vassar College NY)
Brian Patrick Kelly (2014), Part-Time Faculty (BA, MS, Quinnipiac University)
Caroline K. Kerpen (2013), Part-Time Faculty
Albert D. Larcada (2012), Part-Time Faculty (BA, MA, University of Central Florida)
Grace F. Levine (1967), Professor Emeritus (BA, Hunter College; MA, Pennsylvania State University; PhD, University of Massachusetts)
Helayne Lighstone-Scarfo (2008), Part-Time Faculty (BA, SUNY at Stony Brook)
Timothy F. Loh (2012), Part-Time Faculty (BA, University of Notre Dame; MS, Columbia University)
Lori A. Mack (2010), Part-Time Faculty (BA, New York University)
Meagan A. Manning (2013), Part-Time Faculty (BA, University of Wisconsin-Madison; MA, University Minnesota Minneapolis)
Thomas H. Matthews (2012), Part-Time Faculty (BS, Boston University)
Jason K. Miles (2012), Part-Time Faculty (BA, University of Virginia; MA, Syracuse University)
Michele Ann Moore (2005), Part-Time Faculty (BA, Trinity College of Vermont; MS, American University; MS, Quinnipiac University)
Betty Munsell (1990), Part-Time Faculty (BS, Wayne State University)
Jessica Marie Nana (2013), Part-Time Faculty (BA, Sacred Heart University)
William Neagus (2002), Part-Time Faculty (BA, University of Mass Dartmouth; MPA, University of Connecticut)
Amanda L Nelson (2014), Part-Time Faculty (BA, University of Hartford)
Stephen E. Nevas (2012), Part-Time Faculty (BA, University of Connecticut; MA, University of Pennsylvania; JD, Northeastern University)
Lisa M. Nichols (2011), Part-Time Faculty (BA, The University of New Hampshire; MFA, Western Connecticut State University)
Andrea D Obston (2009), Part-Time Faculty (BS, Boston University; MBA, University of Connecticut)
Michael D Patrick (2002), Part-Time Faculty (BS, Sacred Heart University; MS, Quinnipiac University)

Thomas A. Peterson (2010), Part-Time Faculty (BA, University of Bridgeport)
Nicholas A. Pietruszkiewicz (2012), Part-Time Faculty (BA, University of Maryland)
Caroline M. Pompano (2011), Part-Time Faculty (BS, University of Bridgeport; MA, Fairfield University; MS, University of New Haven)
John J Powers (2008), Part-Time Faculty (BS, Boston University; MS, Southern Connecticut State University)
Sharon Prober (1993), Part-Time Faculty (MS, Boston University)
David Radanovich (2012), Part-Time Faculty (BA, Ohio University; MS, Quinnipiac University)
Randall E. Rode (2011), Part-Time Faculty (ME, Capella University; BA, Connecticut College; MS, Rensselaer Polytechnic Institute)
Betsy A Rosenblum (2006), Part-Time Faculty
Jeffrey D. Ross (2013), Part-Time Faculty (BA, MA, York University)
William J Ryczek (2014), Part-Time Faculty (BS, University of Connecticut; MBA, Pennsylvania State University)
Francine M Rzeznik (2008), Part-Time Faculty (BA, SUNY College Oswego; MFA, New York University Tisch School of Arts)
Cathryn J Saldinger (2009), Part-Time Faculty (BA, George Washington University; MA, Fairfield University; MS, Columbia University)
Vrinda Saxena (2010), Part-Time Faculty (MS, Quinnipiac University)
James N. Sayegh (2012), Part-Time Faculty (BA, New York University; MFA, Brooklyn College)
David S. Scales (2010), Part-Time Faculty (BA, MS, Quinnipiac University)
Jacquelyn M. Schroder (2015), Part-Time Faculty (Dipl, Lindenhurst High School; BA, Quinnipiac University; MA, Emerson College)
William L Schwanbeck (2003), Part-Time Faculty
Richard Seethaler (2013), Part-Time Faculty (Certificate, MS, Southern Connecticut State University; BA, Villanova University)
John M Smeallie (2013), Part-Time Faculty (BS, State University of New York At Oswego)
Jonathan H. Spinner (2011), Part-Time Faculty (BA, City College; PhD, Michigan State University Detroit College of Law)
Paul M Steinle (1997), Part-Time Faculty
Lucas A. Swineford (2012), Part-Time Faculty (BA, Fairfield University; MS, Quinnipiac University)
Paul G Taglianetti (2013), Part-Time Faculty (BS, Emerson College; MS, Quinnipiac University)

Abigail B. Tovell (2010), Part-Time Faculty (BA, The University of Chicago)
Michele P. Turk (2011), Part-Time Faculty (BA, Boston College; MS, Columbia University)
Kenneth A Venit (2001), Part-Time Faculty (BS, MS, Temple University)
Daniel L. Weingrod (2013), Part-Time Faculty (BA, Brandeis University; MFA, Pratt Institute NY)
Patricia T. Whalen (2013), Part-Time Faculty (BA, The Ohio State University Moritz College of Law)
Richard L. Wormser (2013), Part-Time Faculty

## School of Education

David J Abate (2006), Part-Time Faculty
Richard Peter Balisciano (1999), Part-Time Faculty
(BS, Quinnipiac University; MS, Southern Connecticut State University)
Susan F. Bass (2013), Part-Time Faculty
Nicholas Bauer (1994), Part-Time Faculty (BA, Fairfield University; MA, Southern Connecticut State University; MAT, University of Connecticut)
Lance R Berndlmaier (2007), Part-Time Faculty (BA, MA, CAS, Fairfield University)
Anna C Blanchard (2013), Part-Time Faculty
Jonathan S. Budd (2010), Part-Time Faculty (Certificate, University of Connecticut; BA, Connecticut College; MA, Trinity College)
Henan Cheng (2014), Part-Time Faculty (BA, University of International Business \& Economics; EdM, Boston University; EdD, Columbia University Teachers College)
Jacqueline L. Chorney (2015), Part-Time Faculty (BS, University of Connecticut; MS, Southern Connecticut State University)
Wilhemenia Christon (2012), Part-Time Faculty (BA, South Carolina State College; MS, Southern Connecticut State University)
Rose-Ann Chrzanowski (2003), Part-Time Faculty Jaclyn S. Cicchiello (2008), Part-Time Faculty (BA, MAT, Quinnipiac University)
Barbara L Cofrances-Nana (2002), Part-Time Faculty
Eric M. Conrad (2009), Part-Time Faculty (BS, Sacred Heart University; MS, Southern Connecticut State University)
Jennifer M Cornett (2008), Part-Time Faculty (BS, Lee University; MA, Georgia State University)
David J. Coss (2011), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Joseph Cristiano (2001), Part-Time Faculty
Mallory E. Curran (2013), Part-Time Faculty (Dipl, Danbury High School; BA, MAT, Quinnipiac University)
Frederic J D'Ambrose (2005), Part-Time Faculty (6THYR, MA, Fairfield University; BS, Southern Connecticut State University)
Russell J. Dallai (2012), Part-Time Faculty (6THYR, MS, EdD, Southern Connecticut State University)
Karen G De Fur (2009), Part-Time Faculty (BA, Juniata College; MA, Fairfield University)
Nancy K Defrancisco (2005), Part-Time Faculty
John M. Devine (2012), Part-Time Faculty (BS, University of Hartford; EdM, Boston University)

Susanne M. Duffy (1998), Part-Time Faculty (BS, Southern Connecticut State University; MA, University of Connecticut)
Susan Elliott (2002), Professor Emeritus (SYC, BS, Southern Connecticut State University; MA, Fairfield University; PhD, University of Connecticut; 6th year degree, Southern Connecticut State University)
Linda P. Finocchi (2009), Part-Time Faculty (BS, Central Connecticut State University; MS, University of Bridgeport)
Milton F Gavigan (2006), Part-Time Faculty
Tara L. Girard (2011), Part-Time Faculty (BA, MAT, Quinnipiac University)
Leanne R. Gmeindl (2011), Part-Time Faculty (BS, Nazareth College Rochester NY; MS, National University)
Zandralyn V. Gordon (2012), Part-Time Faculty (6THYR, MS, EdD, Central Connecticut State University; BA, University of West Indies)
Richard B Guidone (2004), Part-Time Faculty (BS, University of New Haven; MA, Southern Connecticut State University)
John A Hajus (2004), Part-Time Faculty (BS, U.S. Merchant Marine Academy)
Jessica Harris (2013), Part-Time Faculty (BS, Pennsylvania State University; MA, Central Connecticut State University)
Margaret C Hayden (2003), Part-Time Faculty (BA, MA, Boston College)
Susan J Herold-Margolis (2001), Part-Time Faculty (BS, University of Hartford; MS, Southern Connecticut State University)
Edmund C. Higgins (2010), Part-Time Faculty (BA, Marietta College; MA, Purdue University; PhD, University of Southern California)
Kathleen M. Higgins (2011), Part-Time Faculty (Certificate, MS, Southern Connecticut State University; BA, Simmons College)
Gloria Graves Holmes (1999), Professor Emeritus (BA, MA, PhD, SUNY Center Stony Brook; MS, Queens College)
William A. Howe (2011), Part-Time Faculty (MA, EdD, Columbia University; MS, Lesley University)
Paula A Idarola (2004), Part-Time Faculty
Robert D. Irwin (2012), Part-Time Faculty (6THYR, Southern Connecticut State University; BA, University of Connecticut; MA, University of California Berkeley)
Thomas A. Jokubaitis (2009), Part-Time Faculty (BA, University of Connecticut; MS, Central Connecticut State University)

Sara E Kaminski (2013), Part-Time Faculty (BS, Southern Connecticut State University; MS, Quinnipiac University)
Cheryl R Kerison (2004), Part-Time Faculty (BA, University of Puget Sound; MA, Gonzaga University; PhD , University of Connecticut)
Barbara F. Klein (2012), Part-Time Faculty (BA, Queens College; MS, Southern Connecticut State University)
Lucinda R Kramer (2006), Part-Time Faculty
Bernadine Krawczyk (2004), Part-Time Faculty (MS, Western Connecticut State University)
Tricia M. Lasto (2012), Part-Time Faculty (6THYR, BS, MS, Southern Connecticut State University)
John F Leary (1999), Part-Time Faculty (BS, MS, Southern Connecticut State University; PhD, University of Connecticut; CAS, Fairfield University)
Patricia Erin Lichtenstein (2013), Part-Time Faculty
Kristine S. Lindsay (2015), Part-Time Faculty (BA, MS, Southern Connecticut State University; MA, Fairfield University; EdD, University of Hartford)
Gary S. Mala (2015), Part-Time Faculty (BS, MS, Central Connecticut State University; 6th Yr Cer, Southern Connecticut State University)
Anthony P. Mancini (2010), Part-Time Faculty (BS, Southern Connecticut State University; MA, CAS, Fairfield University)
Michael D Mazzacane (2007), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Donald J McCarthy (2003), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Lisa A. Miller (2010), Part-Time Faculty (BA, Utica Coll Syracuse Univ; MS, Walden University; MAT, Quinnipiac University)
Maria Boeke Mongillo (2011), Part-Time Faculty (BA, Boston College; MS, EdD, Southern Connecticut State University)
Richard Nabel (2009), Part-Time Faculty
Lin C. Napolitano (2009), Part-Time Faculty (BS, MA, University of Connecticut)
Mary J. Newbery (2012), Part-Time Faculty (AA, SUNY College Tech Canton; BA, St. Lawrence University; MEd, Massachusetts College of Liberal Arts)
Robert Nicoletti (2011), Part-Time Faculty (Certificate, MA, University of Connecticut; BS, Southern Connecticut State University; PhD, New York University)
Patricia A Niece (2008), Part-Time Faculty (BA, Dickinson State College; MAT, Wesleyan University)

Matthew E. Nittoly (2012), Part-Time Faculty (BS, Fairfield University; MAT, Sacred Heart University)
Joseph R Nuzzo (1998), Part-Time Faculty (BS, Sacred Heart University; MS, Southern Connecticut State University)
Daniel J. Osborn (2006), Part-Time Faculty (Dipl, Marshfield High School; BA, MAT, Quinnipiac University; MA, Brandeis University)
Kathryn K Papale (2008), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Barbara K. Peck (2015), Part-Time Faculty (BA, St. Joseph's University; MS, Central Connecticut State University)
David Michael Pepsoski (2011), Part-Time Faculty (BA, University of Connecticut; MAT, Quinnipiac University)
Lisa M. Porcelli (2015), Part-Time Faculty (Dipl, Notre Dame High School; BA, MAT, MS, Quinnipiac University)
Sandra M. Preneta (2013), Part-Time Faculty (Certificate, MS, Southern Connecticut State University; BA, University of Connecticut)
Madeline F. Previti (2010), Part-Time Faculty (BA, SUNY College Oneonta; MS, Fordham University Fordham Coll NY)
Tamara L. Priestley (2011), Part-Time Faculty (6THYR, MS, Southern Connecticut State University; BA, Christian Brothers College; EdD, Columbia University Teachers College)
Marie Zampano Proto (2004), Part-Time Faculty (BA, Quinnipiac University)
Sharon A Rinaldo (2003), Part-Time Faculty (BS, MA, Southern Connecticut State University)
Sasha Salem (2015), Part-Time Faculty (BS, Western Connecticut State University; MS, University of New Haven)
Rebecca R. Santiago (2010), Part-Time Faculty (BA, Tufts University; JD, Boston College Law School)
Beverly B Scully (2006), Part-Time Faculty
Anthony R. Shannon (2015), Part-Time Faculty (BS, North Carolina Agric Tech St U; JD, University of Connecticut Sch of Law)
Angela V. Swanepoel (2011), Part-Time Faculty (MA, University of Bridgeport)
Jacqueline C. Tetreault (2015), Part-Time Faculty (6THYR, MA, Central Connecticut State University; BA, University of Connecticut)
Karyn Thompson (2015), Part-Time Faculty
Carolyn A. Wayne (2014), Part-Time Faculty (BS, Southern Connecticut State University)

Deborah S. Wheeler (2011), Part-Time Faculty (BS, Edinboro University of PA; MS, Southern Connecticut State University; EdD, University of Hartford)
Geraldine Woods (2011), Part-Time Faculty (BS, Cabrini College; MA, Central Connecticut State University)

## School of Health Sciences

Marc R. Aceto (2015), Part-Time Faculty (BS, Quinnipiac University)
Rocky Ackroyd (1996), Part-Time Faculty (MHS, Quinnipiac University)
Sarah A. Adams (2015), Part-Time Faculty (BS, MHS, Quinnipiac University)
Wayne A Aguiar (2010), Part-Time Faculty (MS, University of Massachusetts)
Cynthia G Andisio (2011), Part-Time Faculty (BS, Utica Coll Syracuse Univ; MS, Boston University)
Dennis Aptaker (2010), Part-Time Faculty (BS, MOT, OTD, Quinnipiac University)
Diane D. Aye (2011), Part-Time Faculty (BA, Smith College; MPH, PhD, Yale University)
Iram S. Azam (2011), Part-Time Faculty (BS, University of Missouri-Columbia)
Thomas R. Bacha (2014), Part-Time Faculty
Eric W Baker (2006), Part-Time Faculty (BS, University of Wisconsin-Madison; MA, MPhil, New York University)
Susan Keane Baker (2006), Part-Time Faculty (BA, College of the Holy Cross; MHA, SUNY at Stony Brook)
Christopher J. Baldoni (2015), Part-Time Faculty (BA, Central Connecticut State University; MHS, Quinnipiac University)
Toni A. Barillaro (2009), Part-Time Faculty (BS, Quinnipiac University)
Ronald G. Beckett (1985), Professor Emeritus (AS, Pima Community College; BS, University of Phoenix; MEd, Rhode Island College; PhD, University of Connecticut; RRT; FAARC)
Linda Ann Bedard (1994), Part-Time Faculty (BS, University of Michigan-Flint; MS, Quinnipiac University)
Chelsea E. Benard (2013), Part-Time Faculty (BS, MOT, Quinnipiac University)
Valerie Bender (2012), Part-Time Faculty (BS, Norwich University; MA, New York University)
Steven Donald Bilodeau (1991), Part-Time Faculty (BS, University of Connecticut; MS, MHS, Quinnipiac University)
Patricia Valley Black (2003), Part-Time Faculty (MS, Quinnipiac University)
Michelle Anne Blackburn (2012), Part-Time Faculty (BS, Utica Coll Syracuse Univ)
Jennifer B. Bogardus (1998), Part-Time Faculty (BS, MPT, Quinnipiac University)
Jeffrey S. Bond (2015), Part-Time Faculty (AS, Minnesota State University, Mankato; BS, St.

Cloud State University; MHS, Quinnipiac University)
Caryn Bradley (2007), Part-Time Faculty (BS, University of Vermont; MS, Emory University)
Dana Marie Brassil (2012), Part-Time Faculty (BS, Quinnipiac University)
Cheryl Denise Brink (2007), Part-Time Faculty (BS, MHS, Quinnipiac University)
Melissa M. Broxton (2013), Part-Time Faculty (AS, Springfield Tech Comm. College)
Jaime L. Bruno (2012), Part-Time Faculty
Mark Bruno (1991), Part-Time Faculty (BS, Southern Connecticut State University; MS, University of Connecticut)
Katie R Bryant (2009), Part-Time Faculty (BS, Sacred Heart University; MEd, University of Nebraska At Kearney)
James R. Bucklin (2000), Part-Time Faculty (BS, Quinnipiac University)
Amy L. Burd (2011), Part-Time Faculty (BS, Ohio Northern University; PhD, University Minnesota Minneapolis)
Heather A. Burke (2012), Part-Time Faculty (BS, MOT, Quinnipiac University)
Lisa L. Burton (2012), Part-Time Faculty (BS, MPH, New York University)
Jillian B. Cacopardo (2007), Part-Time Faculty (BS, MPT, Quinnipiac University)
Todd W. Cacopardo (2012), Part-Time Faculty (BS, MPT, Quinnipiac University)
Allison Calvello (2011), Part-Time Faculty (BA, University of Connecticut; MHS, St. Josephs College Ct)
Burdeen M Camp (2015), Part-Time Faculty
Nancy Ann Cannatelli (2005), Part-Time Faculty (BS, Quinnipiac University)
Caitlin I. Capistran (2008), Part-Time Faculty (Dipl, Amherst-Pelham Reg High School; BS, DPT, Quinnipiac University)
Kara S. Capobianco (2014), Part-Time Faculty (BA, Quinnipiac University; MSW, University of Connecticut)
Thomas Arthur Cappas (2013), Part-Time Faculty (BS, MS, MBA, Quinnipiac University)
Anna Norene Carlson (2015), Part-Time Faculty (BS, Pacific University OR)
Leslie E, Carmody (2013), Part-Time Faculty
Roberta Cascone (1991), Part-Time Faculty
Dennis M. Cashman (2011), Part-Time Faculty (BS, MS, Central Connecticut State University; MS, American University; PhD, Capella University)

Alicia Lynn Cimino (1996), Part-Time Faculty (BS, MHS, Quinnipiac University)
Melissa L. Civitelli (2014), Part-Time Faculty (BS, Quinnipiac University)
Bernard A Clark (1998), Part-Time Faculty
Brian T. Clark (1998), Part-Time Faculty
Katie J. Coleman (2013), Part-Time Faculty (Dipl, Griswold High School; BS, MOT, Quinnipiac University)
John T. Collins (2013), Part-Time Faculty (BA, Yale University; PhD, University of Michigan-Ann Arbor)
Richard L Commaille (2005), Part-Time Faculty
Gerald Joseph Conlogue (1992), Professor Emeritus (BS, University of Connecticut; MHS, Quinnipiac University)
Tricia Lynn Coppola (2007), Part-Time Faculty (BS, MS, Quinnipiac University)
Karen Crainich (2004), Part-Time Faculty (BS, Quinnipiac University)
Katherine Marie Cremins (2002), Part-Time Faculty (MSOT, BS, Quinnipiac University)
Eric Bryce Cybulski (2014), Part-Time Faculty (BS, University of Hartford)
Linda H. Desautels Danaher (1993), Part-Time Faculty (BS, Quinnipiac University)
Jessica M Davis (2013), Part-Time Faculty (BS, Marist College; PhD, Yale University)
Rose Marie DeGrand (2003), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Edward R Delaney (2007), Part-Time Faculty
Jocelyn M. Depathy (2012), Part-Time Faculty (BS, MHS, Quinnipiac University)
Shannon J. DePodesta (1995), Part-Time Faculty (BS, Quinnipiac University)
Cynthia A. DeRiso (2015), Part-Time Faculty
David P. DiNapoli (2015), Part-Time Faculty (BS, Keene State College)
Therese M. DiPietro (2000), Part-Time Faculty (BS, Quinnipiac University)
Jamey R. Dodge (2012), Part-Time Faculty (BS, University of Connecticut)
Matthew S. Dole (2007), Part-Time Faculty (BS, Keene State College; MA, Wesleyan University)
Virginia Domercant (2014), Part-Time Faculty (BS, College of New Rochelle; MHS, Quinnipiac University)
Meaghan Elizabeth Donnelly (2014), Part-Time Faculty (Dipl, Northern Highlands Regional High School; BS, Quinnipiac University)
Jennifer A. Driscoll (2010), Part-Time Faculty (BS, MS, Quinnipiac University)

Anne M. Dropick (2013), Part-Time Faculty
Elizabeth A. Dunn (2005), Part-Time Faculty (BS, Quinnipiac University; MA, University of New Haven)
Marisa Dvorak Prokosch (2012), Part-Time Faculty (BS, Quinnipiac University)
Kristin L. Edgerton (2004), Part-Time Faculty (BS, University of New England; MBA, Quinnipiac University)
Thomas A. Edwards (1998), Part-Time Faculty (BS, MS, Southern Connecticut State University)
Louis V. Elmo (2012), Part-Time Faculty (BS, Boston College; MS, Tufts University)
Jessica Lynn Erbis (2012), Part-Time Faculty (AS, Asnuntuck Community College; BS, Quinnipiac University)
Laura Marie Erhart (2012), Part-Time Faculty (AB, Harvard University; MPH, University of Michigan)
Laura A. Evangelist (2013), Part-Time Faculty (BS, SUNY College Cortland; Cer, Quinnipiac University)
Jennifer S. Evangeliste (2014), Part-Time Faculty (BS, Quinnipiac University)
Shane Richard Fencer (2009), Part-Time Faculty (Dipl, West Bridgewater Jr/Sr H.S.; BS, Quinnipiac University)
Timothy W. Ferrarotti (1998), Part-Time Faculty (BS, Worcester Polytechnic Institute; MHS, Quinnipiac University)
Nicole A. Fidanza (2011), Part-Time Faculty (BS, MOT, Quinnipiac University)
Radmila Filipovic (2011), Part-Time Faculty
Ellen Fischbein (2004), Part-Time Faculty
Rose M. Flammang (2004), Part-Time Faculty (BS, DPT, Quinnipiac University)
Mark E. Franzese (2002), Part-Time Faculty
John Edward Gardner (2013), Part-Time Faculty (BA, Fairfield University; BA, Rensselaer Polytechnic Institute)
Gail D Garfield-Dadio (2005), Part-Time Faculty (BS, Quinnipiac University)
Mindy Garfinkel (2015), Part-Time Faculty (BA, CUNY Queens College; MS, New York University; OTD, Quinnipiac University)
Meredith A. Gaucher (2015), Part-Time Faculty (Dipl, Shaker High School; BS, DPT, Quinnipiac University)
Laurence A. Gelati (2013), Part-Time Faculty (BFA, Saint Michael's College)
Nelson A. Gelfman (2010), Medical Director for the Pathologists Assistant Program

Jillian F. Gleason (2011), Part-Time Faculty (BS, Quinnipiac University)
Craig M Goldstein (2007), Part-Time Faculty (BS, MS, Thom Jefferson U Allied Health)
Edward H. Grant (2011), Part-Time Faculty
Steven G Green (2004), Part-Time Faculty
Thomas G Green (2004), Part-Time Faculty
Joshua D. Greene (2011), Part-Time Faculty (BS, Quinnipiac University)
Katherine B. Grevelding (2012), Part-Time Faculty (BS, University of Virginia)
Pamela A. Guiditta (2014), Part-Time Faculty (BS, Quinnipiac University)
Patricia B. Gunning (2008), Part-Time Faculty (BS, University of Connecticut)
Kimberly Hajjar (2014), Part-Time Faculty (BS, University of New Hampshire)
Patrick M Harewood (2002), Part-Time Faculty (PhD, University of Rhode Island)
Frances E. Harmeyer (2012), Part-Time Law Faculty (Cer, Quinnipiac University)
Lauren E Henrici (2015), Part-Time Faculty
Lisa L. Hoffer (2011), Part-Time Faculty (BA, Russell Sage College; BSN, University of Bridgeport; MSN, Sacred Heart University)
Simon David Holdaway (2009), Part-Time Faculty (MS, Quinnipiac University)
John J. Holland (2014), Part-Time Faculty (BA, MBA, Quinnipiac University; MSW, Columbia University; PhD, Boston College)
Douglas R. Hood (2006), Part-Time Faculty (Certificate, Yale University; BS, MS, University of Florida)
Erica Marie Howes (2013), Part-Time Faculty (BS, Quinnipiac University)
Peter Juergensen (2001), Part-Time Faculty (BS, University of North Carolina Chapel Hi)
Kenneth V. Kaloustian (1978), Professor Emeritus (BA, Boston University; MS, University of Bridgeport; PhD, The University of New Hampshire)
Lisa M. Kamens (2008), Part-Time Faculty (BS, Quinnipiac University)
Stacey Lynn Kavanaugh-Schofield (2015), Part-Time Faculty (BS, Eastern Connecticut State University; MS, Bridgewater State College)
Maryam Khalili (2013), Part-Time Faculty (PhD, University of Connecticut)
Ryan D. Klepps (2014), Part-Time Faculty (Dipl, Bristol High School Central; BS, DPT, Quinnipiac University)

Marie Koch (1988), Part-Time Faculty (BS, St. Louis University; MS, University of Houston-Clear Lk Cty)
Thomas M. Kodz (2008), Part-Time Faculty (AS, Housatonic Community College; BS, Southern Connecticut State University; MHS, Quinnipiac University)
Jessica A. Kothari (2007), Part-Time Faculty (Dipl, Watertown High School; BS, MOT, Quinnipiac University)
Joan E Kreiger (1997), Part-Time Faculty (NG2, Quinnipiac University; BS, Syracuse University; MS, Southern Connecticut State University)
Kristina M. Krsiak (2013), Part-Time Faculty (BS, MOT, Quinnipiac University)
Lori-Jean M Lacaria (2000), Part-Time Faculty (MS, Quinnipiac University)
Julius Landwirth (2012), Part-Time Faculty (BA, Yeshiva University; MD, SUNY Upstate Medical University; JD, University of Connecticut)
Monika S. Laurans (2014), Part-Time Faculty (BS, University of Connecticut; MHS, Quinnipiac University)
Seth A. Leventhal (2009), Part-Time Faculty (PA, Yale University; BS, Union College; MS, University of New Haven)
Susan C. Levy (2012), Part-Time Faculty (BS, Quinnipiac University)
Meredith P. Loman (2012), Part-Time Faculty (BS, Quinnipiac University)
Robert B. Lombardo (2012), Part-Time Faculty (BS, Quinnipiac University)
Alison M. Lucibello (2009), Part-Time Faculty (BSN, Fairfield University)
James E. Lunn (2004), Part-Time Faculty (BS, MHS, Quinnipiac University)
Ashley M. Majeski (2005), Part-Time Faculty (Dipl, Brien McMahon High School; BS, MOT, Quinnipiac University)
Karen E Majeski (2006), Part-Time Faculty (BS, Quinnipiac University)
Maryann Mancini (2013), Part-Time Faculty (BS, DPT, Quinnipiac University)
Marie L. Mancini-Oliveira (2013), Part-Time Faculty
Lori Marini (2011), Part-Time Faculty (BS, Southern Connecticut State University; MHS, Quinnipiac University)
Peter Edward Marone (2013), Part-Time Faculty (BS, MBA, Quinnipiac University)
John J Masley (2003), Part-Time Faculty (BS, University of Connecticut; MBA, University of Hartford)

Kelly A. Massucci (2006), Part-Time Faculty (BS, Quinnipiac University)
Carleta Maurice (2013), Part-Time Faculty (BS, Sacred Heart University; MS, University of New Haven)
Sonja Joy Mazzulli (2010), Part-Time Faculty (BS, Quinnipiac University)
James F. McCaughern-Carucci (2002), Part-Time Faculty (MHS, Quinnipiac University)
Signian M. McGeary (1988), Associate Professor Emerita (BS, Quinnipiac University; MS, Southern Connecticut State University)
Maureen A McGuire (1995), Part-Time Faculty
Janice M. McLeod (2005), Part-Time Faculty (BS, SUNY College Buffalo; Cer, Quinnipiac University)
John M McNab (2005), Part-Time Faculty (BA, University of Connecticut; BS, MHS, Duke University NC)
Deidre Alana McVety-Bauco (2005), Part-Time Faculty (BS, MS, Quinnipiac University)
Stacey L. Melillo (2013), Part-Time Faculty (BS, Quinnipiac University)
Maureen Melleky (1997), Part-Time Faculty
Michelle Metzger (2007), Part-Time Faculty (BS, Quinnipiac University; MA, Columbia University Teachers College)
Shannon M. Michalak (2010), Part-Time Faculty (BS, MS, College Misericordia)
Sara Kay Michaud (2014), Part-Time Faculty (BS, University of New England; MS, West Virginia University)
Sean A Miner (2015), Part-Time Faculty
Donna Minotti (2003), Part-Time Faculty (BS, Southern Connecticut State University)
Saifulla Baig Mirza (2008), Part-Time Faculty (MS, Quinnipiac University)
Diane Mital (2015), Part-Time Faculty (BS, MA, SUNY College Geneseo)
John J. Mitnick (2009), Part-Time Faculty (BA, St Mary's College; MS, PhD, New York University)
Stephen Michael Moran (1991), Part-Time Faculty (BS, Quinnipiac University; DPT, A.T. Still University of Health Sciences)
Bert F. Mozealous (2011), Part-Time Faculty
Alberta B Murdock (2008), Part-Time Faculty (BS, Utica Coll Syracuse Univ)
Martha B Murphy (2014), Part-Time Faculty
Jason B. Myerson (2013), Part-Time Faculty (BS, MPT, Quinnipiac University)

Charles Naden (1970), Part-Time Faculty (BS, Temple University; MS, Yale University; MS, University of Pittsburgh)
Keri Anne Nash (1995), Part-Time Faculty (BS, Quinnipiac University)
Lindsay S. Neumann (2011), Part-Time Faculty (BS, MOT, Quinnipiac University)
Jerilyn Ann Nolan (2005), Part-Time Faculty (BS, Quinnipiac University)
Judy Nunes (2001), Part-Time Faculty (Certificate, Yale University; BS, Northeastern University; MS, Quinnipiac University)
Sean J. O'Brien (2015), Part-Time Faculty (AS, Capital Community College; MHS, Quinnipiac University)
Tara L. O'Connor Buckman (2011), Part-Time Faculty (BS, MOT, Quinnipiac University)
Jennifer B. O'Dea (2015), Part-Time Faculty (BS, MEd, Springfield College)
Andrea L. Oberlander (1997), Part-Time Faculty (BS, MPT, Quinnipiac University)
Adrienne D. Oliveira (2013), Part-Time Faculty (BS, Northeastern University)
Marilyn Elizabeth Olsen (2001), Part-Time Faculty (MHS, Quinnipiac University)
Melissa Rose Olson (2007), Part-Time Faculty (BS, Quinnipiac University; MS, Southern Connecticut State University)
Theresa B Ostrander (1997), Part-Time Faculty (BS, Post University; MBA, University of Hartford)
Kristin C. Overton (1999), Part-Time Faculty (MHS, Quinnipiac University)
George C. Parikh (1975), Professor Emeritus (BS, University of Bombay; PhD, Southern Illinois University Edwvl)
Brian Peck (2001), Part-Time Faculty (BA, University of Connecticut; MD, Virginia Commonwealth University)
Joanna L. Perez (2011), Part-Time Faculty (BS, MOT, Quinnipiac University)
Cindy J. Petry (2012), Part-Time Faculty (BS, University of Puget Sound)
Karen A Pfrommer (2007), Part-Time Faculty
John Pike (2004), Part-Time Faculty
Amy L. Plano (2014), Part-Time Faculty (BS, MS, University of Connecticut)
Katelyn E. Ponzio (2012), Part-Time Faculty (BS, Quinnipiac University)
Richard S. Pope (2001), Part-Time Faculty (BS, SUNY at Stony Brook; BA, The University of New Hampshire; MPAS, University of Nebraska Medical Center)

Linda Lee Post (2004), Part-Time Faculty (BS, Quinnipiac University; MS, SUNY University at Buffalo)
Erin M Prastine (2009), Part-Time Faculty (BS, University of Massachusetts-Amherst; MS, Sacred Heart University)
Karen M. Prestwood (2011), Part-Time Faculty (BS, Dickinson College; MD, Drexel University; MS, University of Pittsburgh)
Carlos M. Quiles (2014), Part-Time Faculty (AS, Manchester Community College)
Michael Quitko (2004), Part-Time Faculty (BA, Southern Connecticut State University)
Michael L Rachkovsky (2004), Part-Time Faculty
Bryan L. Radosavcev Jr. (2014), Part-Time Faculty (BS, University of Akron; MHS, Quinnipiac University; MBA, Pepperdine University-Los Angl)
Patti-Ann Rahl (2014), Part-Time Faculty (BS, Quinnipiac University; MPA, DeVry University)
Carolyn S. Ramos (2000), Part-Time Faculty (BS, MHS, Quinnipiac University)
John B. Ravi (2005), Part-Time Faculty (Cer, MHS, Quinnipiac University)
Sue A Rhode (2006), Part-Time Faculty (Certificate, Kean College N J; BA, Marietta College)
Rayna J. Rhodes (2012), Part-Time Faculty (BA, SUNY Center Stony Brook; BS, MS, Touro College)
Nicole A. Roberts (2011), Part-Time Faculty (BS, MS, Springfield College)
Diego J Rodriguez Gil (2014), Part-Time Faculty
David J Rosinski (2005), Part-Time Faculty
M. Louise Ruinen (2003), Part-Time Faculty (MS, Quinnipiac University)
Carly A. Rumanoff (2012), Part-Time Faculty (Dipl, Norwell High School; BS, MHS, Quinnipiac University)
Cheryl Ann Russo (1995), Part-Time Faculty (BS, Quinnipiac University; MS, Southern Connecticut State University)
Karen E. Russo (2009), Part-Time Faculty (BS, Quinnipiac University)
Patricia A. Ryan-Haag (2009), Part-Time Faculty (BS, Southern Connecticut State University; BS, American International College)
Paul I. Sadowitz (2015), Part-Time Faculty (BS, McGill University; MD, New York Medical College)
Edgar Richard Sanchez (1979), Part-Time Faculty (BS, Quinnipiac University; MBA, University of New Haven)

Peter S. Sandor (2004), Part-Time Faculty (BS, MHS, Quinnipiac University)
Antonio Rodrigues Santos (2002), Part-Time Faculty (BS, Quinnipiac University; MHA, Western Connecticut State University)
Mary Ellen Santucci (2008), Part-Time Faculty (MSOT, Cer, Quinnipiac University; BS, Southern Connecticut State University)
Brenda F Sarosario (2007), Part-Time Faculty (BSN, Concordia College)
Mary Catherine Savoie (2012), Part-Time Faculty (BS, Quinnipiac University)
Sharon L. Sawitzke (1995), Part-Time Faculty (PhD, City University)
Brian M Schwartz (2008), Part-Time Faculty (BS, SUNY College Cortland; MS, Long Island University Brooklyn Cntr)
Caitlin M. Schwer (2009), Part-Time Faculty (Dipl, Rham High School; BS, MHS, Quinnipiac University)
Duane M. Scotti (1997), Part-Time Faculty (BS, MPT, Quinnipiac University)
Tami L. Scotto (1996), Part-Time Faculty (BS, Quinnipiac University)
Jason Louis Scozzafava (2007), Part-Time Faculty (BS, University of Connecticut; DPT, Simmons College)
Sue-Lin Day Seith (2015), Part-Time Faculty (BS, Virginia Polytechnic Institute \& State University; MS, University of Michigan-Ann Arbor)
Michelle A. Serbent (1999), Part-Time Faculty (MSOT, Cer, Quinnipiac University; BS, University of Connecticut)
Elizabeth A. Shea (2014), Part-Time Faculty (BS, University of Rhode Island; BS, University Texas Hlth Sci Ctr Houston; MS, Quinnipiac University)
Judith O. Sheehan (2010), Part-Time Faculty (BS, Utica Coll Syracuse Univ)
Robert A. Shrage (2010), Part-Time Faculty (BA, JD, Quinnipiac University)
John C Smagula (1998), Part-Time Faculty
Sylvia A. Sobocinski (1995), Part-Time Faculty (Cer, Quinnipiac University)
Roberta M Solimene (1996), Part-Time Faculty (Cer, Quinnipiac University)
Alexandre D. Souto (2013), Part-Time Faculty (BA, University of California Berkeley; MDiv, Yale University)
Marla Spadaccino (2013), Part-Time Faculty (BS, MPT, Quinnipiac University)
Ralph Spinella (2014), Part-Time Faculty

Allison Grace St. Clair (2015), Part-Time Faculty (BS, Westfield State College; MEd, Springfield College)
Tracie E Stanton (2003), Part-Time Faculty (AS, Manchester Community College)
Eric James Stearns (2000), Part-Time Faculty (BS, MS, Quinnipiac University)
Keith D. Steigbigel (2011), Part-Time Faculty (BS, University of Hartford; BA, College of Wooster; DPT, Northeastern University)
Marshall F. Sternberg (2008), Part-Time Faculty (BS, SUNY Albany; MS, University of WisconsinMadison)
Lisa C. Stevens (2012), Part-Time Faculty (BS, Quinnipiac University)
Kori L. Stewart (2010), Part-Time Faculty (AS, Housatonic Community College; BS, MHS, Quinnipiac University)
Elizabeth M Sullivan-Well (2008), Part-Time Faculty (BS, University of New England)
Christopher Stephen Sylvest (2012), Part-Time Faculty (BS, University of Southern Mississippi; MS, University Mississippi Med Center; MHS, Quinnipiac University)
Michele A. Tarantino (2015), Part-Time Faculty (BS, University of New Hampshire; MPH, Southern Connecticut State University)
Shahana Lee Theriault (2005), Part-Time Faculty (BS, MHS, Quinnipiac University)
Thomas J Tinghitella (1998), Part-Time Faculty
Jennifer L Tirillo (2009), Part-Time Faculty (BS, Springfield College)
Ralph F. Tolli (1977), Associate Professor Emeritus (BS, Quinnipiac University; MS, Long Island University; MT-SM (ASCP) SM AMM)
Nicole L Tomaschik (2012), Part-Time Faculty (BS, Quinnipiac University)
Michelle A. Torres (2011), Part-Time Faculty (BS, Quinnipiac University)
Allene B Troy (2009), Part-Time Faculty (Certificate, MHS, George Washington University; BS, Fairfield University)
Frank T. Tudini (2015), Part-Time Faculty (BS, MS, Daemen College; DPT, Andrews University)
Louis Tufano (1994), Part-Time Faculty (BA, Fairfield University; PhD, University of Georgia)
Jennifer L. Twohill (2012), Part-Time Faculty (BS, Quinnipiac University)
Christine D. Uzpen (2012), Part-Time Faculty (BS, Quinnipiac University; MA, St. Catherine University)

Janelle Christine Van Luling (2014), Part-Time Faculty (Dipl, Mt Greylock Reg High School; BS, Quinnipiac University)
Wilson Vientos (2013), Part-Time Faculty (BS, University of Connecticut; MHS, Quinnipiac University)
Terry L Watson (1997), Part-Time Faculty
Kelly J. Webster (2015), Part-Time Faculty
Shelly A Welch (2006), Part-Time Faculty
Erin K. Wells (2015), Part-Time Faculty (Dipl, Shenendehowa Sr. High School; BS, MOT, Quinnipiac University)
Jessica L. White (2014), Part-Time Faculty (BS, Oklahoma Baptist University; MS, Midwestern College(Closed) IA)
Gerard C. Whitworth (2013), Part-Time Faculty (Cer, Quinnipiac University)
Patrice M. Wilhelm (2011), Part-Time Faculty (BSN, Fairfield University; MSN, Southern Connecticut State University)
Pamela I Wilkes (2010), Part-Time Faculty
Anne Williamson (2008), Part-Time Faculty (AB, Smith College; PhD, University of Maryland-Balt County)
Sarah Elizabeth Winter (2015), Part-Time Faculty (BS, University of Toledo; MHS, Quinnipiac University)
Caitlin M Wolfe (2014), Part-Time Faculty (BS, University of Vermont; MPH, Columbia University)
Kristen M Wolfe (2005), Part-Time Faculty (BS, University of Maryland-Balt County; MS, Georgetown University)
Catherine W Wong (2001), Part-Time Faculty
Russell M Woodman (1972), Professor Emeritus (BS, Ithaca College; MS, H.H. Lehman College; PhD, Creighton University)
Deborah Woodson (2001), Part-Time Faculty
George F Wooster (2008), Part-Time Faculty
Linda Jean Wooster (1984), Professor Emerita (SYC, University of Bridgeport; BS, Southern Connecticut State University; MEd, Pennsylvania State University; MBA, Quinnipiac University; 6TH YEAR DEGREE - UNIVERSITY OF BRIDGEPORT)
Michelle Lynne Zaremba (2009), Part-Time Faculty (BS, University of Connecticut; MHS, Quinnipiac University)

## School of Law

Melanie B. Abbott (1989), Professor Emeritus of Law (BA, Bates College; MS, Syracuse University; JD, Quinnipiac University School of Law; JD, University of Bridgeport)
Gerard I Adelman (2014), Part-Time Faculty
John Ahern (2011), Part-Time Faculty-Evenings
Lisa Francesca Arpaia (2006), Part-Time Faculty (BA, Fairfield University; MA, University of New Haven; JD, Quinnipiac University)
Michael Becker (2000), Part-Time Faculty (JA, New York University; BA, Franklin and Marshall College; MA, Fairfield University)
David L Belt (2004), Part-Time Faculty (BA, LLB, Yale University)
Peter W. Benner (2014), Part-Time Faculty (AB, Princeton University; JD, Georgetown University)
Lizinka Benton (2009), Part-Time Faculty
Frank P. Blando (2014), Part-Time Law Faculty (BS, University of New Haven; MBA, Adelphi University; JD, University of Bridgeport)
Joseph R. Carvalko (2006), Part-Time Faculty (BS, Fairfield University; JD, Quinnipiac University School of Law; JD, University of Bridgeport)
Tse-shyang Chen (1978), Professor Emeritus of Law (JD, The University of Chicago; LLB, Soochow University; LLM, Yale University)
Nancy Chupak (2014), Part-Time Faculty
Thomas D. Colin (2015), Part-Time Faculty (BS, Long Island University; JD, St. John's University)
James J. Connolly (2003), Part-Time Faculty (BA, Northeastern University; JD, Quinnipiac University)
Bernadette Conway (2003), Part-Time Faculty (BS, Northeastern University; JD, University of Bridgeport)
John Cordani (2002), Part-Time Faculty (BS, Texas A \& M University; MS, Rensselaer Polytechnic Institute; JD, Quinnipiac University)
John L. Cordani (2014), Part-Time Faculty (BA, JD, Cornell University)
Neville Cox (1998), Part-Time Faculty-Evenings
James A. Cresswell (2011), Part-Time Faculty (BA, Tufts University; JD, Quinnipiac University)
Susan R. Dailey (1986), Professor Emeritus of Law (BA, MA, PhD, Catholic University of America)
John R. Day (2004), Part-Time Faculty (BS, SUNY Plattsburgh; JD, Quinnipiac University)
Michelle W. Debarge (2014), Part-Time Faculty (BA, Williams College; JD, University of Connecticut Sch of Law)

Isaias T. Diaz (2006), Part-Time Faculty (BS, Post University; JD, Quinnipiac University)
Leander A. Dolphin (2014), Part-Time Faculty (BA, Wesleyan University; JD, Howard University)
William F. Dow (1998), Part-Time Faculty (BA, Yale University; LLB, University of Pennsylvania)
Felice M. Duffy (2008), Part-Time Faculty (JD, Quinnipiac University)
Chrysten A. Dufour (2011), Part-Time Faculty (BS, Post University; JD, Quinnipiac University)
Steven J. Errante (1992), Part-Time Faculty (BA, Hofstra University; MA, Yale University; JD, SUNY University at Buffalo)
Thomas A. Esposito (2003), Part-Time Faculty (BS, University of New Haven; JD, Quinnipiac University)
Robert Fawber (2012), Part-Time Faculty
Julie C Fay (2009), Part-Time Faculty
Mary Ferrari (1986), Professor Emeritus of Law (BA, University of Notre Dame; JD, Cornell University; LLM, New York University)
James J. Finnerty (2009), Part-Time Faculty
Daniel B. Fitzgerald (2010), Part-Time Faculty
David P Gold (2001), Part-Time Faculty
Karen A. Goodrow (2012), Part-Time Faculty (BA, Southern Connecticut State University; JD, Western New England College)
Mark T Gould (1996), Part-Time Faculty (BA, University of Connecticut; JD, Lewis and Clark College)
Dahlia O Grace (2009), Part-Time Faculty (BS, University of New Haven; JD, Harvard Law School)
Jane K. Grossman (2005), Part-Time Faculty (BA, JD, Quinnipiac University)
Mark Heaphy (2000), Part-Time Faculty (BA, The College of William and Mary; MA, Yale University; JD, University of Virginia)
Joseph Hogan (1992), Professor Emeritus of Law (AB, St. Josephs University; JD, Widener University School)
Brendan C. Holt (2013), Part-Time Faculty (BS, St. Josephs University; JD, Quinnipiac University)
Stephen Joseph Humes (2014), Part-Time Law Faculty (BS, Fairfield University; JD, Quinnipiac University)
Elizabeth Inkster, Part-Time Faculty (BA, MA, JD, University of Connecticut)
Leslie I. Jennings-Lax (2003), Part-Time Faculty (BA, Trinity College; MAT, Johns Hopkins University; JD, Quinnipiac University)

Pamela C. Jones (2014), Part-Time Faculty (BA, Middlebury College; JD, University of Bridgeport)
Maria A. Kahn (2013), Part-Time Faculty
John B. Kennedy (2013), Part-Time Faculty (BA, Carleton College MN; MA, The University of Chicago; JD, Columbia University)
Patricia A King (1996), Part-Time Faculty
Adam D. LaRue (2009), Part-Time Faculty (BA, Western Connecticut State University; JD, Quinnipiac University)
Douglas S. Lavine (2013), Part-Time Faculty (BA, Colgate University; MS, Columbia University; JD, University of Connecticut Sch of Law)
Marcia Lebowitz (2002), Part-Time Faculty (BA, Russell Sage College; MSW, Simmons College)
Thomas E. Lee (1992), Part-Time Faculty (AB, Cornell University; JD, Boston University School of Law)
Anne Littlefield (2009), Part-Time Faculty (AB, Boston College; MTS, Harvard University; JD, University of Virginia)
Richard Litvin (1980), Bar Exam Preparation Program Consultant for Law School (BA, Dickinson College; JD, Temple University; LLM, Yale University)
Bruce Raymond Lockwood , Part-Time Law Faculty (JD, Quinnipiac University)
William D Logue (2006), Distinguished Fellow in the Center on Dispute Resolution (BA, Brown University; JD, University of Connecticut)
Martin B. Margulies (1977), Professor Emeritus of Law (BA, Columbia University; LLB, Harvard University; LLM, New York University)
Peter Markle (2001), Part-Time Faculty
Elizabeth Phillips Marsh (1985), Professor Emeritus of Law (AB, Harvard University; JD, New York University)
Kelly Anne Masi (2011), Part-Time Faculty (JD, Quinnipiac University)
Harry N. Mazadoorian (2000), Distinguished Fellow in the Center on Dispute Resolution (BA, JD, Yale University)
Gerard McEnery (1999), Part-Time Faculty (BS, St. John's University; JD, University of Bridgeport)
Sean P. McGuinness (2003), Part-Time Faculty (BA, JD, Quinnipiac University)
Bradford C Melius (2006), Part-Time Faculty (BA, Fairfield University; JD, Vanderbilt University)
Michael Menapace (2001), Part-Time Faculty (BS, University of Hartford; JD, Quinnipiac University)
Dwight H. Merriam (2014), Part-Time Faculty (MRP, University of North Carolina at Chapel Hill; BA,

University of Massachusetts-Amherst; JD, Yale University)
Robert Charles Messey (2002), Part-Time Faculty (MD, Drexel University; JD, Quinnipiac University)
Nicole L. Micklich (2015), Part-Time Faculty (BS, University of Pittsburgh; JD, University of Connecticut)
Anthony Rosato Minchella (2002), Part-Time Faculty (BA, St Bonaventure University; JD, Quinnipiac University)
Andrew P. Mitchel (2013), Part-Time Faculty (BA, Eastern Connecticut State University; JD, University of Connecticut; LLM, New York University)
Lynda B Munro (2007), Part-Time Faculty
Basam Nabulsi (2010), Part-Time Faculty
Mary Anne O'Neill (2013), Part-Time Faculty (BA, SUNY Binghamton; JD, University of Connecticut Sch of Law)
Ryan A. O'Neill (2008), Part-Time Faculty (BBA, James Madison University; JD, Quinnipiac University)
Trisha Olson (2014), Part-Time Faculty
Alice Osedach-Powers (2012), Part-Time Law Faculty (JD, University of Bridgeport)
Arthur A Palmunen (2003), Part-Time Faculty (BA, MA, Brown University; JD, University of Connecticut)
Darrell G. Pataska (2012), Part-Time Faculty
Adele V. Patterson , Part-Time Faculty
Gregory J. Pepe (1998), Part-Time Faculty (BA, Hamilton College; JD, University of Bridgeport)
Marc G. Ramia (2010), Part-Time Law Faculty (BA, Providence College; JD, Quinnipiac University)
Renee C Redman (2005), Part-Time Faculty (BM, Michigan State University; JD, Brooklyn Law School)
Gerard D. Robilotti (2012), Part-Time Faculty (BS, Manhattan College; MS, Columbia University)
Toni Robinson (1982), Professor Emeritus of Law (BA, Sarah Lawrence College NY; JD, Columbia University; LLM, New York University)
Robert J. Romano (2011), Part-Time Faculty
Stephen Ronai (2003), Part-Time Faculty (AB, Columbia University; LLB, Yale University)
Kenneth Rosenthal (2007), Part-Time Faculty
Joseph R. Rossetti (2007), Part-Time Faculty (BA, Fairfield University; JD, Quinnipiac University)
Tushar Gautam Shah (2006), Part-Time Faculty (BS, University of Bridgeport; MBA, JD, Quinnipiac University)

Mark R. Soboslai (1992), Part-Time Faculty (BA, Central Connecticut State University; JD, University of Bridgeport)
Alan M. Soloway (1992), Part-Time Faculty (BA, State University of New York At Binghamton; JD, Yeshiva University)
Christina O. Spiesel (2000), Part-Time Faculty
Gail S. Stern (1994), Professor Emeritus of Law (BA, Boston University; JD, Quinnipiac University; JD, University of Bridgeport)
Barry K. Stevens (1996), Part-Time Faculty-Evenings
James B. Streeto (2015), Part-Time Faculty (BA, Trinity College; JD, University of Connecticut Sch of Law)
Robert L. Teicher (2003), Part-Time Law Faculty (BA, Yale University; JD, Vanderbilt University; LLM, Quinnipiac University)
Carmina K. Tessitore (2015), Part-Time Faculty
Donna Prill Thomas (1994), Part-Time FacultyEvenings (BA, St. Joseph's College; MS, University of Connecticut; JD, University of Bridgeport)
Louis B. Todisco (2014), Part-Time Law Faculty (BA, University of Connecticut; MS, University of New Haven; JD, University of Miami)
James R. Turcotte (2013), Part-Time Faculty (BA, Boston University; JD, Western New England College School of Law)
Thomas J. Ullmann (1997), Part-Time FacultyEvenings (BA, BS, Quinnipiac University; JD, University of Connecticut)
Elpedio N. Vitale (2013), Part-Time Faculty (BA, University of Connecticut; JD, Western New England College School of Law)
Kenneth A. Votre (1993), Part-Time Faculty (BES, JD, LLM, University of Bridgeport; LLM, Georgetown University)
Robert A. White (2013), Part-Time Faculty (BA, Tufts University; JD, New York University)
Jamison Wilcox (1980), Professor Emeritus of Law (AB, Amherst College; JD, Columbia University)
Jeremy G. Zimmermann (2010), Part-Time Faculty (AB, Brown University; JD, Georgetown University)

## School of Medicine

Aaron Z Grabovich (2014), Part-Time Faculty (AAC, Nova Southeastern University; BS, MS, University of Toledo)
Howard Odom (2014), Part-Time Faculty

## School of Nursing

Kathleen A. Agis (2012), Part-Time Faculty (BSN, Adelphi University; MSN, Drexel University)
Jeffrey B Agli (2002), Part-Time Faculty (BS, MS, Southern Connecticut State University; MSN, Yale University)
Vicky Amon-Perpetua (2009), Part-Time Faculty (MSN, Quinnipiac University)
Lisa Anderson (2008), Part-Time Faculty (BSN, Central Connecticut State University; MSN, University of Hartford)
Elizabeth A. Armstrong (2013), Part-Time Faculty (BSN, Southern Connecticut State University; MSN, University of Hartford)
Kirsten J Asmus (2007), Part-Time Faculty (BSN, University of Connecticut; MSN, Yale University)
Linda A. Bartolotta (2011), Part-Time Faculty (MSN, University of Hartford)
Susan J. Beebe (2015), Part-Time Faculty
Garrett E. Bennett (2011), Part-Time Faculty (BM, University of Colorado-Boulder; MM, MSN, Yale University)
Domenic M. Biello (2011), Part-Time Faculty (BS, Post University; BSN, MSN, University of Hartford)
Brian J. Blasczyk (2013), Part-Time Faculty (BS, University of Connecticut; BS, Quinnipiac University)
Laurel M. Blauvelt (2012), Part-Time Faculty (BSN, MSN, Southern Connecticut State University)
David John Booth (2013), Part-Time Faculty (BS, Utica Coll Syracuse Univ; MSN, Quinnipiac University)
Maureen A. Boylan-Elman (2011), Part-Time Faculty (AAS, BSN, Marymount University; MPS, DNP, Quinnipiac University; MSN, Southern Connecticut State University)
Tameka L Brooks (2008), Part-Time Faculty (BS, University of Hartford; MSN, Quinnipiac University)
Kathleen F. Calvo (2011), Part-Time Faculty (BSN, Southern Connecticut State University; MS, Rensselaer at Hartford)
Stacey A. Carl (2013), Part-Time Faculty
Joan M. Carpenter (2013), Part-Time Faculty (BS, Post University; MSN, University of Hartford)
Nicole Marie Casbarro (2015), Part-Time Faculty (BS, Northeastern University School of Law; MSN, Quinnipiac University)
Christina M. Case (2002), Part-Time Faculty (BSN, Sacred Heart University; MBA, University of Hartford; MSN, Quinnipiac University)

Amy N. Catlin (2014), Part-Time Faculty (BSN, University of Connecticut; MPH, University of Massachusetts)
Gill A Chaturvedi (2008), Part-Time Faculty (BSN, Central Connecticut State University; MSN, Southern Connecticut State University)
Heather L.. Cherry (2011), Part-Time Faculty (BSN, Western Connecticut State University; MSN, Southern Connecticut State University)
David R. Clark-Coller (2010), Part-Time Faculty
Maryann Claypoole (2005), Part-Time Faculty (BS, University of New Haven; BSN, Central Connecticut State University; MS, Southern Connecticut State University)
Karen S. Cleaveland (2011), Part-Time Faculty (BSN, Central Connecticut State University; MS, St. Josephs College Ct)
Carole J Codianni (2007), Part-Time Faculty (BA, University of Connecticut; MSN, Pace University)
Carol R. Connery (1990), Part-Time Faculty (MS, University of Pennsylvania)
Laura C. Conway (2011), Part-Time Faculty (BSN, Salve Regina Newport; MSN, St. Josephs College Ct; MSN, University of Hartford)
Zina I. Crescenzi (2003), Part-Time Faculty (AS, Quinnipiac University)
Anita Baldo DeAngelo (2011), Part-Time Faculty (AS, Quinnipiac University; BSN, MSN, Fairfield University)
Janet A. DeFrancesco (2012), Part-Time Faculty (BSN, MSN, University of Connecticut)
Carol M. DeGennaro (2010), Part-Time Faculty (BSN, University of Colorado Denver; BS, University of Colorado; MSN, University of Hartford)
Lizabeth L. Delaney (2013), Part-Time Faculty (AS, Middlesex Community College; BSN, MSN, University of Hartford)
June DeMarinis (2013), Part-Time Faculty (BSN, Southern Connecticut State University; MSN, University of Connecticut; JD, Thomas M. Cooley Law School)
Katherine J. Dodaro (2014), Part-Time Faculty (BSN, Sacred Heart University; MSN, University of Hartford)
Meredith A. Dodge (2014), Part-Time Faculty (BS, Elmira College; MSN, University of Hartford)
Edward R Donnald (2007), Part-Time Faculty (BS, Juniata College)
Donna J. Dzubin (2011), Part-Time Faculty (BS, Central Connecticut State University; MSN, Yale University)

Amy L. Emanuel (2012), Part-Time Faculty (BSN, State University of New York At Binghamton; MSN, Southern Connecticut State University)
Diane B Freeman (2008), Part-Time Faculty (AS, Lasell College; BSN, Central Connecticut State University; MSN, University of Phoenix)
Susan F. Gallagher (2011), Part-Time Faculty (BSN, University of Rhode Island)
Heather Christine Gatesman (2009), Part-Time Faculty (BS, Western Connecticut State University; MSN, Quinnipiac University)
Patricia D Giannelli (2013), Part-Time Faculty (Certificate, BA, Fairfield University; MS, Yale University School of Nursing; DNP, Sacred Heart University)
Debra J. Giesen (2013), Part-Time Faculty
Megan E. Gonzalez (2014), Part-Time Faculty (BS, Norwich University; BS, Quinnipiac University; MS, Sacred Heart University)
Debbie Marie Gould (2013), Part-Time Faculty (BS, Western Connecticut State University; MSN, Cer, Quinnipiac University)
Lisa Rachele Guerrieri (2009), Part-Time Faculty (AS, BSN, Quinnipiac University; MBA, University of New Haven)
Alicerene Gumbs (2014), Part-Time Faculty (BSN, Western Connecticut State University; MSN, Regis University)
Judith M Hahn (2006), Part-Time Faculty
Patricia D Hammett (2014), Part-Time Faculty
Michele R. Harovas (2015), Part-Time Faculty (BSN, University of Mass at Lowell; MSN, Umass Boston)
Michelle M Henry (2008), Part-Time Faculty (BS, Pennsylvania State University Univ Park; MS, SUNY Center Stony Brook)
Eileen M. Hermann (2005), Part-Time Faculty (MHS, Quinnipiac University)
Katherine E. Holmes (2014), Part-Time Faculty (BS, MSN, Quinnipiac University)
Macrina Hopko (2014), Part-Time Faculty (BSN, MSN, University of Hartford)
Judith Ann Howell-Smith (2015), Part-Time Faculty (BS, University of Hartford)
Marysusan F Hungerford (2005), Part-Time Faculty (BSN, University of Bridgeport; MSN, Sacred Heart University)
Rose Marie Iannino-Renz (2004), Part-Time Faculty (BSN, Sacred Heart University; MSN, Southern Connecticut State University; MS, Southern Connecticut State Univ; DNP, Quinnipiac University)

Patricia E. Jepsen (2011), Part-Time Faculty (MNE, University of Hartford; BSN, Western Connecticut State University; MA, St. Josephs College Ct)
Mary Beth H. Johnson (2014), Part-Time Faculty (BSN, Boston University; MSN, University of Hartford)
James P. Kelly (2004), Part-Time Faculty (BSN, St. Joseph's College; MSN, Southern Connecticut State University; MSN, Quinnipiac University)
Christine B. Kennedy (2014), Part-Time Faculty (AS, BS, SUNY at Albany; MSN, University of Hartford)
Linda L LaCasse (1998), Part-Time Faculty Nancy E. LaMonica (2012), Part-Time Faculty (DIP, Wilcox College of Nursing; BSN, University of Hartford; MSN, MHA, University of Phoenix)
Michael A. Lapierre (2012), Part-Time Faculty (BSN, MSN, University of Hartford)
Catherine M. Leary (2012), Part-Time Faculty (DIP, Berkshire Community College; AS, Manchester Community College; BSN, University of Connecticut; MSN, University of Hartford)
King C Lee (2005), Part-Time Faculty (BS, Eastern Kentucky University; PhD, University of Kentucky)
Mary Chris Lee (2011), Part-Time Faculty (BSN, University of Maryland-Balt County; MSN, University of Hartford)
Diane B. Longobucco (2011), Part-Time Faculty (BSN, St. Josephs College Ct; MSN, University of Connecticut)
Alison L. Luckey-Percy (2012), Part-Time Faculty (BS, American International College)
Rocco Marando (2014), Part-Time Faculty (BS, St. John's University; MD, George Washington University)
Deborah G Margolies (2007), Part-Time Faculty
Karen Marzitelli (2007), Part-Time Faculty (BS, Fairfield University; MSN, Pace University)
Maria Mauldon (2007), Part-Time Faculty (BSN, McGill University; MSN, Yale University)
Elizabeth F. McGann (1992), Professor Emeritus (BSN, City College; MS, Southern Connecticut State University; MSN, Hunter College; D.N.Sc., Yale University)
Michele M. McKelvey (2011), Part-Time Faculty (BSN, St. Josephs College Ct; MSN, University of Hartford)
Russell S Medbery (2008), Part-Time Faculty (MS, Pace University New York NY; MSN, Columbia University)
Patricia M. Melady (2009), Part-Time Faculty (BSN, D'Youville College; MPS, Quinnipiac University)

Maria L. Merola (2011), Part-Time Faculty (MS, Southern Connecticut State University; MSN, Fairfield University)
Carrie D'Amico Michalski (2003), Part-Time Faculty (BSN, SUNY Downstate Medical Center; MSN, Southern Connecticut State University; JD, Benjamin N. Cardozo School of Law)
Mary Jean Michel-Marchitto (2002), Part-Time Faculty (MS, University of Bridgeport)
Mary E. Mitchell Haddad (2012), Part-Time Faculty (AAS, BSN, Pace University; MSN, Columbia University School of Nursing)
Donna M. Montesi-Enters (2015), Part-Time Faculty (BSN, Saint Mary's Hospital; BS, Charter Oak State College Foundation; BS, Charter Oak State College; MS, DNP, Quinnipiac University)
Rose L Moss (2005), Part-Time Faculty (BS, MS, Southern New Hampshire University; MSN, University of Hartford; DNP, Walden University)
Barbara A. Moynihan (1997), Professor Emeritus (BSN, MSN, Southern Connecticut State University; PhD, University of Connecticut)
Krystal A. Mozny (2010), Part-Time Faculty (BS, University of Massachusetts; MSN, Quinnipiac University)
Kelly L. Nicholson (2012), Part-Time Faculty (BSN, MPH, MSN, University of Connecticut)
Ryann P. Nocereto (2013), Part-Time Faculty
Katherine O Olive (2006), Part-Time Faculty (MHSA, University of Arkansas; BSN, Northwestern University)
Lynn A. Orser (2014), Part-Time Faculty (BSN, Salve Regina University; MSN, Southern Connecticut State University)
Karen M Pawelek (2009), Part-Time Faculty (BSN, State University of New York At Binghamton; MSN, DNP, Northeastern University)
Stacey B. Perry (2011), Part-Time Faculty (BSN, Boston College)
Colleen M. Peruta (2012), Part-Time Faculty (BA, Eastern Connecticut State University; BSN, St. Josephs College Ct; MSN, University of Hartford; MSN, Quinnipiac University)
Mary K Peterson (2008), Part-Time Faculty (BSN, Salve Regina Newport; MSN, Yale University; MS, Yale School of Nursing)
Nancy M Peterson (2007), Part-Time Faculty (BA, Wheaton College; MSN, Sacred Heart University)
Monica F. Pirotta (2014), Part-Time Faculty (MSN, University of Hartford)

Charles A Polnitsky (2000), FCC Preceptor (AB, Johns Hopkins University; MD, New York Medical College)
Joann N. Preece (2015), Part-Time Faculty
Kelly M. Puglia (2011), Part-Time Faculty (BS, Fairfield University; MSN, Sacred Heart University)
Marlain J. Ray (2011), Part-Time Faculty (BSN, MSN, Fairfield University)
Melissa K. Rendeiro (2012), Part-Time Faculty (BSN, Fairfield University; MSN, Columbia University)
Karen B. Renstrom (2011), Part-Time Faculty (BSN, University of Vermont; MSN, University of Connecticut)
Melissa L. Revicki (2014), Part-Time Faculty (BS, University of Connecticut; MSN, University of Hartford)
Andrea L. Rickard (2010), Part-Time Faculty (BS, University of Connecticut; MSN, Quinnipiac University)
Juliana Rodriguez-Rosser (2010), Part-Time Faculty (AS, Bronx Community College; BSN, Central Connecticut State University; MSN, University of Hartford)
Diane L Rubinstein (2006), Part-Time Faculty
Barbara J Rudolph (1999), Part-Time Faculty
Catherine H. Santarsiero (2011), Part-Time Faculty (BSN, Fairfield University; MSN, University of San Diego)
Mary B. Shafer (2015), Part-Time Faculty
Sharon F. Shenberg (2012), Part-Time Faculty (AAS, Westchester Community College; BS, SUNY Plattsburgh; MS, Mercy College NY)
Nancy L. Stanton (2011), Part-Time Faculty (BS, University of Massachusetts Amherst; BS, University of Massachusetts Boston; BS, Quinnipiac University; MPH, Boston University)
Nancy M Stein (2006), Part-Time Faculty
Diane M. Sullivan (2010), Part-Time Faculty (BSN, University of Connecticut; MSN, Southern Connecticut State University)
Kathleen L Sullivan (2015), Part-Time Faculty (BS, Salve Regina University; MSN, Quinnipiac University)
Judy S. Sutton (2007), Part-Time Faculty (BS, Sacred Heart University; MSN, Quinnipiac University)
Judith M. Tartaglia (2010), Part-Time Faculty (BS, Western Connecticut State University; MS, University of Hartford)
Jeanne B Thomas (2005), Part-Time Faculty

Julie Anna Trainor (2008), Part-Time Faculty (BS, University of Hartford; MSN, Quinnipiac University)
Carissa A. Tufano (2011), Part-Time Faculty (BS, Quinnipiac University; MSN, Yale University)
Jana Damiani Ugolik (2008), Part-Time Faculty (BS, Curry College; MSN, Quinnipiac University)
David M. Van Ess (2014), Part-Time Faculty (BS, Seton Hall University; MD, Universidad Autonoma de Guadalajara)
Judy A Vansteenbergen (2006), Part-Time Faculty
Melissa J. Veillette (2011), Part-Time Faculty (BSN, University of Connecticut; MSN, University of Hartford)
Judith W Vinoski (2004), Part-Time Faculty
Kathleen M. Visinski (2014), Part-Time Faculty (BSN, University of Rhode Island; MSN, University of Hartford)
Danielle G Walker (2005), Part-Time Faculty (BSN, Villanova University; MSN, Quinnipiac University)
Leslie G. White (2009), Part-Time Faculty (BA, University of Connecticut; BSN, New York University School of Social Work; MSN, Quinnipiac University)


[^0]:    Courses offered as needed
    BIO 205 Bioethics (3 cr.) Prerequisite: BIO 101, BIO 102, BIO 150, BIO 151, PL 101 or PS 101
    BIO 218 Vertebrate Natural History ( 4 cr.) Prerequisites: BIO 101, BIO 102
    BIO 227 Comparative Anatomy and Physiology (4 cr.) Prerequisites: one group; BIO 101/101L, BIO 102/102L, CHE 110/110L, CHE 111/111L; BIO 150, BIO 151, CHE 110/110L, CHE 111/111L

[^1]:    HSC 205 Interprofessional Community-based Service Learning Seminar: Older Adult (SL: Service Learning) ( 1 cr .) This seminar course has a community experience component ( $8-10$ hours), during which the student is able to observe and apply the concepts of wellness and safety education and program implementation in a community-based service setting. The community experience is supervised by faculty with expertise in the analysis of community-based practice and the

[^2]:    Courses offered as needed
    IB 300 Special Topics in International Business (3 cr.)
    Prerequisite: IB 201

[^3]:    Courses offered as needed
    MU 200 (UC) Special Topics ( 3 cr.)
    MU 210 (UC) History of Musical Drama: from Opera
    to Broadway (3 cr.)

[^4]:    Courses offered as needed
    EC 662 Economics Analysis and Law (3 cr.)

[^5]:    Courses offered as needed
    HM 669 Organization and Management of Longterm Care Facilities ( 3 cr .)
    HM 780 Internship I (degree Students Only) (3 cr.)
    HM 781 Internship II (degree students only) (3 cr.)

[^6]:    Courses offered as needed
    HS 500 Special Topics in History (3 cr.)
    HS 501 Special Topics ( 4 cr .)
    HS 563 Dynamics of American Social Structure (3 cr.)
    HS 564 Topics in East Asian History (3 cr.)
    HS 565 Topics in Geography for the 21st Century
    (GP 565) (3 cr.)
    HS 566 Chinese Civilization ( 3 cr .)
    HS 567 Popular Culture in American History (3 cr.)

[^7]:    Courses offered as needed
    MK 610 Research for Marketing and Business
    Decisions (3 cr.) Prerequisite: MK 600 or MBA 645
    MK 611 Managing Marketing Communications (3 cr.)
    Prerequisite: MK 600 or MBA 645

[^8]:    SW 602 Advanced Field Education Practicum In Health/Behavioral Health II (4 cr.) This is the second semester of the second of two field placements in a social service agency. This advanced concentration field

