# 2009-10 Catalog 

The Official Bulletin of
Quinnipiac
University

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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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Course descriptions can be found online at www.quinnipiac.edu/courses09.xml.

You also can search Course Finder at www.quinnipiac.edu/coursefinder.xml.

## 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 Center 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.

## 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 campus.


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 Higher 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 health sciences 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), and the undergraduate and graduate nursing programs are accredited by the National League for Nursing Accrediting Commission (NLNAC). The 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/sports medicine program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).

Veterinary technology holds accreditation from the American Veterinary Medical Association. The bachelor's degree program in diagnostic imaging (formerly "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 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). 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.

Students may review information on the various accrediting agencies and accrediting reports by contacting the Office of the Senior Vice President for Academic and Student Affairs.

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

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Fall 2009

| August 27-28 | Thurs-Fri |
| :--- | :--- |
| August 31* | Monday |
| September 4 | Friday |
| September 7 | Monday |
| September 12 | Saturday |
| September 26 | Saturday |
| September 28 | Monday |
| October 16-18 | Fri-Sun |
| October 24 | Saturday |
| November 6* | Friday |
| November 14 | Saturday |
| Nov 23-28 | Mon-Sat |
| Nov 26-27 | Thurs-Fri |
| December 12* | Saturday |
| Dec 14-19* | Mon-Sat |
| December 21 | Monday |
| Dec 25-Jan 1 | Fri-Fri |
|  |  |
| Spring 2010 |  |
| Jan 14-15 | Thurs-Fri |
| January 18 | Monday |
| January 19* | Tuesday |
| January 23 | Saturday |
| January 25 | Monday |
| March 8-13 | Mon-Sat |
| March 27 \& 28 | Sat \& Sun |
| April 1* | Thursday |
| April 2 | Friday |
| April 17 | Saturday |
| April 18 | Sunday |
| May 1* | Saturday |
| May 3-8* | Mon-Sat |
| May 9 | Sunday |
| May 10 | Monday |
| May 16 | Sunday |
| May 31 | Monday |
| June 4-5 | Fri-Sat |
| June 11-12 | Fri-Sat |
| June 18-19 | Fri-Sat |
|  |  |

New undergraduate student orientation
Undergraduate and graduate classes begin
Last day for late registration/schedule changes
Labor Day—University holiday; no classes
Saturday classes begin
Open House for prospective undergraduate students
Yom Kippur—University holiday; no classes
Parents \& Family Weekend
Open House for prospective undergraduate students
Last day to withdraw with grade of "W" (undergraduate and graduate)
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

New undergraduate student registration
Martin Luther King Jr. Day—University holiday; no classes
Undergraduate and graduate classes begin
Saturday classes begin
Last day for late registration or schedule changes
Undergraduate and graduate spring recess
Admitted Students Days
Last day to withdraw with grade of "W" (undergraduate and graduate)
Good Friday-University holiday; no classes. Classes held Sat., April 3.
Undergraduate Awards Ceremony
Senior Awards Ceremony
Undergraduate and graduate classes end
Final examination period-undergraduate and graduate classes
Graduate and Law Commencements
Final grades due; Junior Open House for prospective students
Undergraduate Commencement
Memorial Day-University holiday
New Student Orientation
New Student Orientation
New Student Orientation

Summer Term 2010
On-campus Calendar
Summer I
May 24 (Mon)-June 24 (Thurs); no classes May 31
Summer II July 12 (Mon)-August 12 (Thurs)
Intensive/Online Calendar
$\begin{array}{ll}\text { Summer I } & \text { May } 24 \text { (Mon)-July } 10 \text { (Sat) } \\ \text { Summer II } & \text { July } 12 \text { (Mon)-August } 14 \text { (Sat) }\end{array}$
The University reserves the right to revise this calendar.

Fall 2010
August 26-27
August 30 *
September 3
September 6
September 11
September 17
September 25
October 16
October 22-24
November 5*
November 13
November 22-27
Nov. 25-26
December 11*
Dec 13-18*
December 20
Dec. 25-Jan 1

| January Term 2011* | January 3- |
| :--- | :--- |
| January 3 | Monday |
| January 17 | Monday |
| January 21 | Friday |
| January 21 | Friday |
| January 24 | Monday |

## Spring 2011

| Jan 13-14 | Thurs-Fri |
| :--- | :--- |
| January 17 | Monday |
| January 24* | Monday |
| January 29 | Saturday |
| January 31 | Monday |
| March 14-19 | Mon-Sat |
| March 26-27 | Sat-Sun |
| April 15* | Friday |
| April 22 | Friday |
| April 30 | Saturday |
| May 1 | Sunday |
| May 7* | Saturday |
| May 9-14* | Mon-Sat |
| May 15 | Sunday |
| May 16 | Monday |
| May 22 | Sunday |
| May 30 | Monday |
| June 3-4 | Fri-Sat |
| June 10-11 | Fri-Sat |
| June 17-18 | Fri-Sat |

New undergraduate student orientation
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
Open House for prospective undergraduate students
Parents \& Family Weekend
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

## December Registration Begins

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

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

## Summer Term 2011 (dates may change)

Summer I May 23-June 25 (5 weeks)
May 23-July 9 ( 7 weeks)
Summer II July 11-August 13 (5 weeks)

## About Quinnipiac University

Quinnipiac's Mount Carmel Campus is located in Hamden, Conn., a southern New England town eight miles from metropolitan New Haven, 90 minutes north of New York City and two hours from Boston. The University is easily reached via the Connecticut Turnpike (Interstate 95), Interstate 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, health, education, law 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. The University's innovative QU seminar series further prepares undergraduates to understand their role and responsibilities as members of the Quinnipiac community, as well as the larger national and global communities.

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.


## History of Quinnipiac

Quinnipiac today is a thriving, three-campus university located in southern Connecticut. It offers more than 70 programs to 5,600 undergraduates and 1,900 graduate 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. 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 nationally recognized programs in health sciences, communications, education, law and arts and sciences.

In 2007, Quinnipiac dedicated its new TD Bank Sports Center, the first of several buildings planned for its 250 -acre York Hill Campus. Also under construction at York Hill are residence halls for 2,000 students, a student center and fitness facility, and a parking garage.

A third 104-acre campus in nearby North Haven was acquired in September 2007 and houses many of Quinnipiac's graduate, online and health programs.

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

## 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 25 states throughout the United States as well as 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, conducts student, faculty and staff surveys, 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.

## A Community of Learning

Effective learning takes place at many levels beyond the traditional teacher-classroom situation, and Quinnipiac encourages flexibility in the learning process.

Students in the School of Health Sciences use hospitals and medical and research centers for their clinical laboratory experiences. Students in the School of Business have working contact with private and public business operations. Students in the School of Communications complete internships in the broadcast, print and film media, in cable television and sound recording industries, and in various video production, advertising and public relations operations. Students in the College of Arts and Sciences participate in community activities and programs. Students in the School of Education complete internships in public schools.

Recognizing that the learning process has no bounds, Quinnipiac requires students to take a University Curriculum regardless of their enrollment in a particular school or program. Further, as citizens of a learning community, the faculty members interact in the learning process as participants rather than mere dispensers of facts.

The student affairs offices also support growth and development of the Quinnipiac community through a variety of cocurricular programs that complement academic efforts.

## Admission

## Admission 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, communications, 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 and 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 web site www.quinnipiac.edu/visit, or email us at admissions@quinnipiac.edu.

## Admission 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 web site 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 and physician assistant applicants should have four years); science, three units (all health science applicants are expected to have 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).
4. A completed Quinnipiac University application, or the Common Application plus Quinnipiac Supplement together with a non-refundable application fee of $\$ 45$.
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 credits) 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 $\$ 45$.

## International Student Admission

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 must also submit the following documents:

1. Certified translations of all prior secondary and collegiate academic records.
2. Scores from the Test of English as a Foreign Language (TOEFL). Information and registration forms can be obtained from the TOEFL Program, Educational Testing Service, Princeton, NJ 08540. Normally a minimum score of 550 ( 213 on the CBT computer-based TOEFL or 77 on the Internet-based TOEFL) 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 web site.

## Admissions Selection 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. 1. Students applying for admission into the physical therapy program must supply documentation of two clinical observations. The online application is easy to access online at www.quinnipiac.edu/apply, or you can file a paper application. Students also may apply using the Common Application and the Quinnipiac Supplement.

The admissions staff begins reviewing complete applications in mid-November and begins notifying students in early January. In all cases, students have until May 1 to respond to offers of admission (uniform Candidate Reply Date) with a matriculation deposit of $\$ 200$ and housing deposit of $\$ 350$. Feb. 1 is the recommended deadline for applications to assure consideration for the program of choice. Students who are placed on a waitlist are notified of any further decision by June 1.

Transfer students should apply for admission either early in the fall (for the spring semester) or mid-winter (for the fall semester). Official transcripts from all institutions attended must be provided. Most programs look for a minimum grade point average of 2.5 (some programs may require a 3.0) for consideration. Transfer students are not eligible to apply for the 6-year freshman entry-level physician assistant program.

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.

## University Laptop Program

Teaching faculty design their courses with the expectation that students will have computers in the classroom when requested. For that reason, all incoming undergraduate students are required to have a University standard laptop computer purchased through the Quinnipiac University Laptop Purchase Program. These laptops are configured so that they meet the core needs of the academic programs and are a key part of the campus computing infrastructure, designed to support teaching and learning. (See p. 42 for more information on Computing Services.)

## 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 student's major for departmental 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 Charges

Tuition and fees for 2009-10
Full-time undergraduate $\quad \$ 32,400$ per year students taking (\$16,200 per semester) 12-16 credits per semester including student fee

More than 16 credits
$\$ 750$ per credit or fewer than 12 credits

Occupational Therapy and Physical Therapy Clinical Affiliation

5th yr. OT 500,580, 581, $582 \$ \$ 690$ per credit
Doctoral PT 571, 572, 581, $582 \$ 690$ per credit
Master's PT 500, 580, 581, $582 \$ 690$ per credit
Pathologists' Assistant $\$ 690$ per credit
Physician Assistant \$690 per credit
Radiologist Assistant $\$ 690$ per credit
A student fee of $\$ 35$ per credit is applicable to students registered for $4-11$ credits.

A number of courses have an additional fee usually associated with laboratory classes in the sciences. For more information about specific course fees, contact the bursar's office.

Miscellaneous expenses (books, laboratory fees, travel and personal) average $\$ 2,500$ 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.xml through "e-cashier." Once you have set up your account through this secure web site, 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 all-inclusive fee for students residing in nonapartment residence halls. The resident fee for students living in a traditional style residence hall is $\$ 12,380$ per year. For students residing in suitestyle residence halls, the resident fee ranges from $\$ 12,520$ to $\$ 13,760$ per year. The resident fee for students assigned to the apartments ranges from $\$ 10,100$ to $\$ 11,100$ per year (non-board). The resident fee for students assigned to Universityowned, off-campus housing is $\$ 10,600$.

All costs are based on the 2009-10 figures. The Office of Undergraduate Admissions and the University web site (www.quinnipiac.edu) can supply financial information.

Quinnipiac requires that all students obtain a University ID card, known as the Q-CARD. Two different accounts are associated with the Q-CARD, the Required Meal Plan and Q-CASH.

Quinnipiac requires all resident students, except those residing in Whitney Village or off-campus housing, to subscribe to the required meal plan. This operates as a prepaid debit account into which students are allocated a specified amount of money as part of their residence fees. The card can be used to make purchases in either the dining hall or the Bobcat Den. 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 Q-CASH, a prepaid debit account that can be used to make a variety of cashless purchases. Q-CASH can be used at the campus post office, the bookstore, the dining hall, the Bobcat Den and for copy, laundry and vending machines. It also is accepted at many popular offcampus 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 as long as the student is enrolled at Quinnipiac. Refunds of unused Q-CASH funds are made upon a student's graduation or withdrawal from Quinnipiac University.

Please visit www.qcardonline.com to find out more information about the Q-CARD.

## 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, 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), available on the Internet, by March 1. Currently attending students must file for renewal prior to April 1 and 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 from the Office of Financial Aid.

## Academic Scholarships

Quinnipiac offers entering freshmen a variety of renewable academic scholarships not based on need. The value of most academic scholarships ranges from $\$ 6,000$ to $\$ 16,000$ per year. Consideration for all scholarships is given to students who have completed application for admission by February 1. Contact the admissions office or visit the web site for academic scholarship criteria.

## Air Force Reserve Officer Training Corps (AFROTC)

Air Force ROTC is offered to Quinnipiac University students at the University of
Connecticut's main campus located in Storrs, Connecticut.

Through this program, Quinnipiac students can pursue a commission as an officer in the United States Air Force. The 100- and 200-level courses carry no military obligation and are open to all students. The 200 -level courses require prerequisites and permission of the appropriate instructor.

Scholarships are available for qualified students. The scholarships pay up to full tuition and fees, plus tax-free stipends of $\$ 250$ to $\$ 400$ per month, and $\$ 600$ per year toward books.

The student selects either a four-year or twoyear ROTC sequence of courses taught by Air Force officers at the University of Connecticut. Students commute to Storrs for classes on Thursday afternoons.

Air Force ROTC courses are:

- AIRF 113-114-The Air Force Today I-II
- AIRF 123-124—Development of Air Power I-II
- AIRF 235-236—Air Force Management \& Leadership I-II
- AIRF 245-246-National Security Forces in Contemporary American Society I-II
Interested students should contact the Air Force ROTC office at 860-486-2224 or visit the web site at www.airforce.uconn.edu.

AFROTC Det 115
362 Fairfield Road U-2081
Storrs, CT 06269-2081

## Army Reserve Officers Training Corps (ROTC)

Army Reserve Officers Training Corps (ROTC) offers a commissioning track to all physically qualified students who are citizens of the United States and who meet other specific requirements. Army ROTC furnishes uniforms, textbooks and other related equipment at no expense to students. Successful completion of the program can qualify the student for a commission in the United States Regular Army, Army Reserve, or Army National Guard.

The basic and advanced courses each cover two years. The basic course includes four one-hour lecture courses consisting of 50 minutes of class time and a leadership lab that requires no military obligation. The advanced course requires four 3-credit courses that meet twice a week for 1.5 hours and a leadership lab.

Quinnipiac students can participate in Army ROTC through the University of Connecticut at Storrs by calling 860-486-4538 or visiting its web site at www.armyrotc.uconn.edu.

## Academic Information

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## Academic Divisions

All Quinnipiac University programs fall within seven major academic areas:

- The College of Arts and Sciences
- The School of Business
- The School of Communications
- The School of Education
- The School of Health Sciences
- The School of Law


## Degree Programs

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

## Bachelor of Arts (BA)

Communications (p. 105)
Criminal Justice (p. 73)
English (p. 61)
Film, Video and Interactive Media (p. 102)
Gerontology (p. 72)
History (p. 63)
Independent Majors (p. 49)
Interactive Digital Design (p. 60)
Journalism (p. 104)
Concentrations:
Broadcast Journalism
Print Journalism
Legal Studies (p. 64)
Liberal Studies (p. 141)
Mathematics (p. 65)
Political Science (p. 68)
Psychology (p. 70)
Concentrations:
Human Services
Industrial/Organizational
Public Relations (p. 106)
Social Services (p. 73)
Sociology (p. 72)
Spanish Language and Literature (p. 66)
Theater (p. 74)

## Bachelor of Science (BS)

Accounting (p. 86)
Advertising (p. 96)
Athletic Training/Sports Medicine (p. 126)
Biochemistry (p. 56)
Biology (p. 51)
Biomedical Marketing (p. 96)

Biomedical Sciences (p. 111)
Chemistry (p. 56)
Computer Science (p. 59)
Diagnostic Imaging (p. 116)
Economics (p. 89)
Entrepreneurship and Small Business Management (p. 93)
Finance (p. 89)
Health and Science Studies (pp. 110, 140)
Information Systems Management (p. 87)
Information Systems Management and
Accounting (p. 88)
International Business (p. 91)
Management (p. 92)
Marketing (p. 95)
Microbiology/Molecular Biology (p. 112)
Nursing (p. 121)
Occupational Therapy (see MOT, page 123)
Physical Therapy (see DPT, page 130)
Physician Assistant (entry-level) (p. 114)
Prehealth Professions (p. 53, 58)
Psychobiology (p. 70)

## BA/MAT Program

Elementary Education (pp. 49, 166)
Secondary Education (pp. 50, 166)

## Master of Arts in Teaching (MAT) (p. 166)

The master of arts in teaching program for elementary certification prepares students for careers as teachers in elementary schools grades (K-6).

The master of arts in teaching program for secondary education prepares students for careers as teachers in any one or more of the following disciplines:
English
History and Social Sciences
Mathematics
Spanish

## Sixth-Year Diploma in

Educational Leadership (p. 171)
The sixth-year diploma in educational leadership program prepares graduates to be exceptional school leaders.

> Master of Business Administration (MBA) MBA (p. 156)
> MBA/CFA ${ }^{\circledR}$ (Chartered Financial Analyst Track) (p. 156)

MBA/Health Care Management (p. 158)
MBA/Supply Chain Management (p. 157)
Also:
Combined BA/MBA program (pp. 50, 157)
Combined BS/MBA program (p. 158)
Joint JD/MBA and JD/MBA in Health Care
Management (p. 159)

## Master of Health Science (MHS)

Cardiovascular Perfusion (p. 173)
Medical Laboratory Sciences with concentrations
in Biomedical Sciences, Microbiology and
Laboratory Management (p. 174)
Pathologists' Assistant (p. 177)
Physician Assistant (p. 179)
Radiologist Assistant (p. 181)

## 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.

## Master of Science (MS)

Computer Information Systems (p. 159)
Interactive Communications (on-campus and online) (p. 162)
Journalism (p. 163)
Molecular and Cell Biology (p. 152)
Organizational Leadership (online) (p. 160)
Public Relations (p. 165)

## Combined BS/MS in Biology and Molecular and Cell Biology (p. 54, 154)

## Combined BS/MS in

Computer Information Systems (p. 160)
Master of Science in Nursing (MSN) (p. 183)
Adult Nurse Practitioner
Family Nurse Practitioner
Master of Science in Occupational Therapy
Occupational Therapy-Post-Professional (p. 185)

## Entry-Level Master of Occupational Therapy (MOT) (p. 123)

This $5^{1} / 2$-year degree program is the only track for occupational therapy students, and begins at the undergraduate level (for freshmen and transfer students). As part of the program, students first earn a bachelor's degree in health and science studies.

## Entry-Level Doctor of <br> Physical Therapy (DPT) (p. 130)

This $6^{1} / 2$-year degree program is the only track for new physical therapy students and begins in the undergraduate freshman year. As part of the program, students first earn a bachelor's degree in health and science studies.

## Entry-Level Master's

Physician Assistant Program (p. 114, 179)
This six-year degree program is designed for qualified students who enter as freshmen earning a bachelor's degree in health and science studies. After successful completion of the undergraduate curriculum, students enter the graduate physician assistant program.

## Juris Doctor (JD)

Quinnipiac University School of Law offers a three-year, full-time day and a four-year, part-time evening program. 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.

## Certificate Programs

Advanced Graduate Study in Occupational Therapy (post-professional) (p. 186)
Export Marketing (p. 140)
Health Care Compliance (p. 161)
International Purchasing (p. 140)
Long-term Care Administration (p. 162)
Post-Master's Adult Nurse Practitioner (p. 184)
Post-Master's Family Nurse Practitioner (p. 184)

## The University Curriculum

The requirements of the University Curriculum are in effect for all students entering Quinnipiac University as freshmen during or after the Fall 2006 semester.

## Mission

The mission of the general education curriculum at Quinnipiac is to provide all students with the basis for an education that helps them integrate their specific interests into a larger context that forms the basis for community, not only at Quinnipiac, but in the larger local, national and global communities while encompassing the rich world, societies and traditions that have shaped their lives. The general education curriculum produces lifelong learners who can, upon graduation, become leaders in their professions, the communities where they live, and as informed citizens.

## Goals

Upon graduation, Quinnipiac students possess and are able to demonstrate the following skills, competencies and dispositions:

## Skills

- An ability to communicate well in written and oral form
- Appropriate numerical literacy


## Competencies

- An understanding of, and facility with quantitative reasoning. This includes the ability to work with numbers, to understand how they are used symbolically and as tools for managing their world.
- An understanding of the scientific method and an appreciation for rational, logical and critical inquiry. This includes an understanding of the many advances that have been made through this method in the natural, biological and social sciences as well as the ways scientific pursuit continues to shape our world.
- An ability to use technological and informational resources and tools to pursue continued learning through research and other forms of inquiry.
- An appreciation for the cultures of the pluralistic American community. This includes an understanding of dominant American cultural traditions and an awareness of other cultural tradi-
tions that have contributed to a uniquely pluralistic American heritage.
- An appreciation for the world community to include an understanding of world geography and major world cultures and political traditions.


## Dispositions

- A preparedness to assume the role of informed citizenship.
- The self-knowledge, self-confidence, and integrity to become leaders in their communities.
- An appreciation for difference in all its forms, and an ability to grow and develop in a world of "diverse cultures and people."

The University Curriculum consists of 46 credits as outlined in the following curriculum structure.

## University Seminars (9 credits)

QU 101 The Individual in the Community
QU 201 Seminar on National Community
QU 301 Seminar on Global Community

## Freshman Composition (6 credits) <br> 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 ( $\mathbf{6}$ 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 being' 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 their modes and history. Students also develop a critical, aesthetic and creative intelligence essential to the educated citizen.

## University Curriculum Electives (6 credits)

Students take 6 credits of UC courses outside the major. Students continue to explore a variety of fields outside their major area of studies 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.

## Policy for Students Who Fail QU 101

Freshmen entering the University in the fall semester who withdraw from or fail to receive a passing grade for QU 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 QU 101 again. They may not withdraw from the course on the second attempt. The failing student receives no credit for QU 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. A variant procedure form allows the student to proceed to QU 201.

## QU 101 Policy for Transfer Students:

A student who transfers to Quinnipiac with less than sophomore standing (fewer than 27 credits) shall enroll in a special section of QU 101, to be offered during the Spring semester. Students who transfer to Quinnipiac with sophomore standing or higher must substitute any UC-designated course for QU 101, to count toward the general education credits needed to graduate. The QU 101 prerequisite is waived for the transfer student to enter a section of QU 201.

## The Core Curriculum

The Core Curriculum consists of up to 50 credits required of all bachelor's degree candidates who entered Quinnipiac University prior to Fall 2006. The Core Curriculum is designed to foster intellectual and social growth through an integrated liberal and technical education, to develop skills in conceptualization and critical analysis and to instill an awareness of the complexities of the world and society.

Students are required to take 6 credits of written English, 3 credits in college-level mathematics, 6 credits of course work designated as specialized competency and the balance of the credits distributed among artistic tradition, behavioral and social sciences, humanistic tradition, physical and biological sciences and economics and the managerial tradition. All bachelor's degree program requirements include the 50 credits of the Core Curriculum. Some additional non-major credits are required for liberal arts, business and communications majors.

Courses that are part of the Core Curriculum are listed in the Course Schedule and Registration Bulletin, published each term, and appear on each student's academic evaluation, available through Web Advisor. Students also may consult the 20052006 University Catalog for more information on the Core Curriculum.

## The 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-excellence in education, sensitivity to students and spirit 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. In addition, honors students have the opportunity for off-campus learning experiences in nearby areas such as Boston, New Haven and New York City in addition to learning about the culture and history of Connecticut.

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.

Typically students are considered for the University Honors Program as part of their application for admission as freshmen. Students are notified of their selection in early February and are asked to respond by May 1 to indicate their interest in participating. Students who enter Quinnipiac but who were not offered participation in the program may apply internally based on their academic record at Quinnipiac and space availability in the program.

## Writing Across the Curriculum

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

The WAC committee now hosts a biennial conference on Critical Thinking and Writing Across the Curriculum (begun in Fall 2006).

The University endorses the position recently taken by the National Commission of Writing For America's Families, Schools and Colleges that good writing is a "threshold skill" for employment virtually anywhere in the professions. The aim is to ensure that students are prepared to succeed in whatever profession they choose.

## Academic Integrity

In its mission statement, Quinnipiac University emphasizes its commitment to be an academic community. As an academic community, our students, faculty and staff work together to acquire and extend knowledge, develop skills and competencies, and serve the greater good of our nation and local communities. Our individual and collective inquiry and pursuit of knowledge are only possible when each of us in the community is aware of and strives to maintain a code of ethical practice and integrity. All communities, though diverse in their individual members, are based on a shared set of beliefs and values that serve as their foundation. At Quinnipiac, our community has chosen integrity as one of its guiding principles.

Integrity means upholding a code or standard of values. In its most general sense, integrity also means being complete. As an academic community, the completeness that we seek includes asking each individual to see her or his life as a whole, and to understand how the actions he or she takes affect self, others and the community. Individual actions also affect the community of higher education as a whole. In keeping with this commitment to the Quinnipiac community and the larger community of higher learning, Quinnipiac is a member of the Center for Academic Integrity (CAI), a consortium of institutions of higher education committed to the principle of integrity. Our academic integrity policy is based on the five fundamental values outlined by the CAI: honesty, trust, responsibility, fairness and respect. More information on the University's academic integrity policy is available on the web site www.quinnipiac.edu/x1046.xml.


## Requirements for Graduation

Students must apply for degrees one semester before they expect to complete all 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

A student may earn a minor in some area of study concurrently with the major degree but not subsequently. Application for a minor should be made to the department chair, who will indicate on the
application 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. The following is a list of approved minors:

Accounting (p. 86)
Anthropology (p. 74)
Asian Studies (p. 76)
Biology (p. 54)
Chemistry (p. 58)
Computer Science (p. 59)
Criminal Justice (p. 74)
Economics (p. 89)
English (p. 62)
Entrepreneurship and Small Business Management (p. 93)

Environmental Science (p. 54)
European Union Business Studies (p. 92)
Finance (p. 90)
Fine Arts (p. 75)
French (p. 67)
Gerontology (p. 74)
History (p. 63)
Information Systems Management (p. 88)
Information Systems Management for Communications Students (p. 88)
Interactive Arts (p. 76)
Interactive Digital Design (p. 60)
International Business (p. 91)
International Studies (p. 77)
Journalism (p. 104)
Latin American Studies (p. 77)
Management (p. 93)
Marketing (p. 95)
Mathematics (p. 66)
Media Studies (p. 105)
Microbiology/Molecular Biology (p. 114)
Middle Eastern Studies (p. 77)
Music (p. 76)
Philosophy (p. 69)
Political Science (p. 69)
Psychology (p. 71)
Public Relations (p. 106)
Science and Values (p. 78)
Scriptwriting (p. 103)
Sociology (p. 74)
Spanish (p. 67)
Sports Studies (p. 79)
Studies in the Law (p. 64)
Theater (p. 76)
Women's Studies (p. 79)

## 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 service-learning 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 web site (www.quinnipiac.edu/x179.xml).


## The 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 |

*I (incomplete) P (pass) **W (withdrawal) S (satisfactory) Z (audit) U (unsatisfactory)
*Incomplete means the student has not completed all work required in a course. A period of time is allotted to make up the work. An incomplete grade automatically becomes a failing grade if it is not removed within that period. The period normally cannot extend more than 30 days after the start of the next full semester. In exceptional cases, an extension may be made with the written approval of the department chair (up to one year) or the appropriate dean (any longer period).
**A student may withdraw from a course offered in a traditional semester ( 15 week) format up to the end of the 10 th week of classes. For courses offered during the summer or in accelerated or other non-traditional formats, the withdrawal period extends up to the completion of 60 percent of the scheduled class sessions. Prior to the start of each semester the specific withdrawal deadlines for all classes are published by the Office of the Registrar.
Withdrawals must be recorded on an official form available in the registrar's office.
P indicates "passed with credit" when no letter grade is given.
Z indicates the course was audited.
S indicates "passed with no credit."
U indicates "unsatisfactory work."

## Academic Good Standing Policy

## 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.

## Credit and GPA Requirements

To be in academic good standing at Quinnipiac undergraduate students must meet both minimum grade point average (GPA) and completed credit requirements. The requirements for full-time students are listed in the schedule below:

| Semesters <br> Registered | Minimum Required <br> GPA | Minimum Required <br> Credits Completed as a <br> FT Student |
| :--- | :--- | ---: |
| 1 | 1.8 | 10 |
| 2 | 1.8 | 20 |
| 3 | 1.9 | 30 |
| 4 | 1.9 | 40 |
| 5 | 2.0 | 50 |
| 6 | 2.0 | 60 |
| 7 | 2.0 | 70 |
| 8 | 2.0 | 80 |
| 9 | 2.0 | 90 |
| 10 | 2.0 | 100 |
| 11 | 2.0 | 110 |
| 12 | 2.0 | 120 |

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. Academic good standing for parttime students is based solely on GPA. For example, a part-time student must have a GPA of 1.8 or better upon the completion of 10 credits and 2.0 or better upon the completion of 50 credits. Individual programs may have GPA and completed credit requirements that are higher than those listed above.

## Sanctions

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

## Probation

Probation serves as an official warning of deficiency. Students on probation may register for courses in the usual fashion. However, students on probation who have completed 30 or fewer credits, must attend and successfully complete an Advanced Learning Seminar. This seminar provides 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.

## 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 encouraged to use the period of suspension to improve their academic skills. However, credit will not be given for summer courses or courses taken elsewhere during the suspension period. Suspended students are readmitted to Quinnipiac after the completion of the suspension period.

## 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 four faculty members (appointed by the deans of the academic schools) and the registrar, who serves on an exofficio basis. Normally students are put 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(ies). However, students who are deficient after a total of three semesters on probation, or two semesters after the freshman year, 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 of Academic Affairs, school deans 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.

## 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.

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.

## 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 dean of the division/school/college offering the course. If after consulting with the student, faculty member and chairperson, the 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 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 dean will appoint the third faculty member from another department within the college or school. If the 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 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 dean. The 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 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 dean will work cooperatively to resolve the matter. If the chairperson is the faculty member who assigned the grade, the student will contact the 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.

## Permission to 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 from other institutions for transfer credit, 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 (see the appropriate section of the catalog).

## 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 during the semester they are called to active duty, are offered the following options:

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 Office of Academic Affairs.

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.

## Withdrawal from the University

Students considering withdrawal from the University should meet with their academic adviser or department chair to explore the available alternatives. If withdrawal is a student's final decision, he/she should 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/services/bursar/asp.

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.

## Medical Leaves

## Medical Leave of Absence

Students who wish to leave the University during an academic term because of physical or psychiatric conditions that necessitate their absence may request a medical leave of absence. Documentation of the serious nature of the medical condition must be provided to the associate dean of student affairs who will review that documentation with the University medical director. A leave of absence may be arranged for one or two semesters. Under special circumstances, the medical leave of absence may be extended. The student may return to classes when medical clearance, provided by a private physician, is reviewed by the University medical director and accepted by the associate dean of student affairs.

## Mandatory Medical Leave of Absence

The University reserves the right to place a student on a mandatory medical leave of absence from the Quinnipiac community for physical or psychiatric reasons.

In the case of a physical problem, the associate dean of student affairs, in consultation with the University medical director, determines the appropriateness of a mandatory medical leave of absence. Parents, legal guardians or the emergency
contact of the student are notified and arrangements are made immediately to remove the student from campus. Before returning to Quinnipiac from a mandatory medical leave of absence, the student is expected to release all relevant medical information to the University medical director. After reviewing the information, the University medical director and the associate dean of student affairs determine whether the student may return to the University or whether continuation of the mandatory medical leave of absence is warranted.

In the case of a psychiatric problem, the associate dean of student affairs, in consultation with the University psychiatrist, determines the appropriateness of a mandatory medical leave of absence when the student is perceived to be a threat to self or others; when the student is deemed to be unable to withstand the rigors of the college experience; or when the student's behavior is disruptive to the educational mission of the University. Parents, legal guardians or the emergency contact of the student are notified and arrangements are made immediately to remove the student from campus. The associate dean of student affairs makes this decision on a temporary basis pending results of an evaluation conducted by the University psychiatrist. After reviewing the evaluation results, the associate dean of student affairs, in consultation with the University psychiatrist, determines whether the student may return to the University or whether continuation of mandatory medical leave of absence is warranted. Before returning to Quinnipiac from a psychiatric mandatory medical leave of absence, the student must undergo a psychiatric evaluation at his or her own expense with the University psychiatrist. The student is expected to release all relevant medical information to the evaluating physician. The results of this evaluation are submitted to the associate dean of student affairs, who, in consultation with the University psychiatrist, determines whether the student may return to the University.

Students may appeal this decision to return following a mandatory medical leave of absence for physical or psychological reasons to the vice president and dean of student affairs. All information submitted becomes part of the student's health record and remains confidential.

## 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 non-traditional formats, the withdrawal period extends up to the completion of 60 percent of the scheduled class sessions.

## 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 which 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: Name
## Address

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
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 about, 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

## 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 stated objectives 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 academic performances. 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.

## Academic Honors

## 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:

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

# Academic Awards and Honor Societies 

Advertising Department Student Achievement Award<br>This award is presented to a graduating student exhibiting outstanding scholarship, independent creativity and extracurricular activities directly related to advertising.

## 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.

## The 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.
## The Alumni Chair Award

A chair is presented to the graduating senior who has done the most to foster student alumni relations at Quinnipiac. This award is made possible by the Alumni Association Board of Governors.

## 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 Iota Mu Society

Alpha Iota Mu is a national honor society that recognizes the academic achievement of information systems management students.

## Alpha Kappa Delta

Alpha Kappa Delta is an international sociology honor society designed to stimulate scholarship and promote the scientific study of society.

## Alpha Lambda Beta

Alpha Lambda Beta is the University's chapter of Phi
Alpha Theta, the national history honor society. Alpha
Lambda Beta seeks to bring students, teachers and writers
of history together for intellectual and social exchanges that promote historical understanding, research and publication.

## 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.

## Arias-Schweitzer Internship

The Arias-Schweitzer internship provides a graduating senior with the opportunity to work with the Arias Foundation for Peace and Human Progress in Costa Rica. The 12-month paid internship is made possible through the efforts of the Albert Schweitzer Institute. The foundation focuses on issues of demilitarization and human security, the promotion of grassroots support for democracy in Latin America, and issues of gender, development and human rights.

## Christopher Becker Memorial Prize in History

This award is given to the history major with the highest cumulative grade point average.

## Mitchell Berkun Prize in Psychology

Each year, the student majoring in psychology who has completed the Research Methods sequence (PS 307-308) with the highest grades receives this award. It honors the individual who founded the psychology department.

## Beta Beta Beta

The biological honor society Beta Beta Beta annually awards an official society key and scroll to the graduating senior member of the Beta Beta Beta majoring in the biological sciences who has attained the highest academic standing.

## 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 meet one of the following requirements: a) a junior with a minimum GPA of 3.7 and in the top 5 percent of the junior class, b) a senior with a minimum GPA of 3.5 and in the top 10 percent of the senior class.

## The BRAMS Scholar Award

The BRAMS Scholar Award is presented annually to a graduating Quinnipiac senior who is part of the Quinnipiac University/Betsy Ross Arts Magnet School Partnership. Award recipients are selected based on academic achievement.

## Economics Department Student Achievement Award

This award is given each year to a senior majoring in economics who has shown outstanding academic achievement and who has contributed significantly to the department.

## Entrepreneurship Student Achievement Award

This award is presented to a graduate of the entrepreneurship program who has contributed significantly to the advancement of Quinnipiac, as well as to the program.

## The Faculty Prize for Excellence in International Business

An award is presented to a graduating senior in international business exhibiting leadership and independent creativity directly related to international business.

## James Fickes Mathematics Award

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 valuable. 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.

## Department of Sociology Joan Phillips Gordon Prize

This award, in honor of Joan Phillips Gordon, former chair of the department, is presented annually to a senior in sociology, social services, criminal justice or gerontology who demonstrates outstanding academic and leadership qualities.

## Highest GPA in Communications

This award is presented to a senior student who is graduating from the School of Communications with the highest overall grade point average, who has shown high academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## The Information Systems Management Student Senior Achievement Award <br> This award recognizes a senior ISM major who had demonstrated scholastic achievement and shown leadership on campus.

## International Business Award

This award is presented to a student who has demonstrated academic excellence and professional qualities in international business.

## 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.

## 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.

## Legal Studies Book Award

This award is given annually to the senior legal studies student with the highest overall cumulative grade point average who has demonstrated exceptional ability in the discipline.

## 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.

## Mallinckrodt Award

This award is presented annually to a graduating senior majoring in diagnostic imaging who has exhibited outstanding achievement in the academic and clinical settings.

## Management Department Award

This award is presented to a senior, majoring or minoring in management, for outstanding performance in organizing and facilitating the development of work groups and projects related to personal and career development.

## Ronald Marangell Memorial Prize for Excellence in Accounting

A plaque and an award are given annually to the outstanding accounting student 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 to the marketing department.

## Modern Languages Department

Spanish Writing Award
The Department of Modern Languages in the College of Arts and Sciences sponsors an annual Spanish writing contest. Eligible students write an essay in Spanish, which is judged by departmental professors. The winning student is honored at the College of Arts and Sciences award dinner and receives a commendation and a monetary prize.

## Occupational Therapy Leadership

This award is presented from the faculty to a student who has shown outstanding leadership in academic work, laboratory performance and initiatives within the department.

## Occupational Therapy Outstanding Community Contribution

This award recognizes distinguished service in the field of occupational therapy within the Quinnipiac community
and the greater community of occupational therapy within the state or nation.

## Ryan J. O'Neil Entry-Level Master's Physician Assistant Award

This award is presented to the ELMPA student in the graduating class who most exemplifies excellent leadership, academic excellence, a cooperative attitude and the strength of character of a future health care professional.

## Outstanding Community Service AwardFreshman

This award is given to a student in the freshman class who has a C+ average or better, and has participated in volunteer service to the community beyond Quinnipiac.

## Outstanding Community Service AwardSophomore

This award is given to a student in the sophomore class who has a C+ average or better, and has participated in volunteer service to the community beyond Quinnipiac.

## Outstanding Community Service AwardJunior

This award is given to a junior who has a C+ average or better and has 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.
## The R. Gordon Pauluccy Graduation Prize in Psychology

The Pauluccy family established this endowed fund for an award to be made annually to the senior majoring in psychology who has the highest overall grade point average.

## Outstanding Achievement in Broadcast Journalism

This award is presented to a senior who is graduating from the journalism program and 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, Video and Interactive Media

This award recognizes distinguished creative achievement in film, video or interactive media.

## Outstanding Achievement in Communications

This award is presented to a senior student(s) who is graduating from the Department of Media Studies and who has shown academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Print Journalism

This award is presented to a student who is graduating from the print journalism program and who has shown academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## Outstanding Achievement in Public Relations

This award is presented to a senior student who is graduating from the public relations program and who has shown academic achievement, made significant contributions to the program, campus life and/or has shown excellent leadership qualities on campus.

## H. Pearce Family Community Leadership Award

 This award is given to a senior undergraduate who has best exemplified the spirit of volunteer community service during his or her years at Quinnipiac.
## Phi Sigma Biological Honors Society

Phi Sigma is an organization devoted to the promotion of research and academic excellence in the biological sciences. Students are invited to become members if they are at least juniors or graduate students, have an overall GPA of 3.0, and are participating in research at Quinnipiac in any area related to the biological sciences.

## 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.

## Political Science Best Senior Thesis Award

The political science faculty has established this award to recognize graduating senior student(s) in political science who have submitted outstanding, as well as original, theses.

## Political Science Outstanding Senior Award

This award recognizes a senior student in political science who has shown high academic achievement, made significant contributions to campus life, and/or has shown excellent leadership qualities on campus.

Harold Potts Memorial Physical Therapy Award This award is given in memory of Harold Potts, former chairman, professor and founder of the physical therapy program at Quinnipiac. The award is presented from the faculty to a fourth-year physical therapy student who has demonstrated academic and leadership excellence, as well as exemplary service to the program and physical therapy profession.

## 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.

## 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 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 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.

## The Rachel Ranis Prize in Social Justice

This award 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

The English department established this award in memory of one of its distinguished members. The award is made to the graduating senior with the highest academic record in English.

## Edward J. Scannell Prize

The Scannell family established this endowed prize fund in memory of former trustee, Edward J. Scannell. Two prizes are awarded to graduating seniors enrolled in the School of Business who are elected to "Who's Who at American Universities and Colleges."

## School of Communications Overall Achievement Award

This award is presented to a senior(s) who is graduating from the 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.

## Aurea C. Schoonmaker Spanish Award

In honor of Professor Aurea C. Schoonmaker's 43 years of exemplary teaching at Quinnipiac, this prize is awarded to the senior Spanish major with the highest overall cumulative grade point average.

## The 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.

## 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 3.0 overall, maintain a GPA of 3.0 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 Tau Delta

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.

## Alfred P. Stiernotte Memorial Prize

An annual award is made to the student who has earned distinction in the study of philosophy.

## Student Involvement Award

An award to an outstanding student is presented by Student Government.

Orville J. Sweeting Memorial Chemistry Award In memory of Orville J. Sweeting, former professor of chemistry and Quinnipiac provost, an engraved plaque is presented to the senior(s) who have exhibited outstanding achievement in both the academic and senior research settings in chemistry.

## The 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 the senior nursing student 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.

## The 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 the senior nursing student who has 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.

## Philip Troup Achievement Prize

In memory of Judge Philip Troup, first president of Quinnipiac, a gold key is awarded to a graduating senior who has contributed most to the welfare of Quinnipiac through strength of character and qualities of leadership.

## Wall Street Journal Award

This award is presented to a student for achievement in finance.

## West Educational Publishing Student Award

This award is given to two legal studies students who have demonstrated outstanding achievement and professional growth.

## Who's Who Among Students in American Universities and Colleges

This prestigious award is given to graduating seniors who have demonstrated outstanding scholarship and leadership.

## Morris Woskow Award for Special Achievement in Arts and Sciences

This award is given to the senior graduate in the College of Arts and Sciences who has a record of exceptional achievement in the face of adversity.

## 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.
## Wyckoff Moore Family Memorial Scholarship

 The fund was established in memory of members of the Wyckoff Moore family. The award is given to a part-time student who has achieved senior status, completed 30 credits and earned a GPA of 3.5 .

## Other Academic Opportunities

## 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.

## Prelaw

Students interested in attending law school must have a BA or BS degree and have taken the Law School Admission Test. 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, Jessica Hynes, at 203-582-3688, CLA-1, room 337, or
jessica.hynes@quinnipiac.edu for further information and, if appropriate, should join the Prelaw Society to learn more about the LSAT and law school admissions and financial aid.

## Prehealth Profession Studies in Medicine and Dental

The health professions include medicine (allopathic and osteopathic), dentistry, physician assistant, optometry, chiropractic, physical therapy and podiatry, and normally require additional study beyond the undergraduate degree. The prehealth professions program provides undergraduate students interested in a career as a health professional with the appropriate educational background necessary to meet the entrance requirements of the different professional schools.

The general requirements for most medical, dental and physician assistant schools include a full year of general biology, general chemistry, organic chemistry, physics and mathematics (including calculus), as well as English. These prerequisite courses provide a basic background knowledge for students to take standardized examinations for admission to professional schools such as the Medical College Admissions Test (MCAT) and the Dental Admissions Test (DAT). These examinations normally are taken in the spring or summer of the junior year, after the completion of all the prerequisite courses.

Although the prerequisites may be completed with any undergraduate major, the majority of prehealth professions students elect to pursue one of the degree programs offered by the Department of Biological Sciences, which provides broader preparation. Faculty advisers from the Prehealth Professions Committee help students select courses and suggest extracurricular activities to meet the specific requirements for the field of interest, and also write letters of recommendation for individuals applying to postgraduate studies in the health professions.

## Field Studies

During summer, winter and spring vacations, 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 multidisciplinary, experiential learning programs bringing students from around the nation and the world to semester-length internships, research projects and seminars in the national capitol. Students in any major may apply. Quinnipiac is affiliated with two organizations, which 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 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 Professor Scott McLean in the Department of Political Science, at 203-582-8686.

## ALANA Mentoring Program

Quinnipiac offers a mentoring program for incoming freshmen students. The ALANA (Asian Latino African Native American) mentoring program is designed to enhance the transition from high school to college for students from diverse backgrounds; participation is by invitation. A student in the ALANA mentoring program is paired with a student, faculty or staff mentor at the start of the student's academic career in order to give the student an expanded support base during the important first year of college. The ALANA mentoring program sponsors social and cultural events as well as offering one-on-one support. Details regarding the ALANA mentoring program are available in the Office of Multicultural Affairs.

## International Education

Quinnipiac University is committed to preparing students for the 21st century. An integral part of that preparation includes providing opportunities for international education through study and internships in foreign countries or having international professors teach at Quinnipiac. Details regarding application to any of the programs and places of study are available from the Office of International Education.

## Study Abroad Programs-General

Quinnipiac students participate in study abroad programs for a year, or for a semester, in various countries such as Austria, Australia, England, Ireland, Italy, France, Japan, Germany, Mexico, New Zealand, South Africa and Spain.

All students are advised to plan early for study abroad. Health Sciences majors, in particular, should begin planning for study abroad during the freshman year so as to ensure the required academic progression in the program of study. To be eligible, students must have a minimum GPA of 3.00 and no judicial sanctions. The credits and grades for approved courses taken abroad become part of the students' academic transcript, and all grades are included in the calculation of the students' GPA. Students may not take classes for a pass/fail grade unless there is no other grade given for that course.

Quinnipiac University students who participate for a semester/year abroad pay the equivalent of full-time tuition at Quinnipiac and the cost to live in the Commons Residence Hall, minus the dining service fee. A fee is added to ensure adequate emergency insurance. If the approved program cost exceeds the sum of Quinnipiac's tuition and housing, the difference is paid to Quinnipiac University by the student. Students who receive financial assistance at Quinnipiac may apply their aid for study abroad, including federal aid, state grants, college grants and scholarships.

Quinnipiac faculty also lead short study abroad courses to various countries during the January and summer breaks. Some of the countries visited include Canada, Costa Rica, various European countries and Mexico. Details are available from the Office of International Education.

Also noteworthy is Quinnipiac's involvement in the Oscar Arias Foundation through its sponsorship of the Arias-Schweitzer Internship. This gives graduates a special opportunity to work on some of the most pertinent issues in Latin America.

## Quinnipiac University in Ireland

Quinnipiac's program of study in Ireland is conducted through a formal articulation with University College, Cork. This arrangement allows students to participate fully in the programs and courses offered by UCC.

UCC has an enrollment of approximately 15,000 students with 2,000 international students from more than 70 countries. UCC offers a full range of undergraduate courses in the humanities, sciences, business and management, social sciences and pre-law. The pattern of study differs, depending on the semester selected.

In the fall, students participate in the Early Start program, which is a month-long course running from late August to late September. The early start courses combine lectures with field trips. Students may select from the following offerings:

- Irish Archaeology
- Irish Folklore \& Ethnology
- History \& Modern Ireland
- Literatures in Ireland
- Irish Ecosystem
- Management \& Marketing in the European Union
- Law (Irish \& European legal systems)
- Musics

Students then take the balance of their course work during UCC's fall semester, which runs from late September to mid-December.

The spring semester at UCC begins in early January. In general, classes run through the end of March, followed by Easter recess and a reading period in April. Students sit for examinations in May. There is no early start program in the spring term. More detailed information is available from Quinnipiac's Office of International Education and from the UCC web site: www.ucc.ie/international.

Quinnipiac faculty also may lead classes to Ireland during the summer and winter intersession. These classes use UCC facilities but are taught by Quinnipiac faculty.

Cork, located on the south coast, is the second largest city in Ireland (after Dublin). The city is situated on the Lee River, at the head of Cork Harbor inlet. There is easy access to the countryside and areas such as Cobh, Kinsale, Killarney and Blarney Castle. The city offers a wide array of educational, cultural, social and athletic opportunities.

## Other Academic Resources

## Arnold Bernhard Library

The Arnold Bernhard Library serves the undergraduate and graduate populations of the University and provides support for the Quinnipiac University School of Law. Approximately 48,000 square feet in size, the Bernhard Library provides 600 seats, 13 group rooms, a 30 -seat instructional facility, more than 60 public computer terminals, and nearly 600 power/data connections for laptop computers.

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. A large variety of webbased resources (including a growing number of full text/full image titles) are available, as well as printed volumes, microforms and audiovisual materials. Supporting this new facility are the combined staffs of the library, academic technologies and media services.

This building also houses the clock tower, the executive suite, the Offices of Administrative Services, Undergraduate, Graduate and Part-time Admissions, Financial Aid, the Bursar, Human Resources and Purchasing.

## Bioanthropology Research Institute

Quinnipiac's Bioanthropology Research Institute, administered through the School of Health 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 School of Health Sciences for more information.


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

Quinnipiac University's Bristol-Myers Squibb Center for Science Teaching and Learning is a network of scientists and educators working in concert to advance the art of science education from kindergarten to university level.

The center draws on the expertise of:

- Quinnipiac's departments of biological sciences and chemistry and physical science in the College of Arts and Sciences
- Quinnipiac's School of Education
- Statewide K-12 school districts
- Schooner, Inc.
- BioBus
- CT Academy for Education
- Various governmental partners, including the Department of Environmental Protection
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 center offers professional development experiences for $\mathrm{K}-12$ teachers in proven techniques for successful science instruction.

Currently, the Bristol-Myers Squibb Center for Science Teaching and Learning provides professional development workshops for teachers in inquiry-based teaching methods and provides innovative tools with which to teach science. The center strives to support student proficiency and achievement in science.

## Clarice L. Buckman Center and Theater

This building houses science laboratories, a state-of-the-art clinical skills lab for the use of both the nursing and physician assistant programs, faculty offices, classrooms, and a 177-seat theater for lectures and theater performances.

## Computing Services

All incoming undergraduate students are required to have a University standard laptop computer purchased through the Quinnipiac University Laptop Purchase Program (information on the program can be found at www.quinnipiac.edu/x1209.xml). These laptops are configured to meet the needs of academic programs both in the classroom and elsewhere, and are supported on campus by the University's Computer Help Desk. The Help Desk is staffed and trained to support only those computers that are part of the laptop program.

Although the standard 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 data network that connects all of the University computers and information systems to each other and to the Internet. The network can be accessed wirelessly by students from all of the classrooms and public areas, including the Arnold Bernhard Library.

The Arnold Bernhard Library is open 24 hours a day during the academic year, and contains more than 100 computers, as well as the Media Services Center where faculty and students can use and receive help with equipment 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.

## Terry W. Goodwin'67 Financial Technology Center

Quinnipiac University created its own version of Wall Street with the Terry W. Goodwin '67 Financial Technology Center in Tator Hall. The 1,500-square-foot center allows students to make stock-broker-like decisions and learn how the financial markets work. Software installed in the center's 31 computer workstations allows students to access real-time financial data, practice analytical finance methods, conduct trading simulations, analyze economic databases and develop financial models.

## The Learning Center.

The Learning Center assists students in reaching their academic potential by offering various programs of academic support. The center is located in Tator Hall, room 119.

Quinnipiac's nationally certified peer tutor program offers individual peer tutoring in nearly all 100-level courses, many 200- and 300-level courses and supports many of the graduate degree programs. Tutoring is content-specific and addresses both entry-level and advanced courses such as mathematics, writing, science and many other specialized subject areas.

Content is only one aspect of the educational experience. The Learning Center also offers learning skills seminars, weekly meetings that address specific skills interactively. In addition, class-specific workshops and individual meetings all help students achieve their academic potential. Working with students to identify the strengths and weaknesses they bring to the university experience, the Learning Center staff helps students develop skills and strategies that contribute to their success at Quinnipiac, the better to be prepared for their career.

The Learning Center staff also coordinates the Advanced Learning Seminar. This seminar, meeting weekly, is open to students on academic probation who meet specific criteria. Through assessment and subsequent individual action plans, students work toward specific academic goals that reinforce their success in the University environment.


The Learning Center recognizes that people learn differently. Following the guidance of $\mathrm{ADA} / 504$, the coordinator of learning services meets individually with students who disclose a disability, assisting them to meet the academic challenges they face.

The Learning Center offers a venue for academic support. Staffed by helpful professionals, equipped with appropriate technology and texts, the Learning Center is an important facet of a successful student's experience at Quinnipiac. For more information, contact the director of the Learning Center.

## Lender School of Business Center and Ed McMahon Mass <br> Communications Center

This state-of-the-art building contains case study rooms, two local area network (LAN) rooms, classrooms, an executive conference center, faculty offices and executive offices for the senior vice president for academic and student affairs and the dean of the School of Business-all of which are linked by a highly sophisticated computer network. This building also houses the Ed McMahon Mass Communications Center, a modern and wellequipped media production facility which provides students with a new completely digital highdefinition television (HDTV) studio, the latest in broadcast technology, a spacious, professional-level television studio, two audio production studios, a fully computerized newsroom with 25 workstations and Associated Press wire service, advanced non-
linear digital video editing systems, a digital desktop production lab for interactive multimedia design, web site development, electronic publishing and digital imaging, an audiovisual production resource depot and a screening room with video projection and theater-quality sound. Two cable television channels originate from the McMahon Center, providing the campus with studentproduced programming from the Q30 student television organization as well as other cablecasts.

## Motion Analysis Laboratory

The Motion Analysis Laboratory is dedicated to education and research on human motion. Laboratory equipment includes two force plates, a high-tech, 16 -channel computer that measures muscle activity, and a comprehensive, eight-camera motion analysis system along with access to a Biodex isokinetic dynamometer. Students access the equipment through prescribed laboratory experiences associated with biomechanics or kinesiology classes or as part of mentored research projects. Faculty use the facility for a variety of research projects such as abdominal strengthening, methods of force absorption during landing tasks, muscle activation patterns during dynamic tasks and animation of human motion.

## Albert Schweitzer Institute

The Albert Schweitzer Institute is an international, nonprofit organization that conducts educational programs. Inspired by Dr. Albert Schweitzer's exemplary humanitarian service and concept of "reverence for life," the institute's programs:

- focus on health, humanitarian and peace efforts
- support health care development in underserved areas
- motivate young people to serve the community and the environment as a way of life
- increase public awareness of Schweitzer's philosophy and its potential for a more peaceful and sustainable world.
The institute, located adjacent to the campus at 660 New Road, houses the offices of its executive director as well as the Albert Schweitzer museum, which consists of artifacts from Dr. Schweitzer's collections and other humanitarian exhibits. Albert Schweitzer was the recipient of the Nobel Peace Prize in 1952.
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## College of Arts and Sciences

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

## Administrative Officers <br> Dean

Associate Dean for the Humanities and Social Sciences
Associate Dean for the Sciences
Assistant Dean for Administration
Assistant Dean for Career Services
Director of Arts and Sciences Cultural Programming

## Departments/Programs

Department
Biological Sciences
Chemistry and Physical Sciences
Computer Science and
Interactive Digital Design
English
History
Legal Studies
Mathematics
Modern Languages
Political Science
Psychology
Sociology
Visual and Performing Arts

## Graduate Programs

MS in Molecular and Cell Biology
Other Programs
Anthropology
Asian Studies
Criminal Justice
Fine Arts
Gerontology
International Studies
Middle Eastern Studies
Philosophy
Psychobiology
Prehealth Professions
Prelaw Advising
Science and Values
Sports Studies
Studies in the Law
Veterinary Technology
Women's Studies

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| Sean Duffy | CAS3-313 | 582-8324 |
| Sharlene Walbaum | CAS1-339 | 582-8317 |
| Lori Sudderth | CAS1-336 | 582-3387 |
| Crystal Brian | CAS2-104 | 582-8394 |
| Charlotte Hammond | TH 203 | 582-8058 |
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| Stephen Henderson | CAS3-306 | 582-3751 |
| Lynne G. Hodgson | CAS1-314 | 582-8950 |
| Sean Duffy | CAS3-313 | 582-8324 |
| Nita Prasad | CAS3-304 | 582-3729 |
| Benjamin Page | CAS3-306 | 582-8328 |
| Joan Bombace | TH 219A | 582-3688 |
| Gene Wong | TH 219 | 582-8467 |
| Jessica Hynes | CAS1-337 | 582-3688 |
| Kathy Cooke | CAS3-307 | 582-5269 |
| Melissa Weiner | CAS1-331 | 582-5355 |
| Jill E. Martin | CAS1-313 | 582-8712 |
| Steven Carleton | BC 109 | 582-8958 |
| Michele Hoffnung | CAS1-312 | 582-8703 |

## 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 and humanities, 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 21st 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, the arts and sciences program provides an exciting, well-rounded program of study that is both fulfilling and rewarding.

## General Requirements

The requirements for the bachelor of arts degree are qualitative as well as 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 a bachelor of arts degree 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.

## 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, English, gerontology, history, independent majors, interactive digital design, legal studies, mathematics, political science, psychology, social services, 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-level courses.

## Sciences Track

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

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 science 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.

## General Requirements

A minimum of 72 credits must be taken from outside the student's major. Of the 120 credits required for the bachelor's degree, only 6 credits of arts and sciences workshop courses and/or physical education courses may be applied.

Primary responsibility for knowing and completing all course requirements rests with the student.


## Academic Advising

The College of Arts and Sciences has a program that places every student, upon entrance, 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 profession. Students also learn how an arts and sciences major can prepare them especially well for an extensive range of satisfying careers. Although the primary responsibility for setting academic goals and selecting courses rests with the student, the academic adviser fosters an ongoing conversation that teaches self-reflection and development. The adviser also maintains an advising record for each student.

Students who enter the College of Arts and Sciences with a declared major are matched with a faculty adviser in that department. Undeclared students are part of the College of Arts and Sciences' Academic Pathfinders Program, which offers a variety of workshops and resources to help students explore majors. During the formal advising period each semester, all students in arts and sciences are required to meet with their academic advisers before selecting and registering for courses.

## Career Services

In the College of Arts and Sciences, the assistant dean for career services works with students to explore majors and career interests through individual consultations and group sessions, guide them through a career development process, and provide assistance with 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. Services also are provided to alumni.

## Degrees in Arts and Sciences

## Bachelor's Degrees

Biochemistry
Biology
Chemistry
Computer Science
Criminal Justice
English
Gerontology
History
Independent Majors
Interactive Digital Design
Legal Studies
Mathematics
Political Science
Psychobiology
Psychology
Social Services
Sociology
Spanish Language and Literature
Theater

## 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. A proposal for an independent major must be submitted to the dean and must have the approval of a three-member faculty committee, chosen by the student, which will work with the student to plan the program. The proposal must have the approval of the dean and faculty screening committee, and must contain suitable justification and a coherent curricular plan. Independent major proposals should be submitted no later than the first semester of the junior year.

## Combined BS/MS in Biology and Molecular and Cell Biology

The Department of Biological Sciences offers a combined BS/MS program in biology and molecular and cell biology to qualified undergraduates in any of the concentration curricula: environmental science, evolution and genetics; molecular and cell biology; and physiology and comparative biology. (Students in the environmental science, evolution and genetics concentration may need to take additional courses.)

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. A minimum cumulative undergraduate GPA of 2.5 and 70 earned credits at Quinnipiac University are required for admission to the graduate program.

Students intending to pursue a combined degree are advised to elect PHY 110/110L and PHY 111/111L by the end of their sophomore year. BIO 282/282L, BIO 346/346L and CHE $315 / 315 \mathrm{~L}$ must be completed by the end of the junior year. BIO 317/317L and BMS 370/370L also are strongly recommended.

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 both undergraduate and graduate requirements. A bachelor of science in biology is granted upon satisfactory completion of all the undergraduate curriculum requirements. 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 the junior year. Interested students should contact the chair of the biology department. For further information on the combined BS/MS program please refer to the graduate molecular and cell biology program. Meeting the minimum admissions standards does not guarantee admission to the program.

## Five-Year Arts and Sciences BA/MAT Program in Elementary Education

This two-degree program leading to a master of arts in teaching degree is designed for any arts and sciences major who maintains an overall undergraduate GPA of 2.67. 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 into Quinnipiac University.

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

This two-degree program leading to a master of arts in teaching degree is designed for Quinnipiac students who wish to earn Connecticut certification to teach chemistry, English, history/social studies, mathematics or Spanish on 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 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. Additional information on this program appears on page 157.

## 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, Asian studies, biology, chemistry, computer science, criminal justice, English, environmental science, fine arts, French, history, interactive arts, interactive digital design, mathematics, music, philosophy, political science, psychology, sociology, Spanish, studies in the law, and theater. Interdisciplinary minors in Asian studies, international studies, Latin American studies, Middle Eastern studies, science and values, and women's studies also are available (see p. 76). Arts and sciences students may complete a minor in one of the other schools. Through the selection of a minor outside arts and sciences, students can maximize their career or graduate school opportunities 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
Environmental Science, Evolution and Genetics*
Molecular and Cell Biology*
Physiology and Comparative Biology*
Combined BS Biology/MS Molecular and Cell
Biology*
Minor in Biology
Minor in Environmental Science
*Program approved for Prehealth Professions option
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. The first two years of each program consist of a core of science and liberal arts courses that permit lateral mobility during those years. 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 101-102 although taking BIO 101 and BIO 102 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.

The curriculum for the BS in biology allows students to pursue one of three different track curricula (environmental science, evolution and genetics; molecular and cell biology; or physiology and comparative biology) based on individual preferences and expressed interests. The University Curriculum, biological sciences and physical science core requirements are common components of all three tracks. Advanced courses and electives within each track are chosen in consultation with expert faculty advisers.

| BS in Biology (recommended curriculum) |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| Fall Semester, First Year |  |  |
| BIO 101/101L General Biology I (for majors) |  | 4 |
| CHE 110/110L General Chemistry I |  | 4 |
| EN 101 | Freshman Composition (UC) | 3 |
| MA 141 | Quantitative Literacy (UC) | 3 |
| QU 101 | The Individual and the Community | 3 |
|  |  | Total 17 |
| Spring Semester, First Year |  |  |
| BIO 102/102L General Biology II (for majors) |  | 4 |
| CHE 111/111L General Chemistry II |  | 4 |
| EN 102 | Freshman Composition (UC) | 3 |
| UC | University Curriculum | 3 |

Total 14

## Fall Semester, Second Year

BIO 298 Research Methods 2
CHE 210/210L Organic Chemistry I 4
PHY 110/110L General Physics I 4
QU 201 Seminar on National Community 3
UC University Curriculum 3
Total 16
Spring Semester, Second Year
BIO Biology concentration core* 3-4
CHE 211/211L Organic Chemistry II 4
PHY 111/111L General Physics II 4
UC University Curriculum 3
Total 14-15
Fall Semester, Third Year

| BIO | Biology concentration core* | $3-4$ |
| :--- | :--- | ---: |
| BIO | Biology concentration elective* | $3-4$ |
| QU 301 | Seminar on Global Economy | 3 |
| UC | University Curriculum | 3 |
|  | Open elective | $3-4$ |

Total 15-18
Spring Semester, Third Year
BIO Biology concentration core/elective* 3-4
BIO Biology concentration elective* 3-4
Open elective 3-4
Open elective 3-4
UC University Curriculum 3
Total 15-19
Fall Semester, Fourth Year
BIO Biology concentration elective* 3-4
$\begin{array}{ll}\text { BIO } & \begin{array}{l}\text { Biology concentration elective } \\ \text { (if necessary) }\end{array}\end{array}$
BIO Biology non-concentration elective ${ }^{* \wedge} \quad 3-4$
UC University Curriculum 3
Open elective 3-4
Total 15-19
Spring Semester, Fourth Year
BIO Biology concentration elective* 3-4
BIO Biology non-concentration elective* ${ }^{*}$ 3-4
UC University Curriculum 3
Open elective 3-4
Open elective (if necessary) 3
Total 15-18
Minimum number of credits required for graduation: 120
*Some biology courses have no laboratory component and are 3 -credit rather than 4 -credit courses.
$\wedge$ Biology non-track electives ( $6-8$ credits): One course must be taken from each of the other concentrations and must be different from courses offered within the declared track.

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 101 and BIO 102 are required for graduation and may be used to meet the core curriculum's physical and biological sciences requirement. Students intending to pursue studies in professional health care fields are advised to complete BIO 205, BIO 317/317L, BIO $346 / 346 \mathrm{~L}$, BIO 370/370L, BIO 471/471L and CHE 315/315L. BIO 298, Research Methods in Biology, is taken during the fall semester of the second year.

## Environmental Science, Evolution \& Genetics Concentration Required Course Title <br> Credits

BIO 331/331L Earth Science 4
BIO 353/353L General Ecology 4
BIO 383/383L Evolution
Total 12

## Concentration electives

| BIO 218/218L | Vertebrate Natural History | 4 |
| :--- | :--- | ---: |
| BIO 282/282L | Genetics | 4 |
| BIO 328/328L | Human Clinical Parasitology | 4 |
| BIO 351/351L | Natural History of New England | 4 |
| BIO 356/356L | Freshwater Ecology | 4 |
| BIO 358/358L | Human Ecology | 4 |
| BIO 385/385L | Conservation Biology | 4 |
| BIO 498/499 | Independent Study in Biology^ | $1-4$ |
| BMS 476/476L | Environmental Microbiology | 4 |
|  | Total 14 |  |
| Molecular \& Cell Biology Concentration |  |  |
| Required Course Title | Credits |  |

Complete two of the following three courses for 8 credits total:
BIO 317/317L Developmental Biology
4
BIO 346/346L Cell Physiology
BIO 471/471L Molecular Genetics
Concentration electives
BIO 282/282L Genetics 4
BIO 317/317L Developmental Biology 4
BIO 329 Neurobiology 3
BIO 346/346L Cell Physiology 4
BIO 382/382L Human Genetics 4
BIO 471/471L Molecular Genetics 4
BIO 498/499 Independent Study in Biology^ 1-4
BMS 370/370L Microbiology 4
BMS 372/372L Pathogenic Microbiology 4
BMS 375/375L Immunology 4
BMS 470/470L Virology

BMS 472/472L Biotechnology 4
BMS 475/475L Special Topics in Microbiology 4
BMS 370/370L Microbiology 4
CHE 315/315L Biochemistry 4
Total 16
Physiology \& Comparative Biology Concentration Credits
Required Course Title
BIO 227/227L Comparative Anatomy \& Physiology $\mathrm{I}^{+} \quad 4$
BIO 228/228L Comparative Anatomy \& Physiology II ${ }^{+} \quad 4$
BIO 223/223L Invertebrate Zoology 4
Total 12
Concentration electives
BIO 218/218L Vertebrate Natural History 4
BIO 328/328L Human Clinical Parasitology 4
BIO 329 Neurobiology 3
BIO 350 Cardiovascular Physiology 3
BIO 352/352L Botany 4
BIO 498/499 Independent Study in Biology^ 1-4
BMS 318 Pathophysiology 3
BMS 332/332L Histology 4
BMS 370/370L Microbiology 4
CHE 315/315L Biochemistry 4
Total 14
${ }^{+}$Prephysician assistant students: In consideration of the entrance requirements for professional programs, pre-physician assistant students may opt to replace Comparative Anatomy \& Physiology (BIO 227 and BIO 228) and the corresponding labs with Human Anatomy and Physiology (BIO 211 and BIO 212) and the corresponding labs.
$\wedge$ Independent Study in Biology:

1. Within any student's declared concentration, he/she may take a maximum of 4 credits of Independent Study/Research (BIO 498 or BIO 499) to be counted as an "elective" within the concentration.
2. Within any student's declared concentration, he/she may take an additional 1-4 credits of Independent Study/Research to meet the maximum of 8 credits allowed provided he/she receives preapproval from the concentration faculty. The additional 4 credits can be applied only to the "open electives."
3. If a student declared in one concentration wishes to take an additional 1-4 credits within another concentration, he/she may do so. These credits can be counted only as "open electives." The credits may not count as "Biology nonconcentration 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 September 1 in the fall term of their senior year.
3. Departmental honors students are required to take BIO 399H (Honors Research in Biological Sciences).
4. Students must take an oral examination in areas related to the proposed student project, which is administered by a departmental committee composed of a minimum of three members of this department, including the sponsor of the project and the department chairman (who serves as committee chairman). Note: It is the student's responsibility to obtain a sponsor for his or her project prior to this examination.
5. Successful completion of a senior research project (for example, BIO 498 and/or BIO 499) is required. The project must include: 1) a written proposal; 2) 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 or another faculty member approved by the department chair; 3) the presentation of the outcome of the research project in the written format approved by the department; 4) 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 faculty of the department and their research interests is available to each student. The list consists of faculty members' office locations, major fields of interest, current research, and/or current listings of research publications. Copies of such publications are available on reserve in the library.


## Biology Prehealth Professions Students

The Department of Biological Sciences provides undergraduate students (in any of the concentration curricula) who are interested in a career as a health professional with a comprehensive curriculum and the appropriate educational background necessary to meet the entrance requirements of professional schools, including medicine (allopathic, osteopathic and veterinary), dentistry, physician assistant, optometry, chiropractic, physical therapy and podiatry. In addition to the regular course work, the qualified biology prehealth professions student also has the opportunity to experience other healthrelated and research-based opportunities which complete the students' academic profile. The Prehealth Professions Committee provides information concerning standardized admissions tests such as the Medical College Admissions Test (MCAT) and the Dental Admissions Test (DAT), as well as writing letters of recommendation on behalf of students.
Prehealth Professions Course Requirements
General Biology (BIO 101/101L and BIO 102/102L) General Chemistry (CHE 110/110L and CHE 111/111L) Organic Chemistry (CHE 210/210L and CHE 211/211L) General Physics (PHY 110/110L and PHY 111/111L) English (EN 101 and EN 102)

## Prehealth Professions Additional Requirements

1. It is highly recommended that students do not apply to have advanced placement in any of the prerequisite courses for professional school. Most professional schools want to see grades in these courses from an undergraduate institution.
2. Students should complete one year of mathematics that includes one semester of calculus (MA 141). Some professional schools may require a full year of calculus (MA 141 and 142).
3. Recommended electives include Bioethics (BIO 205), Developmental Biology (BIO 317/317L), Cell Physiology (BIO 346/346L), Molecular Genetics (BIO 471/471L), General Microbiology (BMS 370/370L) and Biochemistry (CHE 315/315L).

Eligible students, on recommendation by their prehealth professions adviser, are allowed to participate in Prehealth Professions Clinical Affiliation (BIO 397).

## Combined BS/MS in Biology and Molecular and Cell Biology

The Department of Biological Sciences offers a combined BS/MS program in biology and molecular and cell biology to qualified undergraduates in any of the concentration curricula: environmental science, evolution and genetics; molecular and cell biology; and physiology and comparative biology. (Students in the environmental science, evolution and genetics concentration may need to take additional courses.) 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. A minimum cumulative undergraduate GPA of 2.5 and 70 earned credits at Quinnipiac University are required for admission to the graduate program.

Students intending to pursue a combined degree are advised to elect PHY 110/110L and PHY 111/111L by the end of their sophomore year. BIO 282/282L, BIO 346/346L and CHE $315 / 315 \mathrm{~L}$ must be completed by the end of the junior year. BIO 317/317L and BMS 370/370L also are strongly recommended. Students in the combined BS/MS program complete graduatelevel biology courses during their senior year. A maximum of 9 credits may be used to fulfill both undergraduate and graduate requirements.

A bachelor of science in biology is granted upon satisfactory completion of all the undergraduate curriculum requirements. 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 the junior year. Interested students should contact the chair of the biology department. For further information on the combined BS/MS program, please refer to the graduate molecular and cell biology program.
Meeting the minimum admissions standards does not guarantee admission to the program.

## Minor in Biology

A minor in biology requires the completion of at least 20 credits (including five laboratory courses beyond BIO 101-102 or BIO 105-106) with a minimum cumulative GPA of 2.0. A minimum
grade of C-must be achieved in all courses for the minor. No more than 8 credits can be part of other major or minor programs. Only one course with the "BMS" designation can be applied to the minor. Under special circumstances, the chair of the department may approve minors with fewer credits or permit other exceptions. Students who wish to minor in biology are required to consult with the chair to design a minor that best meets their needs.

## Minor in Environmental Science

The environmental science minor is intended for students majoring in one of the sciences at Quinnipiac University who may be planning a career in the environmental field. The purpose of the environmental science minor is to provide students with an opportunity to study ecosystems and understand environmental issues and the impact of human activity on those systems. Students who complete this minor are well prepared for graduate work or entry-level jobs working with environmental consulting firms, analytical laboratories, government agencies, or environmental advocacy or educational groups. The program consists of a minimum of 20 credits of biology with a minimum cumulative GPA of 2.0. A minimum grade of C - must be achieved in all courses for the minor, distributed between 12 credits of required courses and 8 credits of elective courses consistent with the following specifications: Course Title Credits

## Required Courses

BIO 352/352L Botany 4
BIO 353/353L General Ecology 4
BIO 358/358L Human Ecology 4
Electives (select two of the courses listed)
BIO 326/326L Animal Parasitology 4
BIO 351/351L Natural History of New England 4
BIO 354/354L Marine Ecology 4
BIO 356/356L Freshwater Ecology 4
BIO 476/476L Environmental Microbiology 4
CHE 215/215LAnalytical Chemistry 4

## Bachelor of Science in Psychobiology

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

## Bachelor of Science in Veterinary Technology

The BS in veterinary technology program is designed to meet the increasing need for qualified technologists in the clinical and biomedical sectors. The program's mission is to prepare students for career entry or advanced studies through its integrated liberal arts and professional curricula. This is accomplished while providing a supportive and stimulating environment for the intellectual and personal growth of the program's students.

At the current time, Quinnipiac University is not admitting students into this program.

## BS in Veterinary Technology Curriculum Course Title Credits

Fall Semester, First Year
BIO 101/101L Science (UC)
CHE 110/110L General Chemistry I
EN 101 Freshman Composition (UC)
MA 118 Quantitative Literacy (UC)
QU 101 The Individual in the Community

| Spring Semester, First Year |  |  |
| :--- | :--- | :--- |
| BIO 102/102L | Science (UC) | 4 |
| CHE 111/111L | General Chemistry II | 4 |
| EN 102 | Freshman Composition (UC) | 3 |
| UC | Social Sciences | 3 |
| BIO 115 | Administration in Veterinary Technology | 1 |
| BIO 199 | Veterinary Technology Seminar | 2 |

Total 17
Fall Semester, Second Year
BIO 227/227L Comparative Anatomy \& Physiology I
CHE 211/211L Organic Chemistry I
UC Social Sciences
PHY 101/101L Elements of Physics

## Spring Semester, Second Year

BIO 228/228L Comparative Anatomy \& Physiology II
BIO 298 Research Methods in Biology 3
CHE 211/211L Organic Chemistry II 4
QU 201 Seminar on National Community 3
Total 14

| Fall Semester, Third Year |  |
| :--- | :--- |
| BIO 326/326L Animal Parasitology | 4 |
| BIO 313/313L Introduction to Animal Science | 4 |
| BMS 370/370L General Microbiology | 4 |
| UC $\quad$ Humanities | 3 |

Total 15

## Spring Semester, Third Year

BIO 315/315L Clinical Veterinary Lab Techniques 4
BMS 372/372L Pathogenic Microbiology 4
UC Humanities 3
UC Fine Arts 3
QU 301 Seminar on Global Community 3
Total 17
Fall Semester, Fourth Year
BIO 413/413L Veterinary Technology I 4
BIO 414 Clinical Practice in Veterinary Tech. 4
BIO 417 Small Animal Diseases 3
MA 275 UC Elective 3
Open elective 3
Total 17
Spring Semester, Fourth Year
BIO 319/319L Biology of the Horse \& Agricultural Species 4
BIO 415 Veterinary Technology II 3
BIO 416 Clinical Practice in Veterinary Tech. 4
UC
UC elective
Total 15
Total credits 127
Placement in the English and mathematics courses is determined by examination and an evaluation of high school units presented. MA 118 or its equivalent is considered the minimum level of preparation for some advanced courses in the curriculum. Students intending to pursue graduate studies are advised to complete at least one semester of calculus. BIO 101-102 and MA 275 are required for graduation and may be used to meet core curriculum requirements where applicable. Students intending to pursue graduate studies are advised to substitute one year of physics (PHY 110/110L -PHY 111/111L) for PHY 101/101L. BIO 298 may be taken during the spring semester of the second year. Students must achieve a minimum GPA of 2.25 in their science courses to meet graduation requirements.

# Department of Chemistry and Physical Science 

Bachelor of Science in Chemistry<br>Bachelor of Science in Biochemistry<br>Prehealth Professions<br>Minor in Chemistry

The mission of the Department of Chemistry and Physical Science 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.

## Bachelor of Science in Chemistry or Biochemistry

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. 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.

## General Information

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. Mathematics requirements for the chemistry and biochemistry majors include MA 141-142 and MA 275 , which can be used to satisfy UC Quantitative Literacy and UC elective requirements.

Undergraduates enrolled in the chemistry or biochemistry majors must maintain a minimum grade of C in all chemistry, physics and mathematics courses. Any required course not listed in the course description section 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 chairperson. 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 is required of all students in these programs. This research project 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.

## BS in Chemistry Curriculum

## Course Title <br> Fall Semester, First Year

Credits
CHE 110 Science (UC) 4
EN 101 Freshman Composition (UC) 3
MA 141 Quantitative Literacy (UC)
MA 141 Quantitative Literacy (UC) 3

| QU 101 | The Individual in the Community |
| :--- | :--- |
| UC | Social Science |


| Spring Semester, First Year |  |  |
| :--- | :--- | ---: |
| CHE 111 | Science (UC) | 4 |
| EN 102 | Freshman Composition (UC) | 3 |
| MA 142 | UC elective | 3 |
| UC | Fine Arts | 3 |
| UC | Social Science | 3 |
|  |  | Total 16 |
| Fall Semester, Second Year |  |  |
| CHE 210 | Organic Chemistry I | 4 |
| CHE 215 | Analytical Chemistry | 4 |
| PHY 110 | General Physics I | 4 |
| MA 275 | UC elective | 3 |
|  |  | Total 15 |
| Spring Semester, Second Year |  |  |
| CHE 211 | Organic Chemistry II | 4 |
| PHY 111 | General Physics II | 4 |
| UC | Humanities | 3 |
| QU 201 | Seminar on National Community | 3 |
|  |  | Total 14 |

Fall Semester, Third Year
CHE 301 Physical Chemistry I 4
CHE 315 General Biochemistry 4
UC Humanities 3
Open elective 3
Total 14

| Spring Semester, Third Year |  |
| :--- | :--- |
| CHE 302 | Physical Chemistry II |
| CHE 305 | Instrumental Analysis |
| QU 301 | Seminar on Global Community <br>  <br>  <br> Open elective |

Fall Semester, Fourth Year
CHE 490 Chemistry Research I 3
CHE 475 Chemistry Seminar I 1
CHE 410 Advanced Inorganic Chemistry 3
CHE Chemistry elective 3-4
Open elective 3
Open elective 3
Total 16-17
Spring Semester, Fourth Year
CHE 491 Chemistry Research II 3
CHE 476 Chemistry Seminar II 1
CHE Chemistry elective 3-4
Open elective (if necessary) 1-3
Open elective (if necessary) 1-3
Open elective (if necessary) 1-3
Total 14-17
Minimum number of credits required for graduation: 120
BS in Biochemistry CurriculumIncreasing numbers of important scientificadvances in biology and medicine are focused onthe chemical interaction of molecules and require afundamental understanding of chemistry appliedto the life sciences. The BS in biochemistrymaintains the Quinnipiac tradition of a strongliberal arts education and a balance of sciencerequirements that provides competent trainingin chemistry with suitable applications inbiochemistry and a strong orientation in biology.
Course Title Credits
Fall Semester, First Year
UC Science (BIO 101 for majors) ..... 4
CHE 110 General Chemistry I ..... 4
EN 101 Freshman Composition (UC) ..... 3
MA 141 Quantitative Literacy (UC) ..... 3
QU 101 The Individual in the Community ..... 3
Total 17
Spring Semester, First Year
UC Science (BI 102 for majors) ..... 4
CHE 111 General Chemistry II ..... 4
EN 102 Freshman Composition (UC) ..... 3
MA 142 UC elective ..... 3
UC Social Science ..... 3
Total 17
Fall Semester, Second Year
CHE 210 Organic Chemistry I ..... 4
CHE 215 Analytical Chemistry ..... 4
PHY 110 General Physics I ..... 4
MA 275 UC elective ..... 3
Total 15
Spring Semester, Second Year
CHE 211 Organic Chemistry II ..... 4
PHY 111 General Physics II ..... 4
UC Humanities ..... 3
QU 201 Seminar on National Community ..... 3
Total 14
Fall Semester, Third Year
CHE 301 Physical Chemistry I ..... 4
CHE 315 General Biochemistry ..... 4
UC Humanities ..... 3
Advanced Biology elective ..... 4
Total 15
Spring Semester, Third Year
CHE 302 Physical Chemistry II or
CHE 304 Biophysical Chemistry ..... 4
CHE 305 Instrumental Analysis ..... 4
QU 301 Seminar on Global Community ..... 3
Advanced Biology elective ..... 4

Fall Semester, Fourth Year

| CHE 490 | Chemistry Research I | 3 |
| :--- | :--- | ---: |
| CHE 475 | Chemistry Seminar I | 1 |
| CHE 410 | Advanced Inorganic Chemistry | 3 |
| CHE 316 | Intermediate Biochemistry or |  |
| or CHE | Chemistry elective | $3-4$ |
| UC | Social Science | 3 |
|  | Open elective (if necessary) | Total 13-17 |

Spring Semester, Fourth Year
CHE 491 Chemistry Research II 3
CHE 476 Chemistry Seminar II 1
Chemistry elective 3-4
UC
Fine Arts 3

Open elective 3
Open elective (if necessary) 0-3
Total 13-17
Minimum number of credits required for graduation: 120
Advanced biology electives for the biochemistry major may be chosen from the following list of suggested electives or similar level biology courses. Check for prerequisites.

| Course | Title | Credits |
| :--- | :--- | ---: |
| BIO 282 | Genetics | 4 |
| BIO 346 | Cell Physiology | 4 |
| BIO 370 | General Microbiology | 4 |
| BIO 375 | Immunology | 4 |

## Prehealth Professions

The prehealth professions program provides an undergraduate student interested in a career as a health professional the appropriate educational background necessary to meet the entrance requirements of a variety of different professional schools, including medicine, podiatry, chiropractic, dentistry, optometry, osteopathy and physician assistant.

The curriculum consists of the program of study outlined for the biochemistry major, with chemistry and biology electives chosen specifically to meet the requirements of the majority of professional schools. Faculty advisers assist students in selecting courses and the Prehealth Professions Committee provides information concerning such admission tests as the Medical College Admission Test (MCAT).

## The Chemistry Minor

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
CHE 110 General Chemistry 3
CHE 110L Laboratory 1
CHE 111 General Chemistry II 3
CHE 111L Laboratory 1
CHE 210-211 Organic Chemistry I-II 6
CHE 210-211L Laboratory 2
CHE 215 Analytical Chemistry 3
CHE 215L Laboratory 1
Elective (select one of the courses listed or its equivalent)
CHE 301 Physical Chemistry I 3
CHE 301L Laboratory 1
CHE 305 Instrumental Analysis 3
CHE 305L Laboratory 2
CHE $310 \quad$ Qual. Org. Analysis 2
CHE 310L Laboratory 2
CHE 315 General Biochemistry 3
CHE 315L Laboratory 1

## Department of Computer Science and Interactive Digital Design

Bachelor of Science in Computer Science
Bachelor of Arts in Interactive Digital Design
Minor in Computer Science
Minor in Interactive Digital Design
Technology plays an increasingly important role in society today. Much of the new economy is based on advances in computers and communication. The Department of Computer Science and Interactive Digital Design emphasizes the synthesis of technological expertise with a traditional arts and sciences education to provide students with the best opportunity for success.

## General Information

The Department of Computer Science and Interactive Digital Design offers two separate yet complementary majors. The computer science degree is designed around model curricular guidelines published by professional organizations in the field. The major in interactive digital design provides students with the opportunity to study digital design and interactive graphics, emphasizing both technological proficiency and artistic sensibilities.

## Bachelor of Science in 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. The core requirements are:
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 Applied 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

CSC 492 Senior Project $2 \quad 1$
MA 141 Calculus of a Single Variable

## or MA 229 Linear Algebra

The electives are chosen from the following list:

CSC 320 Compilers

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 375 Advanced Topics in Computer Science 3
MA 361 Numerical Analysis I 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 Computer Science and Interactive Digital Design. 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 Applied 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 Programming3
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 375 Advanced Topics in Computer Science 3

## Bachelor of Arts in Interactive Digital Design

The interactive digital design major provides students with in-depth hands-on experience in creating, designing and authoring original interactive art for CD-ROM, DVD, the World Wide Web, and desktop presentation. This major emphasizes artistic creativity, experimentation and technological competence grounded in a critical understanding of the arts and related areas of the humanities.

There are a total of 36 credits in the major, 27 of which comprise a core of nine courses. The remaining 9 credits (three courses) are chosen from a list of electives. A C- or better is required in all departmental prerequisites.

The nine core courses in the interactive digital design major include:

Course Title
IDD 110 Design Research \& Methods Credits

IDD 160
Digital Design I
IDD 161 Digital Design II
IDD 250 Interactive Narrative Forms
IDD 301 Motion Graphics I
IDD 302 3D Graphics \& Animation I
IDD 315 Scripting for Interactivity I
IDD 410 Advanced Interactive Authoring
IDD 480 Senior Seminar \& Portfolio
With the recommendation of the student's adviser, two electives are chosen from the following list:
IDD 210 Modern Design Culture
IDD 270 Type Design \& Production I
IDD 370 Type Design \& Production II
IDD 401 3D Graphics \& Animation II
IDD 405 Soundscapes
IDD 420 Alternative Interfaces
IDD 440 Motion Graphics II
A third elective can be chosen from the above list or from the following list:
AR 158 Photography I
AR 258 Photography II 3
IDD 300/400 Special Topics (as needed)
IDD 399/499 Independent Study
IDD 490 Internship
AR 240 Graphic Design
AR/PL 380 Interactive Arts 3
CSC 110 Programming \& Problem Solving
Substitutions to this list are permitted with prior approval of sthe student's adviser and the chair.


## Minor in Interactive Digital Design

The minor in IDD provides students with a basic literacy, understanding and competency for creating, designing and authoring original interactive art and design for CD-ROM, DVD, desktop presentation and for the World Wide Web. 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. The minor emphasizes artistic creativity, experimentation and technological competence grounded in a critical understanding of the arts and related areas of the humanities.
Minor Core Requirements ( 15 credits)
Course Title 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 301 Motion Graphics I 3
Minor Electives ( 3 or 4 credits)
At least one course must be selected in consultation with the chair of the department from the following:
Course Title Credits

IDD 210 Modern Design Culture 3
IDD 270 Type Design \& Production I 3
IDD 302 3D Graphics \& Animation I 3
IDD 315 Scripting for Interactivity 3
IDD 405 Soundscapes 3
IDD 300-400 Special Topics (as needed) 3
IDD 399-499 Independent Study 3
IDD 490 Internship 3
AR 240 Graphic Design 3
AR/PL 380 Interactive Arts 3
CSC 110 Programming \& Problem Solving 3
Substitutions to this list are permitted with the prior approval of the student's adviser and the chair.

## Department of English

Bachelor of Arts in English
Minor in English
The Department of English introduces students to the study of literature, rhetoric and composition, and how reading and writing together actively produce knowledge. The department's mission is to instill a love of language and literature in students by deepening their sense of the reciprocal and complementary relationship between reading and writing. The department views reading and writing as historically and culturally situated and interdependent activities; students develop an increasingly complex sense of what reading and writing entail.

The program in English provides a solid background in literary theory and in the history of literature, rhetoric and writing. Students learn to analyze, interpret and write about literature by studying a variety of literary periods, genres, major authors and rhetorical strategies. The trajectory of the curriculum progresses from the instruction of critical and creative reading techniques and introductory critical analysis in English 101 and 102, to the study of at least four periods of English and American literature, ending with a capstone Senior Seminar in literature.

Classroom instruction follows the belief that a thorough knowledge of literature and a complex understanding of a range of writing strategies are both requisite for graduate study in such fields as education, law and business or employment in English-related areas. The faculty believes that graduating Quinnipiac English majors should be thoroughly grounded in expository and argumentative writing strategies, should know how to read and think carefully about a variety of texts using a variety of critical and theoretical approaches, and should possess the basic skills necessary to conduct research.

The program prepares graduates who-in both their jobs and in their lives-are skilled writers, critical readers and thinkers, and avid students of literature.

## General Information

The Department of English supports four programs: the First-Year Writing program, the English major, the English minor, and the MAT in

English. Students usually apply for the major or minor during their freshman year or early in their sophomore year. They apply to the chair of English, Professor Robert Smart (CLA 1, Rm. 327, tel. 582-3325), who helps them construct their program of study and selects an adviser with whom the student meets periodically. Students in good academic standing are accepted into the major or minor and must maintain a 2.0 grade point average in the major or minor and must satisfy all liberal arts requirements. According to their inclinations and goals, English majors are encouraged to consider a double major or a minor in another field.

The Department of English supports the English Club, open to all Quinnipiac students, and Montage, the undergraduate literary journal. Students who meet the academic criteria can join Sigma Tau Delta, an international honor society for English majors and minors. For further information, please visit the Quinnipiac web site.

## Bachelor of Arts in English

The Department of English offers a four-year bachelor's degree program (minimum 39 credits) in English, American and world literatures. In addition, it allows students in other majors to earn a second major or a minor (19 credits). An emphasis on reading, critical thinking, research and writing produces graduates well-trained to negotiate constantly changing employment opportunities.

## The English Major Curriculum

The composition courses (preliminary to the major) impart ways of reading, thinking and writing that are crucial for the successful major. The major program emphasizes a three-pronged approach to understanding the importance of literature: writing, literary theory and criticism, and literary history. These three values are offered in a wide-range of courses including a balance of British, American and world literature, singleauthor courses, specialized thematic and genre courses, interdisciplinary and multicultural courses.

## The English Major Requirements (39 credits)

Distribution Requirements
Advanced Composition
Credits
One course from the following:
EN 201, EN 202, EN 212, EN 213, EN 214, EN 215
EN 302, EN 305, EN 351

## Period British

Three courses from the following:

- One course from Pre-1785: EN 341, EN 345, EN 348, EN 350
- One course from Post-1785: EN 352, EN 355, EN 326
- One course from either of the above Period English courses


## Period American

Two courses from the following:

- One course must be pre-1865: EN 365
- One course must be post-1865: EN 377, EN 380

Criticism \& Theory
One course from the following:
EN 204 [new], EN 304 (preferably in sophomore or junior year)
Shakespeare

- EN 343 (preferably in junior or senior year)

Multicultural/Women
One course from the following:
EN 235, EN 265, EN 338, WS 235, WS 338
Senior Seminar
24 credits of the major must be completed before taking this course: EN 460
English Electives
Three courses from the following:

- Any 200 -level or higher English courses

Note: English majors in the master of teaching program must take EN 325. For these students, EN 325 counts as a British period course.

## 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. Some 3-credit internships are accepted, but are taken in addition to the 39 -credit course requirement. Interested students should see their adviser.

## The Honors Program in English

English majors with high overall academic standing and a minimum 3.3 grade point average in the major may seek the recommendation of any English faculty member for admission to EN 470
(Senior Thesis). Students interested in this option should discuss the qualifications and options during the junior year, develop a thesis proposal with the counsel of the recommending instructor, and file an application by the November preceding the graduation date. High achievement in a senior thesis, combined with the English grade point average, may lead to the distinction of honors, high honors, or highest honors in English (distinct from the overall University awards).

## Career Opportunities

English majors (and double majors) have found employment in education, government, the law, public service, management, advertising, journalism, media work, and traditional and desktop publishing. Moreover, the blend of professional talents derived from training in creative thinking, critical reading, logic, organizing projects for presentation, and effective and varied writing, provides English graduates with a special flexibility rare among college graduates and prized by employers.

The English major offers ideal preparation for advanced study in librarianship, Internet publication and museum studies. In addition, the ability to write with precision, grace and substance is a crucial skill for those students seeking admission to law school. Students pursuing the English major with law school in mind should contact Professor Jessica Hynes, the Quinnipiac Pre-Law adviser (582-3688), and should prepare early to take the LSAT.

## The English Minor

The Department of English offers an English minor (literature track or writing track) of 19 credits beyond the composition courses, EN 101-102. Students interested in the English minor apply to the chair of English.

## Who Should Consider the English Minor?

- Students who love reading literature and who wish to foster their writing.
- Students whose advancement in professional careers will depend on sound writing, creative thinking, solid communication skills, and sound critical analysis of ideas presented orally and in writing.
Which Courses Are Required?
Literature Track Credits
EN 150 Advanced Revision \& Editing ..... 1
- two 200-level literature courses ..... 6
- four 300-level literature courses ..... 12
Strongly advised: two period courses
EN 343 (Shakespeare)
Writing Track 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 is 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 varieties 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 usually is 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:
CourseCredits
European History ..... 6
American History ..... 6
Global History ..... 6
Four Electives 200 level or above ..... 12
HS 303: Historiography \& Historical Methods ..... 3
HS 408: Seminar in History ..... 3
No more than three courses may be at the 100 level

The minimum requirement ( 36 credits) must be met with grades 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 grades 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<br>Minor in Studies in the Law

Quinnipiac University's BA in legal studies is designed to provide graduates with the full set of knowledge and skills needed to be successful in the evolving paralegal profession. The classic values of a liberal arts education are added to the critical thinking skills of the legal profession, producing graduates who possess both the traditional breadth of understanding of persons educated in liberal arts, and the depth of paralegal studies.

Quinnipiac's ABA-approved 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 paralegal profession. Hands-on computer classes provide students with exposure to the latest legal research techniques, including the use of nationwide online databases. Through the legal studies internship, students are able to integrate their class work with practical office experience. This combination of theoretical class work with real-world experience, along with exposure to the traditional liberal arts and business courses of Quinnipiac (including a minor in a related area of study), prepares legal studies graduates for a broad range of professional opportunities. Many graduates work as paralegals in the public and private sector and in other law-related positions. Other graduates have continued their education and become attorneys, teachers and business owners.

## Bachelor of Arts in Legal Studies

The legal studies department curriculum, approved by the American Bar Association, prepares students for careers as paralegals by combining a liberal arts education with skills necessary for those interested in law-related employment. 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.

The legal studies major requirements are:
Required courses: ( 25 credits)
Course Title Credits
LE 100 Orientation to Legal Studies 1
LE 101 Introduction to the American Legal System 3
LE 208 Legal Research 4
LE 210 Legal Writing 3
LE 301-302 Civil Procedures I \& II $\quad 6$
LE 480-481 Legal Internship I \& II 8
Elective courses: ( 12 credits)
Four electives chosen from the following. At least 9 credits must be at the 300 level.
LE 115 Criminal Law 3
LE 200 Special Topics 3
LE 250 Gender \& the Law 3
LE 260 Trial Techniques 3
LE 300 Special Topics 3
LE 310 Elder Law 3
LE 311 Administrative Agencies 3
LE 312 Family Law 3
LE 315 Wills, Probate \& Estate Administration 3
LE 320 Land Transfers \& Closing Procedures 3
LE 325 Alternate Dispute Resolution 3
LE 330 Business Entities 3
LE 340 The Constitution \& the Court 3
LE 345 Intellectual Property 3
LE 350 Federal Indian Law \& Policy 3

## Additional Requirements:

Legal studies majors also must take AC 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 must complete a minor in any other department within the University.

LE 480-481, Legal Internship I and II, are limited to legal studies majors and must be done within the fall and spring of the student's senior year. Students must take LE 100, LE 101 and LE 208 by the end of their sophomore year to successfully complete the degree requirements within four years.

## Studies in the Law Minor

The minor in Studies in the Law 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. 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.
Required courses: (7 credits)
Course Title Credits
LE 101 Introduction to the American Legal System 3
LE 208 Legal Research
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 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):
Course Title Credits

EN 372 Law in Literature
LW 121 Business Law \& Society
LW 122 The Law of Property, Sales \& Negotiable Instruments
MSS 440 Communications Law 3
PL 202 Logical Reasoning
PO 317 International Law
PO 353 American Constitutional Law 3
PO 354 Civil Rights I 3
PO 355 Civil Rights II 3
PO 357 Supreme Court \& Foreign Policy 3
PS 383 Psychology \& the Law 3
SO 383 Sociology of Law


## Department of Mathematics

Bachelor of Arts in Mathematics
Minor in Mathematics
Mathematics is 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.

Mathematics is both a subject with widespread applications to the sciences and social sciences and a subject of intrinsic intellectual interest. The mission of the Department of Mathematics is to provide students with a solid understanding of and appreciation for both aspects of the subject.

All 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.


## 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.

The major in mathematics consists of

1. The calculus sequence: MA 141, MA 142, MA 241, MA 242
2. Linear Algebra for mathematics majors: MA 229
3. MA 305
4. MA 321 and MA 341
5. The Senior Seminar: MA 490
6. Three electives chosen from the following:

Course Title Credits
MA 285 Applied Statistics 3
MA 361 Numerical Analysis 3
MA 365 Ordinary Differential Equations 3
MA 371 Mathematical Statistics 1 3
MA 372 Mathematical Statistics 2
MA 378 Mathematical Modeling 3
MA 441 Complex Variables 3
MA 451 Point-Set Topology 3
MA 580 Geometry 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 and MA 580.
- 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, MA 142, MA 229, and three electives chosen in consultation with the department chairperson. At least one of the three electives must be at the $300-l e v e l$. Courses numbered below MA 141 may be approved at the discretion of the department chairperson.

## Double Majors

The Department of Mathematics encourages double majors. Common double majors include computer science, economics, finance or chemistry.

## Department of Modern Languages

Bachelor of Arts in Spanish Language and Literature Minor in French
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 Spanish and French. It also offers instruction in German and Italian through the intermediate level, and instruction in Chinese, 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. Our 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.
The Spanish major consists of 36 credits as follows:

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

Demonstrated by completing the following courses or their equivalent
Course Title Credits

SP 301
Advanced Spanish I
SP 302 Advanced Spanish II
SP 312 Advanced Spanish Conversation 3
(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:
Course Title Credits
SP 243 Culture of Spain 3
SP 270 History of the Romance Languages 3
SP 373 Latin American Culture I
SP 374 Latin American Culture II
SP 376 Spanish Caribbean 3

## 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:

Course Title Credits
SP 317 Approaches to Literary Genres
SP 321 Masterpieces of Spanish Literature 3
SP 328 Spanish-American Literature from
SP 329 Spanish-American Literature from

SP 335
19th-Century Literature of Spain
SP 348 Spanish Drama \& Poetry of the Golden Age 3
SP 371 Contemporary Literature in Spanish 3
4. SP 450 Senior Seminar 3

## Internships

The department strongly advocates off-campus experience communicating in Spanish. Internships in area organizations such as radio and television stations, health care facilities, educational institutions and inner-city social work reinforce classroom practice.

## 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 Office of International Education for additional information).

## Minor in French or Spanish

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

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. (18 credits) To include: six courses, all of which must be taught in Spanish. SP 363 and SP 375 do not count for the minor. At least one of the six courses must be at the 300 level. In all courses for the minor a grade of C or higher must be achieved. Independent studies may not count toward minor. At least 9 credits must be taken on campus.

## Department of Political Science

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

To achieve this mission, the courses balance social scientific analysis with a focus on the politics and values of community. Students learn to become aware and informed of political processes and power; evaluate and construct logical accounts of political and social causation; take part in the process of social inquiry; and reflect on immediate experiences in social, political and/or governmental activities.

The political science major introduces students to the systematic analysis of politics in the areas of political theory, comparative politics, international relations and American government. Students in the major are required to complete an experiential learning program in the form of an internship, service learning course or political science course taken in Washington, D.C., or abroad. The capstone of the major is a senior seminar in which students engage major questions in political science and develop a sustained, independently conceived contribution to those questions in the form of a senior thesis project.

The department offers a minor that introduces broadly political dimensions to supplement a student's major field of study. The department also supports a variety of other minor programs including philosophy, women's studies, international studies, European Union studies, Latin American studies and Middle Eastern studies.

The department supports the QU Seminar Series, with courses that cover political concepts and modes of inquiry that will develop their ability to understand and participate in the political world.

## 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:

The core requirements ( 25 credits) for the majors in the political science program are:
Course Title Credits
PO 101 Introduction to Political Science; Justice, Politics \& Power
P0 131 Introduction to American Government \& Politics
PO 201 Political Inquiry 3

PO 211 Introduction to International Relations 3
PO 215 Political Theory 3
PO 395 Advanced Internship 3
PO 408 Senior Seminar 3
Electives ( $\mathbf{1 5}$ credits). Five political science courses or cognate (see below).
A. Political science courses:

PO 216 American Political Thought 3
PO 218 Politics of Health 3
PO 221 Introduction to Latin America 3
PO 231 Elections \& Political Parties 3
PO 245 International Political Economy 3
PO 247 Actors \& Processes in U.S. Foreign
Policy Formation
PO 270 State \& Local Government 3
PO 280 Congress \& the Presidency 3
PO 299 Independent Study in Political Science 3
PO 311 Topics in International Relations 3
PO 315 Democratic Theory \& Practice 3
PO 317 International Law 3
PO 325 Public Opinion Research 3
PO 331 Topics in Comparative Government 3
PO 332 European Politics 3
PO 333 Middle Eastern History \& Politics 3
PO 348 Political Communication 3
PO 350 Topics in Political Theory 3
PO 353 American Constitutional Law 3
PO 354 Civil Rights \& Liberties I 3
PO 355 Civil Rights \& Liberties II 3
PO 357 Supreme Court \& Foreign Policy 3
PO 360 Topics in American Government 3
PO 295 Internship in Political Science 1
PO 395 Advanced Internship 3
PO $399 \quad \begin{aligned} & \text { Intermediate Independent Study in } \\ & \text { Political Science }\end{aligned}$
PO 499 Advanced Independent Study in
Political Science
4
B. Cognate courses: In addition to political science courses, the following courses will also count as electives toward completion of the political science major.
IB 201 International Business 3
PS 261 Social Psychology 3
SO 264 Social Welfare Institutions 3

Experiential requirement: PO 395 Advanced Internship (3-6 credits) or equivalent approved by the department. Students should plan with their academic advisers early in order to complete this requirement before the start of their senior year. With departmental approval, PO 395 may be substituted with one of the following:

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


## Portfolio Requirement:

In addition, students in their senior year assemble a portfolio of representative academic work done in political science, which includes a senior thesis, internship paper and other key assignments.

## 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.

## Minor in Philosophy

This minor 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).

## Washington, D.C., Program

See page 39 for complete details. The Washington, D.C. semester programs are multidisciplinary, experiential learning programs bringing students from around the nation and the world to semesterlength internships, research projects and seminars in the nation's capitol. 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.

## Department of Psychology

Bachelor of Arts in Psychology
Bachelor of Science in Psychobiology
Minor in Psychology
The mission of the Department of Psychology is to introduce students in the major 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 is 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. Many 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.

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 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, 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. Of these, PS 206, PS 307, PS 308 and PS 409 must be taken sequentially. Before moving on to PS 307, students must receive a grade of C- or higher in PS 206 and have a psychology GPA that is above 2.0. Students complete a thesis in the capstone course, PS 409, Senior Seminar; PS 409 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 265, PS 311, PS 325, PS 371, PS 383). In addition, two psychology electives are required, one at the 200-level 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, which are described next.

## A. Human Services Concentration

Students may elect to enroll in the human services program within the general psychology major. The program prepares students for careers in counseling and related areas and provides the basis for graduate work in fields such as social work, counseling and school psychology.

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.

## B. Industrial/Organizational Psychology Concentration

Students may elect to enroll in the industrial/ organizational psychology program within the general 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.

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.
I/O psychology students must take PS 265, PS 366, PS 367 and PS 397 and one specialized elective to be determined.

## Bachelor of Science in Psychobiology

The psychobiology major is an interdisciplinary course of study that emphasizes the biological and social foundations of behavior.

The curriculum has been designed to meet the needs of students interested in the biological and behavioral sciences and prepare them for graduate study and professional work in fields such as neuroanatomy, neurophysiology, behavior genetics, ethology and psychopharmacology.

The program also is appropriate for students planning careers in medicine or related sciences.
Course Title Credits
Fall Semester, First Year
BIO 101 Biology 4
CHE 110 General Chemistry 4
UC English 3
QU 101 The Individual in the Community 3
UC Mathematics ${ }^{1}$ 3
Total 17
Spring Semester, First Year
BIO 102 Biology 4
CHE 111 General Chemistry 4
UC English 3
PS 101 Introduction to Psychology 3
MA 142 Calculus 3
or MA 275 Biostatistics
Total 17
Fall Semester, Second Year
BIO 227 Comparative Anatomy \& Physiology 4
CHE 210 Organic Chemistry 4
PS 307 Methods of Psychology I* 4
QU 201 Seminar on National Community 3
Total 15
Spring Semester, Second Year
BIO 228 Comparative Anatomy \& Physiology 4
CHE 211 Organic Chemistry 4
PS 351 Brain \& Behavior 3
UC Social Sciences (usually PS 272) 3
Total 14

## Fall Semester, Third Year

| BIO 346 | Cell Physiology | 4 |
| :---: | :---: | :---: |
| PHY 110 | General Physics | 4 |
| PS 309 | History \& Systems of Psychology | 3 |
|  | Independent Research | 3 |
| UC | Humanities | 3 |
|  |  | Total 17 |
| Spring Semester, Third Year |  |  |
| BIO | 300 -level biology course in consultation with the psychobiology professor |  |
| BIO 298 | Research Methods | 2 |
| PHY 111 | General Physics | 4 |
| PS 352 | Animal Behavior | 3 |
| UC | Fine Arts | 3 |
|  |  | Total 16 |
| Fall Semester, Fourth Year |  |  |
| CHE 315 | General Biochemistry | 4 |
|  | Biology elective ${ }^{2}$ | 4 |
| QU 301 | Seminar on Global Community | 3 |
| UC | Humanities | 3 |
| UC | Social Sciences | 3 |
|  |  | Total 17 |
| Spring Semester, Fourth Year |  |  |
| BIO 282 | Genetics | 4 |
| BIO | Biology Elective ${ }^{2}$ | 4 |
| PS 409 | Psychology Seminar | 3 |
| UC | Humanities | 3 |

Total 14

1. The mathematics requirement depends upon the high school entrance units presented (most students will probably enroll in MA 140 or 141).
2. Biology electives should be selected, with faculty guidance, for their suitability to the goal of the individual student.
3. Students may elect to have a chemistry minor with the psychobiology major with the addition of one course: CHE 215, Analytic Chemistry.
4. Psychology electives should be selected after consultation with the student's faculty adviser. Recommended courses include:

## PS 232 The Concept of Personality

PS 261 Social Psychology \& Its Development
PS 272 Abnormal Psychology
PS 311 Group Tests \& Measurements
PS 354 Sensation \& Perception
PS 355 Psychology of Learning
PS or BIO course chosen in consultation with adviser
PS or Blo

## Minor in Psychology

Students wishing to minor take 18 credits in psychology. 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.

## Department of Sociology

Bachelor of Arts in Sociology
Bachelor of Arts in Gerontology
Bachelor of Arts in Social Services
Bachelor of Arts in Criminal Justice
Minor in Anthropology
Minor in Criminal Justice
Minor in Gerontology
Minor in Sociology
The Department of Sociology offers four undergraduate majors, including a degree in sociology-the traditional discipline - and three sub-disciplines: criminal justice, gerontology and social services. All majors in the department share common goals: to provide students with a thorough understanding of the social factors that influence human behavior and to offer students the tools to continue their education in graduate school or assume careers in our rapidly changing social institutions. In each of the four degree programs, student learning is carried out through an integration of theoretical course work in the classroom and applied fieldwork in the community. Graduates of the department are currently represented in careers in teaching, law enforcement, social work, health care, law, corrections, public administration, medicine and public policy.

The program in social services integrates a traditional liberal arts education with the specialized training and field background that a student will find helpful in pursuit of a career in the social services. Each student's education occurs both in the classroom and in community agencies. The program-both in the classroom and out-is designed to acquaint students with the nature of social problems, examine how organizations deal with these problems, learn about the people who are being served, and discuss the major policy choices available to society. Students are prepared to enter careers in the social service arena or to continue their education in fields such as social work, criminal justice and public administration.

The state-licensed program in gerontology prepares students to work for and with older Americans. The interdisciplinary curriculum provides background in such additional fields as sociology, psychology, anthropology, health administration, and biology, all of which are relevant to the study of aging. Through a combination of learning in the
classroom and in the community, students receive a broad understanding of the aged in today's society.

The program in criminal justice educates students in a wide range of issues on the social nature of crime and on the strategies and policies of social control. The interdisciplinary curriculum draws not only from criminal justice studies, but from sociology, psychology and legal studies as well. The integration of a liberal arts education and specialized training offers students a solid background in criminal justice. Students are prepared to enter careers in a variety of law enforcement agencies or to continue their education in fields such as criminal justice, law, social work or public administration.

Each of these programs has at least one required internship in the community, in widely varying sites that include governmental agencies, health-related settings, public school systems, probation offices, women's shelters, nursing homes, hospital emergency rooms, prisons, police departments, substance abuse facilities, senior centers, and community homes for the developmentally disabled, to name only a few. Career opportunities for graduates are just as varied.

The student who chooses to major in sociology, social services, gerontology or criminal justice must confer with the department chairperson at an early date to plan the program in the major.

## 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, political-legal and health care systems are all experiencing stress. Students in this major study and analyze this change and explore potential solutions to such 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 non-profits. Students are prepared to continue their education or assume careers in areas such as teaching, social work, public administration, health care, law and criminal justice.

## Requirements (37 credits)

1. Introductory Sociology (SO 101), Orientation to Sociology (SO 205) and at least two of the following:

Course
SO 201
Title
Credits
SO 225
SO 304
SO 241
2. Internship (SO 292).
3. Five electives in sociology, at least two of which must be at $300-$ level.
4. Social Stratification (SO 244), Evaluation Research (SO 381), Social Policy (SO 385).

## Bachelor of Arts in Gerontology

Quinnipiac is one of the few universities to offer an undergraduate major that anticipates one of the growing concerns 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, health administration and law. Gerontology majors also complete two semester-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.

## Requirements (39 credits)

Course Title Credits

1. Required courses for the major in gerontology:

SO 101 Introductory Sociology* 3
PS 101 Introductory Psychology* 3
or PS 133 Developmental Psychology
GT 205 Orientation to Gerontology 1
GT 263 Sociology of Aging 3
GT 365 Aging: Problems \& Policies 3
PS 234 Adult Development 3
BMS 200 Biology of Aging* 3
GT 381 Evaluation Research 3
GT 385 Senior Seminar 3
2. Two internships in the community

GT 292 Internship in Gerontology 3
GT 392 Advanced Internship 3
3. Two courses from the following:

SO 241 Race \& Ethnicity* 3
SO 255 Sociology of the Family* 3
SO 264 Social Welfare* 3

SO 266
Population \& Society*
SO 280
Illness \& Disability*
SO 305
Death, Grief \& Bereavement

$$
\text { SO } 312
$$

Social Organizations \& Behavior
Social Stratification*
Ethics \& Human Values*

## PL 234

Philosophies of Health*

## PL 268

Life \& Life After Death
PS 325
Health Psychology*3

Any health administration course
4. Three courses from the following:

GT 300 Special Topics
GT 305 Death, Grief \& Bereavement 3
GT 310 Elder Law 3
GT 311 Introduction to Social Work 3
GT 315 Case Management 3
GT 318 Therapeutic Recreation 3
GT 325 Counseling Older Clients 3
GT 270 Program Planning 3
*These courses also satisfy University Curriculum requirements.

## Bachelor of Arts in Social Services

American society is increasingly faced with challenges in delivery of social services to a growing set of underserved populations. For students who want to work within the social service delivery sector, this major provides a perfect background. Students choose courses from among four specialized service areas: health, welfare, justice and aging. All students complete two semester-long internships in area agencies such as those providing support services for battered women, neglected children, people with disabilities, veterans and those who are incarcerated. Students are prepared to continue their education or assume careers in areas such as social work, public health, public administration and criminal justice.

## Requirements (37 credits)

1. Introductory Sociology (SO 101), Orientation to Sociology (SO 205) and at least two of the following:
Course Title Credits

SO 225 Social Problems 3
SO 264 Social Welfare 3
SO 266 Population \& Society
2. Internship (SO 292)
3. Internship (SO 392)
4. Minimum of two courses each in two of the following areas: Health, Welfare, Justice \& Aging
5. Social Stratification (SO 244), Evaluation Research (SO 381), Social Policy (SO 385)

## 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. Required internships assure students of practical applications of theoretical material. Students are prepared to continue their education or assume careers in law enforcement, corrections, law, social work, public administration, teaching and international peacekeeping.

## Requirements ( 37 credits)

1. Orientation to Criminal Justice (CJ 205), Introduction to Sociology (SO 101), Crime \& Society (CJ 283), Criminal Law (LE 115), Criminal Justice Systems (CJ 335), Research Methods in Criminal Justice (CJ 381) and Senior Seminar (CJ 385).
2. One internship in the community (CJ 392) is required.


| 3. One or two crime typologies courses* | from the following: |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| CJ 232 | Women in the CJ System | 3 |
| CJ 240 | Organized Crime | 3 |
| CJ 250 | Youth Crime | 3 |
| CJ 262 | Politically Motivated Crime | 3 |
| CJ 271 | Public Order Crime | 3 |
| 4. One or two criminal justice in practice courses* from the |  |  |
| following: |  |  |
| CJ 241 | Police \& Policing | 3 |
| CJ 243 | Investigative Techniques | 3 |
| CJ 251 | Probation, Parole \& Community Corrections | 3 |
| CJ 261 | Prisons \& Jails | 3 |
| *Students need a total of 9 credits from crime typologies and |  |  |
| criminal justice in practice courses. They may take one from |  |  |
| crime typologies and two from criminal justice in practice, or |  |  |
| vice versa. |  |  |
| 5. Two courses from the following advanced-level courses: |  |  |
| CJ 241 | Racial \& Ethnic Groups | 3 |
| CJ 260 | Social Control \& Deviance | 3 |
| CJ 300 | Special Topics | 3 |
| CJ 330 | Perspectives on Violence | 3 |
| CJ 340 | Practicum in Alternatives to Violence | 3 |
| CJ 343 | Forensic Issues in Law Enforcement | 3 |
| CJ 344 | Social Stratification | 3 |
| CJ 350 | Practicum in Negotiation Skills | 3 |
| CJ 353 | Sexual Violence | 3 |
| CJ 355 | Crime \& the Media | 3 |
| CJ 370 | Constitution, Ethics \& Policing | 3 |
| CJ 380 | Criminal Justice Policy | 3 |
| CJ 383 | Psychology \& the Law | 3 |
| CJ 394 | Internship | 3 |
| CJ $399 / 499$ | Independent Study | 3 |
|  |  | 3 |

## Minor Programs

A minor in sociology, gerontology, criminal justice or anthropology consists of 18 credits of course work in the field. Students who wish to minor must confer with the department chairperson to select those courses that enable them to pursue a particular interest or select those courses most related to their major field.

## Department of Visual and Performing Arts

Bachelor of Arts in Theater
Minor in Fine Arts
Minor in Interactive Arts
Minor in Music
Minor in Theater
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, theater and music. Courses in the history and performance techniques of the respective disciplines are enriched by an active theater production program and performing ensembles. Students may major in theater or minor in fine arts, interactive art, theater or music. Students also may design a major in a field of visual or performing arts through the College of Arts and Sciences' independent major program.

The popularity of the department's theater major and minors (in fine arts, interactive arts, music and theater studies) enables the department to have a multifaceted role.

## 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 and 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 and 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.

## Departmental Core Requirements (28 credits) <br> 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

3
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 3
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.

## 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 $220 \quad$ Voice \& Movement
DR 240, 241
or DR 242 Scenic, Lighting or Costume Design
DR 260 Acting for Film/TV
DR 375 History \& Literature of Contemporary Theater
DR $350 \quad$ Playwriting

## 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 $220 \quad$ Voice \& Movement for Actors
DR 350 Playwriting
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 (9 credits)
Students choose three courses from the following list, chosen in consultation with adviser:


Course Title Credits
DR 380 Theater Administration 3
DR 191 Theater Practice I 3
DR 291 Theater Practice II 3
DR 391 Theater Practice III 3
DR 242 Costume Design for the Theater 3
DR 241 Lighting Design for the Theater 3
DR 240 Scenic Design for the Theater 3
Theater and Community Track (9 credits)
Course Title Credits
DR 350 Playwriting 3
DR 310 Seminar/Lab in Community Focused Theater 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 Programs

## Fine Arts

The Department of Visual and Performing Arts offers a minor for students interested in exploring the arts. Students electing this minor will complete 18 credits under one of the following three tracks.
Fine Arts: Art History Track
Either AR 102 or AR 103
Any two of the following: AR 102, AR 103, AR 104 or AR 105 Any three 300-level art history courses
Fine Arts: Studio Art Track
Either AR 102 or AR 103
AR 140
AR 251
One other 200 level studio art course or AR 158
Two 300 level AR course at least one of which must be a
studio course

## Fine Arts: Interdisciplinary Track

Students who want to explore the links between visual and performing arts take "Art History: Ancient through Medieval" (AR 102) or "Art History: Renaissance through Contemporary" (AR 103), and five courses in art, music, film and/or theater/drama. Two courses must be at the 200 level or higher.

## Interactive Arts

Focuses on the interactive capabilities of the digital arts in conjunction with studio art. May include courses in digital art, animation, web design, graphic design, photography and/or studio art. In consultation with the chair, students will select appropriate IDD and AR courses to complete this minor (18 credits).

## Music

A major international art form, music brings people together in a common experience, and gives each student lifelong aesthetic pleasure. The minor combines history, theory, composition and applied guitar (18 credits).
Required courses:
Course Title Credits

MU 130 Understanding Music 3
MU 230 Music Theory I
MU 330 Music Theory II
3
MU 240 Applied Guitar for Minors I
MU 340 Applied Guitar for Minors II
Electives:
Music Elective
Applied Music Elective

## Theater

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

Quinnipiac's unique relationship with the nationally renowned Long Wharf Theatre in New Haven provides students with opportunities for performance and production work in a professional theater setting. 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.

The Quinnipiac University Theater for Community produces two productions each year at the

Long Wharf Stage II theater. The 4th Wall student theater group produces original one-acts, comedy revues, musicals, and staged readings throughout the school year (18 credits).

Required courses: DR 140 (Stagecraft), DR 160 (Introduction to Acting), DR 230 (Directing) or DR 350 (Playwriting), DR 270 (Theater History, Part I) or DR 275 (Theater History, Part II), and any two, 200- or 300-level theater courses.

## Performing Arts Workshop

The department invites participation in musical performance workshops which carry an optional 1-credit academic credit, 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) and MU 240 (Guitar).

## Interdisciplinary Minors

Minor in Asian Studies
Minor in International Studies
Minor in Latin American Studies
Minor in Middle Eastern Studies
Minor in Science and Values
Minor in Women's Studies

## 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 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
Open Electives ( 6 credits)
AN 337 Non-Western Medicine 3
PO 111 International Relations 3
PO 331 Topics in Comparative Government 3

## 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 planning on attending law or graduate school in fields such as English, history, legal studies, mass communications, political science, psychology, social services, sociology and Spanish. International studies minors are required to complete 18 credits in four years as is the case in other programs. Students are required to meet with their adviser for course choices ideally toward the end of their sophomore year or the beginning of their junior year.

## Course Structure

Students are required to take a minimum core of requirements within the 18 -credit minor program (at least 6 credits of which are 300-level courses) as follows:

1. Two world language courses: these must be advanced courses at the 200-level or above. In languages without advanced course offerings, two courses in an additional language. The sequence of these courses can be decided with the consent of your adviser. Languages offered include Spanish, French, German, Italian, Chinese and Japanese.
2. A course on a non-American culture, in history, art, comparative literature, anthropology, etc. Examples include:

## Course <br> Title <br> Credits

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
AN 101 Introduction to Cultural Anthropology 3
AN 201 Cultural Worlds 3
AN 337 Non-Western Medicine 3
SP 363 20th-Century Latin American Fiction 3
SP 375 Pre-Columbian America 3
3. A capstone course in international studies:

PO 321 with an international focus is a required course for all students who choose a minor in international studies. For political science majors, substitute PO 311 or PO 331.
4. A course in international business/economics at the introductory or advanced level depending on the student's major concentration.

Title
Credits

IB 201
IB 280
IB 311
IB 324
IB 325
International Economics 3
International Business 3
International Field Experience 3
International Marketing 3
International Business Negotiation 3
International Trade, Investment \& Competition
5. A course in geography, philosophy or political science. Examples are:
GP 101 Introduction to Geography 3
GP 200 Special Topics in Geography 3
PL 238 Philosophies of the Future 3
PL 265 Living Religions of the World 3
PO 211 Introduction to International Relations 3
PO 317 International Law 3
PO 321 Comparative Politics 3
In addition, students are encouraged, but not required, to take off-campus studies, either in the form of study abroad or an internship in, for example, Washington, D.C.

## Minor in Latin American Studies

Quinnipiac's minor in Latin American studies combines the study of Latin America's vital and diverse business, cultural, economic, health, media and political environments as part of an interdisciplinary program of studies. University faculty and guest lecturers from many disciplines offer course work and share their scholarly passion about Latin America with Quinnipiac students. Latin America is poised to become one of the most important regions for the United States in the 21st century. Students minoring in Latin American studies are required to take one cornerstone course, one capstone course, and four elective courses selected from a list of more than 10 courses, including an internship. The program offers two tracks-one emphasizing Spanish and another emphasizing study abroad.
Director: Professor Margarita Diaz 203-582-8785

## 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
ABR 102
HBR 101
HBR 102
HS 307
HS 328
HS 333
PL 265
PO 333
Elementary Arabic II
Elementary Modern Hebrew I
Elementary Modern Hebrew II
The Holocaust
Jewish History
The Middle East, 1300-1919
Living Religions of the World
Middle Eastern History \& Politics

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 Science and Values

This interdisciplinary program seeks to introduce students to the social, political, economic and ethical issues raised by the dominant place that science has assumed in our world. For this program, science is defined broadly to encompass both scientific theory and practical applications of scientific knowledge. The minor in science and values therefore includes consideration of technology, the practice of medicine, and aspects of the human sciences in addition to the traditional physical, chemical and biological sciences. The purpose of a minor in science and values is to give students the skills to understand and to prepare for changes in science, technology and health care, and to evaluate the ways in which these changes impact society. A science and values minor provides an understanding of the pace of change in science and medicine, and
develops critical thinking and writing skills applicable to a broad range of professional pursuits including technical writing, science journalism and patent law. One specific aim of the program is to expose students to a wide range of courses offered by different schools throughout the University, while giving them 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 ethical issues on topics relating to science, technology and health.

To complete a minor in science and values students are required to complete six courses (18 credits). Students take SV 101: Introduction to Science, Technology, Health and Human Values, and SV 301: Science, Technology and Health Care: Present \& Future Challenges. 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 Non-Western Medicine 3
BMS 117 The Human Organism 4
BMS 162 Human Health \& Disease 4
BIO 205/PL 222 Bioethics 3
BIO 222 Evolution in Biology \& Literature 3
ISM 101 Principles of Information Technology 3
GT 305 Death, Grief \& Bereavement 3
HM $101 \quad$ Organization \& Agencies of Health 3
HM 202 Introduction to Public Health 3
HM 217 Health Economics 3
HM/PO 218 Politics of Health 3
HM $310 \quad$ Health \& Disease in Less
Developed Countries
HS 330 The History of Western Medicine 3
PL 220 Ethics \& Human Values 3
PL 234 Philosophies of Health, Healing \& Medicine 3
PL 235 Philosophy of Science 3
PL 238 Philosophies of the Future 3
PS 325 Health Psychology 3
SO 266 Population \& Society 3
SO 280 Illness \& Disability 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 Sports Studies

Whether as a participant in sports or as a spectator, people throughout the world have contributed to the creation of a mega-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 industries. 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 sciences), 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 105/MEP 105 Video Essentials-Sports Broadcasting 3
SPS 201/AT 201 Medical Aspects of Sport \& Activity 3
SPS 226/MA 226 Baseball \& Statistics (UC) 3
SPS 240/PL 240 Philosophy of Sport 3
SPS 307/SO 307 Sociology of Sport 3
SPS 311/PRR 311 Sports Public Relations 3
SPS 325/EC 325 Sports Economics 3
SPS 352/HS 352 History \& Social Impact of Baseball 3
SPS 361/JRN 361 Sports Reporting 3
SPS 420/MSS 420 Sports, Media \& Society 3
SPS 488 Internship 3
SPS 499 Independent Study 3

## Minor in Women's Studies

Women's Studies is an interdisciplinary field that takes the study of women and gender as its subject. The women's studies program has three purposes. First, it introduces students to the experiences and achievements of women, and their treatment by society here and now, as well as in earlier historical times and in other geographical places. Second, it examines gender as a social construct by taking it as the primary focus of analysis and raising questions about its impact on traditional disciplines. This enables students to examine the content of other courses in new ways. Third, it promotes interdisciplinary understanding of women's experience by requiring students to take collateral courses in several academic areas in the humanities and the social sciences and by providing an integrative seminar.

For a minor in women's studies, students take six courses. WS 101, Introduction to Women's Studies, is recommended. WS 301, Seminar in Women's Studies, is required during the junior or senior year. The other courses should include at least three different disciplines and be selected from the following:
Course
Title
Credits
WS 210
Human Sexuality
3
WS $219 \quad$ Women in Political Thought 3
WS $232 \quad$ Women in the Criminal Justice System 3

Women's Literature (UC)
3
WS 250 Gender \& the Law 3
WS $255 \quad$ Sociology of the Family (UC) 3
WS $260 \quad$ Psychology of Men 3
WS 262
Psychology of Women (UC) 3

## WS 265

Sociology of Work 3
WS $285 \quad$ Protest \& Change 3
WS 287 Women \& Public Policy 3
WS $302 \quad$ Women, Health \& Aging 3
WS 304 Sociology of Gender 3
WS $308 \quad$ Women in America, 1770-1920 3
WS 309

## WS 310

Women in America, 1920-19903

Cross-Cultural Perspectives on Gender, Sex \& Sexuality 3
WS 311 Diversity in the Media 3
WS 315 Women Artists: Sex, Lies \& Handbags 3
WS $330 \quad$ Philosophy and Gender 3
WS 335 Images of Women in Psychology \& Lit. 3
WS 338 American Literature by Women of Color 3
WS 345 Media Audiences 3
WS $370 \quad$ Intimate Partner Violence Seminar 3

## School of Business

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## School of Business

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

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| :---: | :---: | :---: | :---: |
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| Departments/Programs |  |  |  |
| Department | Chair | Office | Phone |
| Accounting | Scott Lane | SB 228 | 582-8367 |
| Economics | Donn Johnson | SB 216 | 582-8205 |
| Finance | Thomas Coe | SB 221 | 582-3455 |
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| International Business | Chad Nehrt | SB 223 | 582-8303 |
| Management | Dale Jasinski | SB 225 | 582-3388 |
| Marketing and Advertising | Abhik Roy | SB 219 | 582-8465 |

## Mission Statement

The School of Business 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 <br> Course Title Credits

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
AC 101 Introduction to Financial Accounting 3
AC 102 Managerial Accounting 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
ISM 101 Principles of Information Technology 3
LW 121 Business Law and Society 3
$\begin{array}{lll}\text { MG 210 } & \text { Essentials of Management \& } \\ & \text { Organizational Behavior } & 3\end{array}$
MG 211 Operations Management 3
MK 201 Marketing Principles 3
SB $450 \quad$ Strategic Integrated Management 3
Total 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 6 required credits of University Curriculum electives.

## Career Services

In the School of Business, members of the Office of Career Services 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 minimum of 57 credits with a GPA of 3.0 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. Students who have completed 87 or more credits with a GPA between 2.6 and 3.0 may submit a written appeal for approval to complete an internship for credit. 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.

## Degrees in Business

## Bachelor's Degrees

Accounting
Advertising
Biomedical Marketing
Economics
Entrepreneurship and Small Business Management
Finance
Information Systems Management
Information Systems Management and Accounting
International Business
Management
Marketing

## Certificate Programs

Export Marketing
Health Care Compliance
International Purchasing
Long-term Care Administration

## Master's Degrees

Master of Business Administration
with electives available in:
Computer Information Systems
Finance
Health Administration
Management
Marketing
MBA/CFA ${ }^{\circledR}$ (Chartered Financial Analyst Track)
MBA/HCM (Health Care Management)
MBA/SCM Track (Supply Chain Management)
Master of Science in Computer Information Systems
Master of Science in Organizational Leadership
Fast Track Combined BA/MBA Program
Fast Track Combined BS/MBA Program
Combined BS/MS in Computer Information Systems
JD/MBA
JD/MBA in Health Care Management

## 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.

The Fast Track BS/MBA and BS/MS programs are designed for outstanding undergraduate School of Business students. Options are available within the MS in computer information systems and master of business administration programs. 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 pages 157-158 of this catalog.

## Department of Accounting

Bachelor of Science in Accounting
Bachelor of Science in Information Systems
Management and Accounting
Minor in Accounting
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 Outcomes of the Program

Graduates of the accounting program demonstrate technical knowledge and skills, such as:

- classifying-identifying the appropriate accounting treatment of events and transactions
- measuring-calculating inventory, cost of goods sold and depreciation using various accounting methods
- reporting-learning to identify the accounting principle or constraint that leads to a particular treatment and to prepare financial statements that comply with principles generally accepted in the U.S.
- auditing and analytical skills-understanding and applying generally accepted auditing stan-dards-the guidelines auditors use to ensure accuracy, consistency and verifiability. Students also demonstrate analytical skills by completing an audit simulation in accounting systems, determining when specific performance measures are used and the specific cost of allocating procedures.
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, accounting compilations and review. Some graduates go into management and private industry accounting, where they prepare financial statements for external reporting, develop budgets, perform cost analyses or internal audits. An accounting background is highly appreciated in industry; many CEOs and presidents come from accounting and finance departments.

## CPA Exam

Specific requirements to sit for the CPA exam vary by state and are established by each state's board of accountancy. Students who plan to take the CPA exam should consult with the appropriate state board to determine the specific state requirements that would apply to them.

## Bachelor of Science in Accounting

A total of 125 credits is required for graduation with the degree of BS in accounting. A course in accounting or law with a grade of D or lower must be repeated.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
Accounting Core (27 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 405 Accounting for Business Combinations 3
AC 411 Auditing Theory \& Practice 3
AC 412 Advanced Auditing Theory \& Practice 3
AC 431 Federal Income Tax Procedure 3
AC 432 Advanced Federal Income Tax Procedure 3
Accounting Elective (select one-3 credits)
AC 402 Internship Program 3
FIN (any) Finance Elective 3
LW 122 Law of Property, Sales \& Negotiable Instruments 3
Open Electives (12 credits)

## Bachelor of Science in Information Systems Management and Accounting

Students who wish to specialize in information systems management with applications in accounting may earn a dual degree in information systems management and accounting. For a description of this program, see page 88.

## 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 complete AC 101 Financial Accounting and AC 102 Managerial Accounting. In addition, students must take AC 305 Intermediate Accounting I. The remaining three courses may be selected from the following:
AC 306 Intermediate Accounting II
AC 323 Cost Accounting
AC 335 Accounting Systems
AC 411 Auditing Theory \& Practice
AC 431 Federal Income Tax Procedure
AC 432 Advanced Federal Income Tax Procedure

## Department of Information Systems Management

Master of Science in Computer Information Systems (see p. 159)
Bachelor of Science in Information Systems Management
Bachelor of Science in Information Systems Management and Accounting
Minor in Information Systems Management
The Department of Information Systems Management is a supportive and inclusive learning community dedicated to the effective and ethical use and management of information systems in the personal, corporate and societal domains.

The mission of the department is to produce graduates who are academically prepared to enter the information systems profession, dedicated to the principles of lifelong learning, able to recognize the need to use information technology resources in a socially responsible manner, and committed to consistently using information systems in an ethically responsible manner.

In pursuit of this mission, the department fosters a supportive learning environment that provides students with opportunities to develop the expertise required to distinguish themselves academically and professionally. The department focuses on excellence in teaching, and provides a course of study that develops knowledge reinforced by interactive contemporary projects.

Information systems management majors complete an internship as part of their programs of study in preparation for careers in data management, network management, information systems security administration, systems analysis, web development and PDA applications support. Service learning is an integral program component. Students have an opportunity to work on projects that support public, private and nonprofit organizations while gaining first-hand experience in how these organizations function.

The department also collaborates with the accounting department to offer an undergraduate program of study in information systems management and accounting. A minor in information systems management is available as well.

## Bachelor of Science in Information Systems Management

## Learning Objectives of the Major in Information Systems Management

The information systems management program enables students to manage and work with information systems that meet business or organization requirements effectively; this means that students must understand the need for fault tolerant systems that are within the requirements of budgetary constraints, incorporate ethical and legal considerations, and meet specific enterprise goals, including quality requirements for customer service.

Students are provided information systemspecific skill sets, including:

- Analysis and design of information systems that meet enterprise needs. This includes developing a comprehensive understanding in the systems development life cycle, including planning, analysis, data gathering, and acquiring basic project management, data and process modeling, design options, construction, implementation and maintenance skills. Students also acquire basic skills in project management and project control. Among the specific courses that concentrate on these skills are ISM 270, ISM 351, ISM 370, ISM 427 and ISM 440.
- Use and experience with multiple design methodologies (such as the System Development Life Cycle, Agile Development and Joint Application Development), and multiple system models (procedural, enterprise, data-oriented and object-oriented models). Among the specific courses that support the development of these skills are ISM 351, ISM 370 and ISM 427.
- Experience in the use of multiple programming languages, which is used as a tool for system construction and modification, with an understanding of appropriateness for an application and the capabilities and limitations of a language. Among the courses supporting this skill set goal are ISM 110, ISM 210, ISM 301, ISM 381.
- Development of hardware, software and networking skills, including different computing platforms and operating environments. This also includes understanding networking concepts and applications. Among the courses designed to develop these skills are ISM 301, ISM 330, ISM 411 and ISM 484.

- Understanding of data management, including structured query language (SQL) structures and techniques; entity-relation diagrams (ERD); normalization and data optimization. Among the courses that develop this skill set are ISM 351, ISM 370, and ISM 427.
- Understanding of the role of information systems in organizations, including information technology for competitive advantage, value chain, enterprise resource planning; electronic business and electronic commerce; and supply-chain management. Among the courses designed to develop these skills are ISM 101, ISM 260, and ISM 270.
To assist students in meeting these goals, the program is built upon a core of required courses, a distribution of elective courses within the program, and a required internship.

As with all programs within the School of Business, students must meet the requirements of both the University Curriculum and the School of

Business core curriculum, as well as the specific requirements of the major for a total of 124
credits.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
Information Systems Management Core (29 credits) Course Title Credits
ISM 110 Introduction to Object-Oriented Programming 3
ISM 210 Advanced Object-Oriented Programming 3
ISM 270 E-Business Systems 3
ISM 301 Information Systems Hardware \& Software 3
ISM 330 Networking \& Telecommunications 3
ISM 351 Database Programming \& Design 3
ISM 370 Systems Analysis \& Design 3
ISM 427 Design \& Implementation of Information Systems in Emerging Environments
ISM 440 Project \& Change Management 3
ISM 484 ISM Internship
ISM Electives ( 6 credits)
Open Electives ( 6 credits)

## Bachelor of Science in Information Systems Management and Accounting

Students who wish to specialize in information systems management with applications in accounting may earn a dual degree in information systems management and accounting by completing the requirements of the University Curriculum, the School of Business core curriculum and the specific requirements outlined below for a total of 134 credits.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
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 Tax Procedure 3
AC 432 Advanced Federal Income Tax Procedure 3
Information Systems Management Course Work ( $\mathbf{2 4}$ credits)
ISM 110 Introduction to Object-Oriented Programming 3
ISM 210 Advanced Object-Oriented Programming 3

| ISM 270 | E-Business Systems | 3 |
| :--- | :--- | :--- |
| ISM 301 | Information Systems Hardware \& Software | 3 |
| ISM 330 | Networking \& Telecommunications | 3 |
| ISM 351 | Database Programming \& Design | 3 |
| ISM 370 | Systems Analysis \& Design | 3 |
| ISM 440 | Project \& Change Management | 3 |

Open Electives ( 3 credits)

## Information Systems Management Minor

By earning a minor in information systems management, students become better educated consumers of information technology and develop valuable skills. The minor is structured to provide each student with an opportunity to select courses that support his or her own learning objectives.
The minor in information systems management requires the completion of 18 credits that must include:
Course Title Credits

ISM 101 Principles of Information Technology 3
ISM 110 Introduction to Object-Oriented Programming 3
ISM 270 E-Business Systems
Plus 9 credits of upper-level ISM courses

## Minor in Information Systems <br> Management for Communications Students

By earning a minor in information systems management, communications students become better educated in the information technology resources available to, and used within, the communications industry. The minor is structured to help students to understand and utilize information retrieval and deployment in an electronic world.
The minor in information systems management for communications students requires the completion of 18 credits that must include:
Course Title Credits
$\begin{array}{lll}\text { ISM } 107 & \begin{array}{l}\text { Principles of Information Technology } \\ \text { for Communication }\end{array} & 3\end{array}$
ISM 257 Information Mining 3
ISM 267 Tools \& Techniques for Online Communication 3
ISM 270 E-Business Systems 3
ISM 370 Systems Analysis \& Design 3
Plus 3 credits of ISM courses.

## Department of Economics

Bachelor of Science in Economics
Minor in Economics

## Bachelor of Science in Economics

Economics majors examine the development and application of economic theory, consider questions relating to social goals and policies, the role of a market economy in attaining those goals, and the relationship between market and non-market institutions. These studies are supplemented by specialized courses such as environmental economics, law and economics, international economics or labor economics.

## Goals

1. To learn the core theories of economics.
2. To become skilled in the application of these theories to business and social problems.
Economics majors have gone on to successful careers in government and business, not only as economists but as buyers, systems analysts, lawyers, securities analysts, bankers, stockbrokers, sales managers and researchers.
```
To earn a BS in economics, students must complete 125 credits.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
Required Courses for Economics Majors (12 credits)
Course Title Credits
EC 211 Intermediate Macroeconomics 3
EC 212 Intermediate Microeconomics 3
EC 250 International Economics 3
EC 365 Econometrics 3
Economics Electives ( 12 credits)
(EC courses numbered 200 or higher)
Open Electives (18 credits)
```


## Minor in Economics

Students wishing to augment their field of study with the perspective and skills of economics are encouraged to consider a minor in economics. In addition to the University Curriculum economics courses (EC 111, EC 112), the student must complete four economics courses numbered 200 or higher to be approved by the department chair. EC 271 may not be used as part of a minor in economics.

## Department of Finance

Bachelor of Science in Finance 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 equities and fixed income analysis and portfolio management, corporate finance, financial services, working capital management, asset valuation, banking and credit analysis. The program also prepares students for graduate work in finance, business administration, law and other related disciplines.

Student learning opportunities are enhanced by the Terry W. Goodwin '67 Financial Technology Center. The center allows students to access realtime financial data, develop financial models, conduct trading simulations and analyze financial and economic data. Students have the opportunity to participate in the Bobcat Fund, a student-managed investment portfolio. Extracurricular activities include the FMA student chapter (QU Investment Club) and the Economics/Finance Club, which sponsor investment challenges, speakers and field trips. 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 National Honor Society.

## Bachelor of Science in Finance

Graduation with a BS in finance requires that the student complete 125 credits.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
Finance Core ( 15 credits)
Course Title Credits
FIN 310 Investment Analysis 3
FIN 320 Financial Modeling 3
FIN $350 \quad$ Financial Markets \& Institutions 3
FIN 380 Intermediate Corporate Finance 3
FIN 430 Portfolio Theory \& Practice 3
Finance Electives ( 15 credits)
Students must complete 15 credits of finance electives.

Students may apply up to 6 credits from the following courses toward their finance elective requirements:
AC 305 Intermediate Accounting I
AC 306 Intermediate Accounting II
EC 250 International Economics
EC 330 Public Finance 3
EC 365 Econometrics 3
IB 335 International Financial Management

## Department of International Business

Bachelor of Science in International Business Minor in International Business Minor in European Union Business Studies

The world around us is fast changing and future business leaders need to meet new challenges every 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 worldunderstand 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 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 area of competence (ideally a minor) early in the program, with a broad range of options including in business (marketing, finance, etc.) and the 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 (two to four weeks as well as semester-long) offer the opportunity for immersion in a foreign country to better understand its language, history, politics, business and culture. All students are urged to take advantage of these possibilities, once they meet the necessary requirements (junior or senior status with a minimum GPA of 3.0). Quinnipiac University has semester-abroad programs in Quinnipiac University has semester-abroad programs in various countries such as Austria, Australia, 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.

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.

## Bachelor of Science in International Business

The BS in international business requires the completion of 125 credits.
Business Core (46 credits)
As described on pages 83
University Curriculum (37 credits)
As described on page 84
International Business Core (21 credits)
Course Title Credits

IB 313 International Marketing \& Marketing Research 3
IB 320 Introduction to Global Entrepreneurship 3
IB 324 Negotiating Internationally 3
IB 345 Two-Way Management of the Global Supply Chain
IB 335 International Finance 3
IB 352 International Management 3
IB 401 International Strategy \& Business Plan 3

## Foreign Language ( 6 credits)

Students must complete 6 credits of 100 -level foreign language courses. Credits earned as part of a semester-long study abroad program or from an international internship may be used to fulfill this requirement.
Open Electives ( 15 credits)

## Program GPA Requirement

If a student's GPA falls below 2.3, he or she has one semester to bring it up to 2.3. Otherwise the student is subject to dismissal from the program.

## International Business Minor (18 credits) Course Title Credits <br> IB 201 Globalization \& International Business 3 <br> IB 320 Introduction to Global Entrepreneurship 3 <br> IB 324 Negotiating Internationally 3 <br> IB 352 International Management 3

Plus, choose two courses from the following:
IB 105 International Business Environment 3
IB 313 International Marketing \& Marketing Research 3
IB 345 Two-Way Management of the Global Supply Chain

3
IB 335 International Finance 3
IB 362 Research \& Field Experience in the European Union-Part I
IB 363 Research \& Field Experience in the European Union-Part II
IB 401 International Strategy \& Business Plan 3

## Minor in European Union Business Studies (18 credits)

The minor is designed to respond to the needs of students from a variety of backgrounds-business, communications, health sciences and/or arts and sciences. The program is recommended to students planning careers in businesses and other organizations dealing with the European Union, America's largest trading partner and an emerging political, financial and economic powerhouse. This minor complements the skills and knowledge acquired in the student's major area of study.

The minor consists of six required courses, including an international field experience course that is conducted over six weeks in May and June every year.

## Required courses:

Course Title Credits
IB 313 International Marketing \& Marketing Research 3
IB 352 International Management
3
IB 362 Research \& Field Experience in the European Union-Part I
IB 363 Research \& Field Experience in the European Union-Part II
PO 332 European Politics

## Plus, choose one of the following:

IB 105 International Business Environment
IB 201 Globalization \& International Business


## Department of Management

Bachelor of Science in Management Minor in Management
Bachelor of Science in Entrepreneurship and
Small Business Management
Minor in Entrepreneurship and Small Business Management

## Bachelor of Science in Management

The management department's focus is to prepare students to be both effective business leaders and responsible citizens, and to assume executive positions across a variety of business and non-business organizations. To that end, the department has designed its curriculum to provide students with the knowledge, skills and experience base to equip them to fill those roles. The main goals of the major and minor programs are to:

- Educate students about a conceptual framework for creating, organizing and managing a business enterprise in this global environment
- Teach students the intrapersonal and interpersonal skills necessary to manage individuals, groups and teams in the efficient and effective running of an organization in a culturally diverse environment
- Facilitate student understanding of the integration of qualitative and quantitative management skills in planning, decision making and implementation
- Access cocurricular opportunities for students to apply and practice management concepts learned.
The management curriculum is built on a foundation of knowledge that includes the functional disciplines of business covered in the business core, complemented by a range of arts and sciences subjects appropriate to a full and balanced undergraduate education.


## Management Major

Students majoring in management are required to complete 125 credits. To graduate as a management major, a student must have earned a minimum of C grade in every management course.
Business Core Curriculum (46 credits)
As described on page 83
University Curriculum (47 credits)
As described on page 84

| Management Core (21 credits) |  |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| MG 203 | Organizational Theory | 3 |
| MG 240 | Software Applications for Business | 3 |
| MG 301 | Organizational \& Group Processes | 3 |
| MG 321 | Business Decision Making | 3 |
| MG 333 | Management Thought | 3 |
| MG 401 | Project Management | 3 |
| MG 402 | Management Senior Seminar | 3 |
| Business Electives $\mathbf{( 9 \text { credits) }}$ |  |  |
| Open Electives (12 credits) |  |  |

## Minor in Management

The minor in management requires:
MG 210 Essentials of Management \& Organizational Behavior
Students also take five management courses (level 300 or higher). The approval of the department chair is required.

## 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 exciting 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 includes traditional classroom-based courses, experiential, distance and service learning, independent study, internships, learning modules, case study and case development. 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.

## Entrepreneurship and Small Business Management Major

To graduate as an entrepreneurship and small business management major, a student must have earned a minimum of a $C$ grade in every entrepreneurship and small business management course. Students majoring in entrepreneurship are required to complete 125 credits.

## Business Core Curriculum ( 46 credits)

As described on page 83
University Curriculum (37 credits)
As described on page 84

## Entrepreneurship \& Small Business Management Core (21 credits)

Course Title Credits
MG 222 Ventures in Social Enterprise 3
MG 240 Software Applications for Business 3
MG 332 Achievement, Risk Taking \& the Entrepreneur 3
MG 371 Small Business Marketing 3
MG 372 Entrepreneurial Finance 3
MG 433 Entrepreneurship \& Small Business
Management
MG 470 Entrepreneurial Creativity \& Implementation 3
Entrepreneurship Field Experience (complete 3 credits from the following courses):
MG 488 Internship 3
MG 490 Field Projects 3
Open Electives (18 credits)

## Entrepreneurship and Small Business Management Minor

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. The requirements of the minor are: MG 210, MG 332 , plus four courses from the entrepreneurship core. Approval of the department chair is required.

## 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 management department values experiential learning and direct contact with businesses, practitioners and entrepreneurs, and so provides students majoring in management and in entrepreneurship and small business management many extracurricular opportunities to expand their skills and stretch their capabilities. These currently include:

1. Students in Free Enterprise: SIFE is an international organization that gives students the opportunity to apply what they have learned about the free enterprise system. SIFE 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, SIFE 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. Quinnipiac University Entrepreneur Success Team is the Quinnipiac University chapter of the national Collegiate Entrepreneurs Organization. QUEST's mission is to inform, support and inspire college students in any major to be entrepreneurial and seek opportunity through enterprise creation. It sponsors activities and events that promote entrepreneurial thought and spirit throughout the Quinnipiac community. QUEST provides global access to and conversations with a network of collegiate and world-renowned successful entrepreneurs through personal appearances and web site chat rooms.
3. 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. Faculty facilitate and encourage students to enter the contest and assist them in their planning efforts.


## Department of Marketing and Advertising

Bachelor of Science in Marketing Bachelor of Science in Advertising 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, our students are prepared to enhance their knowledge of the field through active pursuit of lifelong learning. In support of these objectives, the department offers its departmental 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 Management, MK 401 Marketing Strategy, MK 210 Consumer Behavior, MK 333 Distribution Management, MK 352 Retail Management, and MK 312 Advertising.

Marketing majors are encouraged to complete a minor in another department such as mass 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 (46 credits)
As described on page 83
University Curriculum (37 credits)
As described on page 84
Marketing Core (18 credits)
Course Title Credits

MK 210 Consumer Behavior 3
MK 332 Integrated Marketing Communication 3
MK 333 Distribution Management 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 courses):
MK 301 Internet Marketing 3
MK 312 Advertising 3
MK 315 Media Planning 3
MK $324 \quad$ 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 Management 3
Open Electives (18 credits)

## Program GPA Requirement

If a student's GPA falls below 2.5 , the student has one semester limit to bring it up to 2.5 . Otherwise he or she is subject to dismissal from the program.

## Minor in Marketing (18 credits)

The marketing minor requires 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 Advertising

The Quinnipiac University advertising program is based on the process by which advertising is planned, created and managed. With its emphasis on the link between advertising and marketing strategy, the bachelor of science in advertising prepares business students for entry-level positions in the advertising field.

The advertising major combines core business courses and fundamental marketing courses (i.e., Marketing Research \& Consumer Behavior) with the technical skills of advertising. The advertising curriculum includes core courses such as Advertising Principles \& Practices, Integrated Marketing Communications and Advertising Strategy, as well as technical courses such as Media Planning and Advertising Design for New Media \& Technology. Courses are designed to challenge students' prob-lem-solving, strategic planning and communications skills in the context of advertising. To prepare for careers in advertising, students are encouraged to participate in an internship program, and seniors either take part in the National Student Advertising Competition or work on a semesterlong advertising campaign.

Quinnipiac's BS in advertising degree is unique among Connecticut colleges and universities. Job opportunities exist in independent advertising agencies, advertising media organizations (e.g., television and radio), and in-house advertising departments. The growth of the Internet has provided a new advertising medium, thereby increasing job opportunities. The advertising program also provides students with the necessary prerequisites for graduate education. Students who have an interest in advertising design and creative strategy are encouraged to minor in Interactive Digital Design. With an IDD minor, they can acquire art, design and production skills, and possibly develop a portfolio, which they can present to potential employers.

The BS in advertising requires the completion of 125 credits as outlined below:

## Business Core Curriculum (46 credits)

As described on page 83
University Curriculum (37 credits)
As described on page 84

| Advertising | Core ( $\mathbf{1 8}$ credits) |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| MK 210 | Consumer Behavior | 3 |
| MK 312 | Advertising Principles \& Practice | 3 |

MK 325
Interactive Digital Advertising
MK 332 Integrated Marketing Communications 3
MK 370 Marketing Research 3
MK 490 Seminar in Advertising Strategy 3
Advertising Electives (complete 6 credits from the following courses):
MK 301 Internet Marketing 3
MK 315 Media Planning 3
$\begin{array}{lll}\text { MK } 316 & \text { Advertising Design for } \\ & \text { New Media \& Technology }\end{array}$
MK $324 \quad$ Business-to-Business Marketing 3
MK 383 Professional Selling \& Sales Management 3
MK 401 Marketing Strategy Seminar 3
MK 488 Marketing Internship 3
MK 497 Advertising Competition 3
AR 140 Basic Visual Design 3
or IDD 160 Digital Design I
Open Electives (18 credits)

## Program GPA Requirement

A student must maintain a 2.5 GPA. After a onesemester probation period, students failing to bring their GPA above 2.5 are subject to dismissal from the program.

## 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 27 credits of marketing courses beyond the business core. These courses include traditional marketing core courses (Marketing Research, and Seminar in Marketing Strategy) as well as courses that are important to biomedical marketing and pharmaceutical sales (Business-to-Business Marketing, Integrated Marketing Communications, Distribution Management, Product Management and Pricing, Professional Selling and Sales Management). An internship is an integral part of the program. Electives include Services Marketing, Database Marketing and Consumer Behavior.

The science requirement is made up of 21 credits including: BMS 117 The Human Organism (with lab), BMS 162 Health and Human Disease (with lab), BMS 276 Drug Development, BMS 203 Introduction to Medical Terminology, CHE 101 Fundamentals of Chemistry I (with lab), and CHE 102 Fundamentals of Chemistry II (with lab).

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 123 credits as outlined here:

## Business Core Curriculum ( 46 credits)

As described on page 83
University Curriculum ( 27 credits not including science, social science or University Curriculum electives)
Course Title Credits University Seminars
QU 101 The Individual in the Community 3
QU 201 National Community 3
QU 301 Global Community 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
BMS 117 The Human Organism 3
BMS 162 Human Health \& Disease 3
These credits are counted in the biomedical science core outlined below.
Humanities ..... 6
Fine Arts ..... 3University Curriculum Electives
CHE 101 Fundamentals of Chemistry I ..... 3
CHE 102 Fundamentals of Chemistry II ..... 3These credits are counted in the biomedical science coreoutlined below.
Biomedical Science Core ( 20 credits) Course Title ..... Credits
BMS 117 The Human Organism ..... 3
BMS 117L The Human Organism Lab
BMS 162 Human Health \& Disease ..... 3
BMS 203 Intro to Medical Terminology ..... 2
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
Biomedical Marketing Core (24 credits)
MK 324 Business-to-Business Marketing ..... 3
MK 332 Integrated Marketing Comm. ..... 3
MK 333 Distribution Management ..... 3
MK 334 Product \& Pricing Strategy ..... 3
MK 370 Marketing Research ..... 3
MK 383 Professional Selling \& Sales Mgt. ..... 3
MK 495 Biomedical Marketing Internship ..... 3
Biomedical Marketing Electives (complete 3 credits)
MK 210 Consumer Behavior ..... 3
MK 340 Database Marketing ..... 3
MK 355 Services Marketing ..... 3
Open Electives (3 credits)

## Program GPA Requirement

A student must maintain a 2.5 GPA. After a onesemester probation period, students failing to bring their GPA above 2.5 are subject to dismissal from the program.

## School of Communications

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## School of Communications

# The Ed McMahon Mass Communications Center, School of Business 203-582-3498 (central office) 

Administrative Officers<br>Interim Dean<br>Assistant Dean for Career Services<br>Assistant Dean for Student Services<br>Director of the McMahon Center<br>Associate Director, McMahon Center

Chairperson/Director
Michele A. Moore
Jennifer Bobrow Burns
Danielle Reinhart
Michael Calia
Peter Sumby

## Departments/Programs

Film, Video and Interactive Media
Journalism
Media Studies (BA in Communications)
Public Relations
Graduate Programs

- MS in Interactive Communications
- MS in Journalism
- MS in Public Relations

William O'Brien
Margarita Diaz
Nancy Worthington
Kurt Wise
TBA
Rich Hanley
Kathy Fitzpatrick

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## Mission Statement

The School of Communications' mission is to educate undergraduates, graduate students and professionals to excel in an evolving communications environment. The values that guide our mission are professional ethics and social responsibility, creativity and innovation, passion and inquiry, respect for diversity, freedom of expression, and unfettered access to information.

As a school, we encourage and support research and creative endeavors that contribute to public discourse on national and global issues.

As a community that values a free and open exchange of ideas, critical thinking and informed decision making, we nurture and challenge our students to achieve their full potential.

The school offers bachelor's and master's degrees in disciplines that are becoming increasingly valuable in our society. Students receive practical training in various production techniques, which complement a thorough grounding in communication history, theory and ethics. Communications students also receive a strong foundation in the arts and sciences, which provides a solid, broad-based education. Advanced students arrange internships in professional media organizations. We have relationships with more than 1,000 private and nonprofit organizations and a director of internships to help with student placement. Our educational philosophy embraces experiential learning, and students gain 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, all-digital high-definition television studio, two radio studios, a journalism technology center, a multimedia production facility, editing suites and labs, and a mini-theater. The center is equipped with state-of-the-art technology 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.

## Undergraduate Studies

## General Requirements

The requirements of the bachelor of arts degree are qualitative and quantitative. Completion of 120 credits with a GPA of C or better is not in itself sufficient to qualify for graduation. Students should be cautioned that an average of C , or 2.0 , in the student's program is a minimum requirement for each major and that some programs may require higher standards as noted. In addition to the general University Curriculum requirements (see p. 20), eligibility for a bachelor of arts degree also requires the satisfactory completion of both School of Communications core and major requirements including those in a program of concentration. Specific major requirements are noted below under the individual program descriptions.

## School Requirements

The undergraduate majors require students to study the political, social, legal and economic institutions that have shaped the media; the artistic heritage through which broadcasting, film, print media and the Internet have developed; and the social and psychological structures which both influence and are influenced by the media.
Through a balanced approach, the programs simultaneously develop technical skill and an understanding of the artistic, historical and theoretical traditions on which the disciplines are built.

Students should apply for formal admission to their program of choice by the beginning of sophomore year.

Beyond the University Curriculum requirements, students majoring in any of the programs in the School of Communications must meet the following requirements:

- two courses in a language sequence; the sequence will be determined by placement testing;
- an additional course in the fine arts;
- three additional courses in the humanities or social sciences, one of which must be at the 200 level or higher.
Program Requirements: School of Communications students are required to achieve a B- or better combined average for the school's three core courses: MSS 101, JRN 160 and MSS 220.

If a student fails to achieve a combined average of B- for the three core courses, the student must
meet with the associate dean in the School of Communications before receiving permission to begin a fourth course.

If the associate dean grants permission for the student to take a fourth course, the student must achieve, at minimum, a B in that course to continue as a student in the School of Communications.

Students who are asked to transfer out of the school due to noncompliance may opt to select a minor in the School of Communications.

Transfer Students and the B- Rule: Students who transfer from other colleges and universities into the School of Communications and have been given academic credit for the communications core courses taken outside of Quinnipiac University must achieve, at minimum, a combined average of B- in the first two School of Communications courses they take at Quinnipiac.

Transfer credits: The School of Communications only accepts for transfer 12 credits in journalism or communications courses.

Minor requirement: In addition, each student in the School of Communications is required to take a minor ( 18 credits) in a subject offered by one of the other schools within the University. See the specific department program directors for information.

## Advising

Faculty and staff of the School of Communications advise all students. Upon entrance to the school, each student works with one faculty member to select course work in accordance with the student's interests and the school's requirements. 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.

Note: While plan sheets are maintained by school and program advisers, 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 25 for a description of the grading system).

## Career Services

In the School of Communications, the assistant dean for career services 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

Communications (see p. 105)
Film, Video and Interactive Media
Journalism
Public Relations

## Master's Degrees (see p. 162)

Master of Science in Interactive Communications Master of Science in Journalism
Master of Science in Public Relations

## Department of Film, Video and Interactive Media

Bachelor of Arts in Film, Video and Interactive Media
Minor in Scriptwriting

## Bachelor of Arts in Film, Video and Interactive Media

The Department of Film, Video and Interactive Media offers a specialized program that educates students in contemporary media practice so they can excel as technically accomplished, aesthetically grounded and expressively mature professionals. The program is 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, cell phone and all emerging media platforms.

To achieve these goals, students are immersed in techniques of visual storytelling that demand expertise in single and multicamera 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 taught only 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 majoring in film, video and interactive media 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 myriad 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 multicamera environments. Mastering the acquisition, composition and manipulation of moving images and sound, they are expected to create and execute compelling narratives; factual or fiction, for current and developing distribution platforms.

Graduates of the program are well positioned to pursue careers in the creation (writing, directing, editing, acquisition 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-forprofit institutions engaged in delivering entertainment and information programming to audiences around the world and have a firm foundation to pursue graduate work, including a master of fine arts degree.

## Film, Video and Interactive Media Major Requirements ( 40 credits)

Required communications core courses to be completed by the end of sophomore year with a minimum $B$ - average ( 9 credits):
Course Title Credits
MSS 101 Introduction to Media Communications 3
JRN 160 Introduction to Media Writing 3
MSS 220 Media History
Other required media production courses ( 22 credits):
FVI/MEP 210 Production Fundamentals I
FVI/MEP 212 Production Fundamentals II
FVI/MEP 340 Analysis of the Moving Image
FVI/MEP 345 Writing \& Producing Media
MSS 340 Communications Law \& Ethics
FVI/MEP 450 Senior Seminar
FVI/MEP 494 Senior Colloquy
FVI/MEP 495 Senior Project (capstone)
Electives (select 3 courses/ 9 credits):
FVI/MEP 310 Creating Interactive Media
FVI/MEP 312 Projects in Interactive Media
FVI/MEP 355 Projects in Single-Camera Production
FVI/MEP 372 Scriptwriting

FVI/MEP 375 Advanced Camera \& Lighting 3
FVI/MEP 380 Projects in Audio Production 3
FVI/MEP 390 Projects in Multicamera Production 3
FVI/MEP 392 Post-Production Techniques 3
FVI/MEP 393 Animation Techniques 3
FVI/MEP 397 Summer Production Project 4
FVI/MEP 410 Game Design \& Development 3
MSS 490 Internship 3
Other courses with chair's approval.

## Minor in Scriptwriting (18 credits)

The scriptwriting minor, designed for undergraduate students who have majors outside the School of Communications, consists of a survey course in communications (MSS 101), a hands-on video production course (FVI/MEP 105), a media history course (MSS 220), a film theory course (FVI/MEP 340) and two courses in the art and craft of writing the screenplay (FVI/MEP 372 and FVI/MEP 495). On completion, this minor can result in the authorship of a full-length screenplay of the student's invention. This minor is not available to students majoring in the School of Communications.
Minor Requirements ( 18 Credits):
Course Title Credits
MSS 101 Introduction to Media Communications 3
FVI/MEP 105 Video Essentials—News 3
MSS 220 Media History 3
FVI/MEP 340 Analysis of the Moving Image 3
FVI/MEP 372 Scriptwriting 3
FVI/MEP 495 Senior Project—Scriptwriting 3


## 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 reporting across distribution technologies. The program's mission is to prepare journalism professionals who reflect and can effectively report on the diversity of the human experience. To that end, the program's curriculum emphasizes skills courses, community engagement, racial, ethnic and gender awareness, rigorous scholarly inquiry, and ethical training.

The wide range of elective courses enables students to focus on a specific medium (such as television) or news subject (such as sports).

## Print Journalism Concentration Requirements ( 40 credits minimum)

Required School of Communications core courses to be completed by the end of the sophomore year with a minimum $B$ - average:
Course Title Credits
MSS 101 Introduction to Media Communications 3
JRN 160 Introduction to Media Writing 3
MSS 220 Media History 3
Required journalism courses (22 credits):
JRN 105 Electronic News Gathering 1
JRN 260 Reporting 3
JRN 305 Reporting for the Web 3
JRN 365 Editing for Print 3
MSS 340 Communications Law \& Ethics 3
JRN 450 Senior Seminar 3
JRN 495 Advanced Reporting for Print (Capstone) 3
MSS 490 Internship 3
Electives (select three):
JRN 263 Broadcast News Writing 3
JRN 291 Reporting for TV 3
JRN 360 Public Affairs Reporting 3
JRN 361 Sports Reporting 3
JRN 363 Computer-Assisted Reporting 3
JRN 470 Writing for Magazines 3
PRR 201 Public Relations Writing 3
MSS 231 Media \& Society
MSS 331 Media Influence
MSS 345 Media Audiences
MSS/WS 311 Diversity in the Media
Other courses with chair's approval

## Broadcast Journalism Concentration Requirements ( 40 credits minimum)

Required School of Communications core courses to be completed by the end of the sophomore year with a minimum $B$ - average:
Course Title Credits
MSS 101 Introduction to Media Communications ..... 3
JRN 160 Introduction to Media Writing ..... 3
MSS 220 Media History ..... 3
Required journalism courses ( 25 credits):
JRN 105 Electronic News Gathering ..... 1
JRN 263 Broadcast News Writing ..... 3
JRN 291 Reporting for TV ..... 3
JRN 305 Reporting for the Web ..... 3
JRN 311 Advanced Reporting for TV ..... 3
MSS 340 Communications Law \& Ethics ..... 3
JRN 450 Senior Seminar ..... 3
JRN 496 Producing \& Presenting the News (Capstone) ..... 3
MSS 490 Internship ..... 3
Electives (select two):
JRN 361 Sports Reporting ..... 3
JRN 363 Computer-Assisted Reporting ..... 3
FVI/MEP 380 Projects in Audio Production ..... 3
JRN 390 Broadcast Performance ..... 3
PRR 201 Public Relations Writing ..... 3
MSS 231 Media \& Society ..... 3
MSS 331 Media Influence ..... 3
MSS 345 Media Audiences ..... 3
MSS/WS 311 Diversity in the Media ..... 3
Other courses with chair's approval

## Minor in Journalism

Eighteen credits 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 in-depth expertise on the media's wider social, cultural and economic relationships. The program's required courses emphasize the skills sought by both demanding employers and competitive graduate programs: critical thinking, creativity, research and effective communication. Communications students obtain positions in diverse professional environments, including television networks, music corporations, 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.

## Communications major requirements (39 credits)

Required media studies core courses to be completed by the end of sophomore year with a minimum B- average (9 credits):

## Course

Title
Credits
MSS 101 Introduction to Media Communications 3
JRN 160 Introduction to Media Writing 3
MSS 220 Media History 3
Other required media studies courses ( 18 credits):
MSS 231 Media \& Society
MSS 332 Research Methods 3
MSS 340 Communications Law \& Ethics 3
MSS 450 Senior Seminar 3
MSS 490 Internship 3
MSS 495 Media Influence (capstone) 3
Electives (select three):
MSS 307 The Holocaust 3
MSS 311 Diversity in the Media 3
MSS 320 Communication Technologies 3
MSS 344 Popular Culture \& the Media 3
MSS 345 Media Audiences 3
MSS 346 Global Communication 3


MSS 348 Song \& Dance 3
MSS 349 Political Communication 3
MSS 400 Special Topics 3
MSS $420 \quad$ Sports, Media \& Society 3
And/or any PRR, JRN, FVI or MEP courses
Other non-School of Communication courses with chair's approval.
Open elective (3 credits)
Any 3-credit course; MSS 150 recommended

| Minor in | Media Studies (18 credits) |  |
| :--- | :--- | ---: |
| MSS $101 \quad$ Introduction to Media Communications |  |  |
| MSS 220 | Media History | 3 |
| MSS 450 $\quad$ Senior Seminar | 3 |  |
| Plus three School of Communications courses (electives) |  |  |
| (9 credits) |  |  |

## Department of Public Relations

Bachelor of Arts in Public Relations
Minor in Public Relations

## 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. The program emphasizes research, writing, campaigns, speaking and service learning. The Quinnipiac University public relations program focuses on helping students acquire the knowledge and skills necessary to manage the relationships between an organization and its publics.

Public Relations Major Requirements (39 credits)
Required public relations core courses to be completed by end of sophomore year with a minimum B- average ( 9 credits):

## Course Title Credits

MSS 101 Introduction to Media Communications 3
JRN 160 Introduction to Media Writing 3
MSS 220 Media History 3
Other required communications courses (21 credits):
PRR 101 Principles of Public Relations 3
PRR 201 Public Relations Writing 3
PRR 332 Public Relations Research 3
PRR 495 Public Relations Campaigns 3
MSS 340 Communications Law \& Ethics 3
PRR 450 Senior Seminar
MSS 490 Internship
Electives, select two ( 6 credits):
PRR 311 Sports Public Relations 3
PRR 341 Corporate Public Relations 3
PRR 343 Nonprofit Public Relations 3
PRR 344 International Public Relations 3
PRR 345 Investor Relations 3
PRR 346 Health Care Public Relations 3
PRR 340 Public Relations Management 3
PRR 400 Special Topics 3
Other courses with chair's approval.
Open Elective (3 credits)
Any School of Communications elective 3

Minor in Public Relations (18 credits)
PRR 101 Principles of Public Relations ..... 3
JRN 160 Introduction to Media Writing ..... 3
PRR 201 Public Relations Writing ..... 3
Plus three School of Communications courses (electives) ..... 9
School of Health Sciences
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# North Haven Campus, building 1 <br> Echlin Health Sciences Center, second floor <br> 203-582-8710 (central office) 

Administrative Officers<br>Dean Associate Dean Assistant Dean Assistant Dean for Career Services<br>Departments/Programs

Edward R. O'Connor
Betsey C. Smith
Deanna Proulx-Sepelak
Cynthia Christie
Chairs, Directors, Coordinators

| Donald Kowalsky | NH1-380E | $582-8681$ |
| :--- | :--- | :--- |
| Lennart Johns | EC 217 | $582-8557$ |
|  |  |  |
| Thomas C. Brady | EC 220 | $582-8609$ |
| Edward R. O'Connor | NH1-160G | $582-5202$ |
| Thomas C. Brady | EC 220 | $582-8609$ |
| William Hennessy | NH1-265H | $582-5214$ |
| Lynn Price | NH1-405M | $582-8678$ |
| Lisa O'Connor | NH1-400J | $582-8549$ |

Combined Undergraduate/Graduate Programs
Entry-Level/Master's Physician
Assistant Program
Occupational TherapyMOT Occupational Therapy
Physical TherapyDPT Program
Graduate Programs
Biomedical SciencesMHS Cardiovascular Perfusion
MHS Medical Laboratory SciencesMHS Pathologists' AssistantMHS Physician Assistant
Diagnostic ImagingMHS Radiologist Assistant
NursingMSN Nurse Practitioner
Post-Professional Programs
Occupational TherapyOnline MSOT ProgramWilliam KohlheppEC 218582-5226
Kimberly D. Hartmann NH1-305F ..... 582-8679
Donald Kowalsky NH1-380E ..... 582-8681
Thomas C. Brady EC 220 ..... 582-8609
Michael J. Smith EC 218 ..... 582-3427Kenneth Kaloustian
EC 219 ..... 582-8676Kenneth Kaloustian
582-8676Cynthia LordWilliam HennessyRamon GonzalezLynn PriceJeanne LeVasseurEC 219
NH1-480E ..... 582-5297
NH1-265H ..... 582-5214NH1-265B582-3765
NH1-405M ..... 582-8678Ann Burkhardt NH1-300H582-3823

## Mission Statement

The belief that access to good health care is an individual's right is prominent in our society. Underscoring this belief are the needs to make adequate health services and health personnel available and to develop an environment that is conducive to good general health and long life. The School of Health Sciences is committed to developing professionals through comprehensive career-oriented programs at the bachelor's, master's and clinical doctorate levels. To this end, it has developed a series of aims upon which it conceives, plans, develops and evaluates its educational programs.

- All programs within the School of Health Sciences are based upon a comprehensive foundation in the liberal arts and sciences.
- The school provides educational opportunity for those who wish to pursue careers in health care delivery and basic science professions.
- The school prepares individuals through basic scientific knowledge supplemented by actual and simulated clinical and field experiences.
-The school has designed, and will continue to create innovative, flexible programs to meet both present and future needs of the health care system.
- The school offers practicing science and health professionals the opportunity to maintain and upgrade their skills through continuing education courses that can lead to one of several graduate degrees.
- The school encourages its faculty to undertake research, on and off campus; publish their findings; and share their research and new concepts in their courses with colleagues and students.
- Quinnipiac University is affiliated with outstanding health and scientific institutions, and private industry in Connecticut, the Northeast and the nation. These sites provide field and clinical experiences that allow students to apply classroom knowledge to real situations. To be eligible for the clinical experience required for graduation and certification, students must maintain a level of academic excellence acceptable to both the academic program director and the clinical director.



## 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.

## Bachelor's Degrees

Athletic Training/Sports Medicine
Biomedical Sciences
Diagnostic Imaging
Health and Science Studies
Microbiology/Molecular Biology
Nursing

## Graduate Degrees

Master of Health Science-major in:
Cardiovascular Perfusion
Medical Laboratory Sciences with concentrations in biomedical sciences, microbiology and laboratory management
Pathologists' Assistant
Physician Assistant
Radiologist Assistant
Master of Science in Nursing
Adult Nurse Practitioner
Family Nurse Practitioner
Master of Occupational Therapy

## Entry-Level Master of Occupational Therapy (MOT)

This $5^{1} / 2$-year degree program is the only track for new freshmen. As part of the program, students first earn a BS in health and science studies. See p. 123.

## Post-Professional Master of Science in Occupational Therapy

This unique program is designed for practicing occupational therapists and combines online learning with residency requirements. For information, contact quonlineadmissions@quinnipiac.edu.

## Entry-Level Master's Radiologist Assistant

This 18-month program is designed for radiologic technologists already possessing a bachelor's degree in the field. The program prepares advanced practioners in the field of radiography. See p. 181.

Entry-Level Master's Physician Assistant
This six-year degree program is designed for qualified students who enter as freshmen earning a BS in health and science studies. After successful completion of the undergraduate curriculum, they enter the graduate physician assistant program.
See pp. 114 and 179.

## Entry-Level Doctor of Physical Therapy (DPT)

This $6^{1} / 2$-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 and sciences studies. See p. 130.

## Certificates

Post-master's Adult Nurse Practitioner
Post-master's Family Nurse Practitioner

## Health and Science Studies

A four-year curriculum leading to a bachelor of science degree in health and science studies. This curriculum permits students, in conjunction with an academic adviser, to design a program tailored to meet their defined career goals.

Students choosing this option are carefully counseled in the formulation of specific career goals as time progresses.
Course ..... Credits
Foundational Sciences (biology, chemistry \& physics) 20Health/Science electives30
Open electives ..... 33
University Curriculum requirements ..... 39

*Total 122
*It is possible that courses taken within the basic science core also may satisfy the University Curriculum's science requirement.

## Career Services

In the School of Health Sciences, the assistant dean for career services 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.

## Department of Biomedical Sciences

Bachelor of Science in Biomedical Sciences
Bachelor of Science in Microbiology/Molecular Biology
Entry-level Master's Physician Assistant 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 three programs leading to the bachelor of science degree. These include microbiology/molecular biology, biomedical sciences and an entry-level master's physician assistant program. Because of the expansion of medical information and techniques, the department also offers several graduate degree programs including physician and pathologists' assistant, medical laboratory science with specialties in biomedical sciences, microbiology and laboratory management, and molecular and cell biology. 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.

## Bachelor of Science in Biomedical Sciences

The mission of the biomedical sciences degree program is to provide the student with a solid foundation in the basic sciences as a means to study and understand the biomedical sciences. This, together with the development of scientific thinking, analysis and research skills, serves to prepare the student for many avenues of opportunity upon program completion.

The curriculum for the BS in biomedical sciences allows the student to pursue many different avenues of opportunity depending upon the student's goals and interests. In addition to courses in science and mathematics, a number of University Curriculum courses (designated UC on the curriculum) are required. The entire curriculum provides 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, hospital and independent testing laboratories, universi-ty-based biomedical research, and 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 sciences, biomedical sciences, medicine, dentistry, veterinary medicine, physician assistant, pathologist assistant, forensic sciences, toxicology, etc.

Admission to this program is dependent on the applicant's potential to pursue a college program and on past academic performance. Transfer students wishing to enter this program will be given appropriate transfer credit for previous college work.

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 profes-
sional sources. We will consider reasonable accommodations on a case-by-case basis.

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. Students must complete the following curriculum.

## Biomedical Sciences Curriculum

| Course | Title | Credits |
| :--- | :--- | ---: |
| Fall Semester, First Year |  |  |
| BIO 101 | Science (UC) | 4 |
| CHE 110 | General Chemistry I | 4 |
| EN 101 | Freshman Composition (UC) | 3 |
| QU 101 | The Individual in the Community | 3 |
| MA 140 | Quantitative Literacy (UC) | 3 |
|  |  |  |

Total 17
Spring Semester, First Year
BIO 102 Science (UC)
CHE 111 General Chemistry II
EN 102 Freshman Composition (UC)
UC Social Sciences
UC Humanities
Total 17
Fall Semester, Second Year
BIO 211 Anatomy \& Physiology I
CHE 210 Organic Chemistry I
PHY 110 General Physics I
UC Social Sciences

## Spring Semester, Second Year

BIO 212 Anatomy \& Physiology II 4
CHE 211 Organic Chemistry II 4
PHY 111 General Physics II
QU 201 Seminar on National Community
Fall Semester, Third Year
BMS 370 General Microbiology
CHE 315 Biochemistry
Science elective
MA 275 UC elective
Spring Semester, Third Year
BMS 375 Immunology
BIO 298 Research Methods in Biology
Science elective
QU 301 Seminar on Global Community

## Fourth Year, Fall Semester

| BIO 346 | Cell Physiology |
| :--- | :--- |
| UC | Science elective (2 courses) |
| Fine Arts |  |

Fourth Year, Spring Semester
BIO 471 Molecular Genetics ..... 4
Science elective ..... 4
BMS 318 Pathophysiology ..... 3
UC UC elective

```
                                3
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Total 14

For more information about the undergraduate biomedical sciences program, please contact the chair of the Department of Biomedical Sciences.

## Bachelor of Science in Microbiology/Molecular Biology

The program in microbiology/molecular biology 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/molecular biology 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.

## BS in Microbiology Curriculum

| Course | Title |
| :--- | :--- |
| Fall Semester, First Year |  |
| BIO 101 | General Biology I (UC) |
| CHE 110 | General Chemistry I |
| EN 101 | Freshman Composition I (UC) |
| MA 140 | Quantitative Literacy (UC) |
| QU 101 | The Individual in the Community |

Credits
Fall Semester, First Year
BIO 101 General Biology I (UC) 4
CHE 110 General Chemistry I
EN $101 \quad$ Freshman Composition I (UC)
QU 101 The Individual in the Community
Spring Semester, First Year
BIO 102 General Biology II (UC) 4
CHE 111 General Chemistry II 4
EN $102 \quad$ Freshman Composition II (UC) 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
QU 201 Seminar on National Community
Fall Semester, Third Year
CHE 315 Biochemistry
UC UC elective ${ }^{2}$ 3Microbiology elective3-4
Science elective ..... 4

Total 14-15
Spring Semester, Third Year
BMS 375 Immunology ..... 4
Microbiology elective ${ }^{3}$ ..... 4
Science elective ..... 4
QU 301 Seminar on Global Community ..... 3
Total 15
Fall Semester, Fourth Year
BMS 478 Microbiology Seminar ..... 1
Microbiology elective ..... 3-4
Chemistry elective ${ }^{4}$ ..... 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 professionalschools, 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.
Recommended Science electives Course Title ..... Credits
BIO 211-212 Anatomy \& Physiology I \& II ..... 4
BIO 251 General Ecology ..... 4
BIO 282 Human Genetics ..... 4
BIO 317 Developmental Biology ..... 4
BMS 332 Histology ..... 4
Additional electives may be selected with the approval of thedepartment chair.
Microbiology electives
BIO 326 Animal Parasitology ..... 4
BIO 346 Cell Physiology ..... 4
BMS 373 Mycology ..... 4
BMS 470 Virology ..... 4
BMS 471 Molecular Genetics ..... 4
BMS 472 Biotechnology ..... 4
BMS 473 Infections of Leisure ..... 3
BMS 474 Power of Plagues ..... 3
BMS 476 Environmental Microbiology ..... 4
BMS 482 Independent Study in Biomedical Sciences ..... 4

## Minor in Microbiology/Molecular Biology

The minor in microbiology/molecular biology is available to students in bachelor's degree science programs. Students wishing to receive a minor in microbiology must receive written approval from the department chair.

Students must complete at least five of the courses listed below with a grade of C or better. Students from other institutions are allowed a maximum of two transfer microbiology courses toward the minor.

## Course

Title
Credits
BIO 326
Animal Parasitology
BIO 346
Cell Physiology
BMS 370
General Microbiology
BMS 372 Pathogenic Microbiology
BMS 373
Mycology
BMS 375
Immunology
BIO 470
Virology
BMS 471 Molecular Genetics
BMS 472 Biotechnology
BMS 476 Environmental Microbiology


## 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 health care teams. 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 specialties. It is our expectation that these collaborative strategies will ultimately result in outstanding health care providers.

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 must be completed within four years. Following successful completion of the preprofessional component, students receive a BS in health and 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. The program addresses the need for medical experience by providing students with emergency medical technician (EMT) training as well as extensive time "shadowing" and "mentoring" with practicing physician assistants. Shadowing and mentoring experiences take place at off-campus sites generally within 30 miles of the Mount Carmel Campus. Students are responsible for transportation to and from all off-campus sites.

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 clinical affiliations.

By the beginning of the fourth year, students are required to have accumulated 500 hours of documented direct patient contact through summer paid and/or volunteer experiences (i.e., certified nurse's aide, phlebotomy technician, emergency room technician). Students are responsible for making their own arrangements to obtain these clinical hours.

## Admission to the Program

Candidates applying for admission must have: a minimum of three years of high school mathematics including geometry, algebra and pre-calculus; 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 physician assistant program curriculum in the Graduate Studies section (p. 179) for information on the professional component.

## Entry Level Master's Physician Assistant Curriculum

Course Title Credits
Fall Semester, First Year
BIO 101 Science (UC) 4
EN 101 Freshman Composition (UC) 3
MA 141 Quantitative Literacy (UC) 3
CHE 110 General Chemistry I 4
QU 101 The Individual in the Community
Spring Semester, First Year
BIO 102 Science (UC) 4
EN 102 Freshman Composition (UC)
UC Fine Arts
3
CHE 111 General Chemistry II 4
PY 104 Orientation to PA Seminar I 1
Total 15

## Summer I-Clinical Hours

## Fall Semester, Second Year

BIO 211 Anatomy \& Physiology I 4
CHE 210 Organic Chemistry I 4
PHY 110 General Physics 4
PY 388 Clinical Training I* 3
Total 15
Spring Semester, Second Year
BIO 212 Anatomy \& Physiology II 4
CHE 211 Organic Chemistry II 4
PY 397 Pre-Health Clinical Affiliation 3
PY 389 Clinical Training II* 3
QU 201 Seminar on National Community 3
Total 17

## Summer II-Clinical Hours

Fall Semester, Third Year
BIO/BMS Biology/Biomedical Science elective 3
BIO 350 Cardiovascular Physiology 3
BMS 370 General Microbiology 4
UC Humanities 3
PS 101 Social Science (UC) 3
Total 16

## Spring Semester, Third Year

BMS 203 Introduction to Medical Terminology 2
BMS 304 Biological Chemistry 3
BMS 318 Pathophysiology 3
PY 400 Pre-Physician Assistant Clerkship 3
QU 301 Seminar on Global Community 3
Total 14
Summer III-Clinical Hours
Fall Semester, Fourth Year
BIO/BMS Biology/Biomedical Science elective 3
BMS 330 Endocrine Physiology 3
PY 401 Introduction to Problem Solving 3
GT 200 UC elective (UC) 3
PS 272 Social Science (UC) 3
Total 15

Spring Semester, Fourth Year

PY 204 Orientation to PA Seminar II

Introduction to Clinical Medicine

1

BMS 332 Histology 4
BIO/BMS BIO/BMS elective 3-4
UC UC elective 3
UC Humanities 3
Total 14-15
Total number of credits required for completion
of the preprofessional component $\mathbf{1 2 3 - 1 2 4}$
*If student has current EMT licensure on admission to the program, BMS 482, BMS 498 is taken instead of PY 388, PY 389.

Students placing out of an introductory-level science course with a minimum of 4 on the Advanced Placement examinations are required to take the equivalent number of credits at a higher level in the same area of course work.

## Acceptable Biology/Biomedical electives (Take 3 courses) Course Title Credits

BMS 310 Neuroanatomy 3
BMS 320 Pharmacology 3
BMS 325 Toxicology
BIO 329 Neurobiology
BMS 375 Immunology
BMS 595 Transplantation Immunology

## Acceptable UC/Social Sciences

PS 101 Introduction to Psychology 3
PS 272 Abnormal Psychology
Acceptable UC elective outside major BMS 200 Biology of Aging


## Department of Diagnostic Imaging

Bachelor of Science in Diagnostic Imaging Bachelor of Science in Diagnostic Imaging (Continuing Education)

## Bachelor of Science in Diagnostic Imaging

The diagnostic imaging 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 diagnostic imaging program at Quinnipiac University 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 procedures and imaging protocols. In addition, the program prepares multi-skilled graduates competent in the art and science of radiography. Graduates of the program will meet the needs of the community for highly qualified professionals, and the program prepares students for career entry and 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. Courses also are offered to introduce the student to the subspecialties of computed tomography (CT), magnetic resonance imaging (MR), mammography (M), bone densitometry (BD), forensic imaging, quality management (QM) and sonography.

To prepare students for careers in radiography and to introduce them to the subspecialty areas within diagnostic/interventional radiology, as well
as its management, Quinnipiac offers a BS degree in diagnostic imaging. Graduates are ready for entry-level employment as radiographers with expanded skills in advanced imaging and quality management.

The first year of the bachelor's degree program consists of University Curriculum studies on the Quinnipiac campus. The professional component 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. Didactic and clinical courses are taken concurrently to provide the opportunity for immediate application and reinforcement.

Upon satisfactory completion of the junior year, students 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. This component of the program is accredited by the Joint Review Committee on Education in Radiologic Technology.

The fourth year of the program provides the student with an opportunity to select from four areas of concentration; advanced imaging, science, management, marketing/business. In the advanced imaging track, the student selects from among advanced modalities such as computed tomography $(\mathrm{CT})$, magnetic resonance imaging (MR), mammography (M) and sonography (ARDMS/ARRT) in preparation for the advanced level ARRT certification examination in a particular modality. Students intending to continue their education beyond the bachelor's degree level select the science track, which concentrates on completing requirements for most professional schools. The management track introduces students to various concepts of managerial principles, organizational behaviors and other foundations necessary for future professional roles as supervisors and managers. Students interested in business may select the marketing/business track in preparation for careers in medical advertising, marketing and sales.

## 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 imaging program:

## Progression in the Program

BIO 101-102 and MA 110 must be completed with a minimum grade of $\mathrm{C}-(70)$ and $\mathrm{C}+(77)$ respectively before admission to the clinical component of the program. Physics or chemistry also is required with a passing grade. All students must be CPR certified prior to admission to clinical practicum and must maintain certification throughout the duration of the program. In addition, all diagnostic imaging courses with the prefix RS, including RS 101, must be successfully completed with a minimum grade of B- (80). A student who earns a grade of less than B- (80) in an RS course must repeat the course before enrolling in a more advanced diagnostic imaging course. Students are allowed to repeat one diagnostic imaging course one time only. After completion of the freshman year, a cumulative GPA of 2.5 is required for continued good standing. Students whose averages fall below 2.5 are subject to dismissal 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 (RS 252). This clinical practicum consists of a 10week, 40-hour-per-week assignment and may be performed only in a clinical affiliate currently approved by the Joint Review Committee on Education in Radiologic Technology (JRCERT) for the program.

| BS in Diagnostic Imaging Curriculum |  |  |
| :--- | :--- | ---: |
| Course Title | Credits |  |
| Fall Semester, | First Year |  |
| BIO 101 | Science (UC) | 4 |
| PHY 101 | Elements of Physics |  |
| or CHE 101 | Fundamentals of Chemistry | 4 |
| EN 101 | UC | 3 |
| MA 110 | Quantitative Literacy (UC) | 3 |
| QU 101 | The Individual in the Community | 3 |
|  |  |  |

Total 17

| Spring Semester, First Year |  |  |
| :--- | :--- | ---: |
| BIO 102 | Science (UC) |  |
| EN 102 | Freshman Composition (UC) | 4 |
| RS 101 | Introduction to Diagnostic Imaging | 3 |
| UC | Social Sciences | 3 |
| UC | Humanities | 3 |
|  |  | 3 |
| Fall Semester, Second Year | Total 16 |  |
| RS 210 | Radiographic Procedures I |  |
| RS 211 | Laboratory Practicum I | 2 |
| RS 240 | Image Production \& Evaluation I* | 1 |
| RS 250 | Clinical Education I | 3 |
| RS 298 | Methods of Patient Care* | 2 |
| BIO 211 | Anatomy \& Physiology I | 3 |
|  |  | 4 |
|  |  | Total 15 |

## Spring Semester, Second Year

RS 220 Radiographic Procedures II 2
RS 221 Laboratory Practicum II 1
RS 245 Image Production \& Evaluation II* 3
RS 251 Clinical Education II 2
RS 318 Pathology in Imaging 3
BIO 212 Anatomy \& Physiology II 4
Total 15
Summer Semester, Second Year
RS 252 Clinical Education III 2
RS 497 Directed Studies in Diagnostic Imaging 1
Total 3
Fall Semester, Third Year
RS 230 Radiographic Procedures III 2
RS 231 Laboratory Practicum III 1
RS 330 Diagnostic Assessment 3
RS 350 Clinical Education IV 2
RS 322 Sectional Anatomy
or RS 300 Introduction to Sonography** 3
RS 260 Radiographic Physics \& Instrumentation 3
QU 201 Seminar on National Community 3
Total 17
Spring Semester, Third Year
RS 215 Radiation Protection \& Biology 3
RS 290 Radiographic Procedures IV* 3
RS 351 Clinical Education V 2
RS 498 Radiography Seminar 1
BMS 200 UC elective (UC) 3
BMS 318 UC elective (UC) 3
Total 15
Fall Semester, Fourth Year
QU 301 Seminar on Global Community
UC Humanities 3
RS Concentration Courses*** 6-9
Total 12-15

## Spring Semester, Fourth Year

UC Social Science 3
UC Fine Arts 3
RS Concentration Courses*** 9
Total 15
Total Credits 125-128
*These courses have a laboratory component
**Sonography track only
***Students complete courses in one of the following areas of concentrations: advanced imaging, science, management or marketing/business.

## Concentrations

Students select courses for their concentration in consultation with the faculty adviser (15-16 credits for a concentration).
Course Title Credits

Advanced Imaging (15-16 credits)
$\begin{array}{lll}\text { RS } 300 & \begin{array}{l}\text { Introduction to Diagnostic } \\ \\ \text { Medical Sonography }\end{array}\end{array}$
RS 340 Introduction to Mammography 3
RS $320 \quad$ Ultrasound Physics \& Instrumentation 3
RS 338 Introduction to CT Scanning 3
RS 414 Research: Analysis \& Critique 3
RS 415 Introduction to Magnetic Resonance Imag. 3
RS 416 Advanced MRI Principles \& Imaging 3
RS 417 Clinical Practicum: Magnetic Resonance 1 Imaging (MRI) I (7 wks)
RS 418 Clinical Practicum: Magnetic Resonance 2 Imaging (MRI) I
RS $419 \quad$ Clinical Practicum: Magnetic Resonance 2 Imaging (MRI) II
RS 460 Advanced Imaging \& Pathology 3
RS 323 Advanced Sectional Anatomy 3
RS 370 Instructional Strategies in Allied Health Educ. 3
RS 331 Electrocardiography 1
RS 332 Phlebotomy \& Interpretation of Vital Signs 1
RS 333 Diagnostic Imaging Pharmacology 1
RS 335 Pathology Seminar 1
RS 401 Quality Management in the Imaging Sciences
RS 421 Non-Traditional Applications of Diagnostic 1 Imaging I
RS 422 Non-Traditional Applications of Diagnostic 1 Imaging II
RS 425 Cadaver Imaging 1
RS 440 Non-Traditional Imaging Practicum 1
RS $450 \quad$ Forensic Imaging I 1
RS 451 Forensic Imaging Lab 1
RS 452 Forensic Imaging II 1
RS 455 Human Osteology 2
RS 430 Clinical Practicum: Mammography I 2
RS 431 Clinical Practicum: Mammography II 2

Clinical Practicum: Computed Tomography (CT) II
RS 439
RS 480
RS 481
RS 482
RS 483
RS 470
RS 471
RS 472
Clinical Practicum: Computed Tomography (CT) II

Management ( 15 credits)
MG 201 Business Decision Making
MG 203 Organizational Theory
MG 210 Essentials of Management \& Organizational Behavior
MG 255 Human Resource Management
MG 301 Organizational \& Group Processes
MG 333 Managerial Thought
Science
16 credits of biology, chemistry or physics course work for the students considering medical, dental, podiatric, chiropractic or veterinary medicine.

## Marketing/Business (15 credits)

MK 201 Marketing Systems 3
MK 383 Professional Selling \& Sales Management 3
MK 210 Consumer Behavior 3
MK $324 \quad$ Business-to-Business Marketing 3
MK 332 Integrated Marketing Communications 3
MK 355
Services Marketing

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 110 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. Any deviations from the prescribed program require the approval of the program director.
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. into the Quinnipiac diagnostic imaging program.

Quinnipiac University normally grants transfer credit for courses appropriate to the chosen curriculum, completed with a grade of "C" or better, at regionally accredited postsecondary institutions. Based on transfer of credit, at a minimum, students must fulfill the 45 -credit residency requirement. All students complete 39-40 credits in radiologic sciences at Quinnipiac University. Contact the diagnostic imaging program director for further information about transfer assessment.

Radiologic technology articulation programs are in place with Gateway Community Technical College, Middlesex Community Technical College, Naugatuck Valley Technical Community College and St. Vincent's College.

## Department of Nursing

Bachelor of Science in Nursing
Traditional BSN Track for High School Graduates Accelerated BSN Track for Second Degree Students

The mission of the Department of Nursing at Quinnipiac University is to prepare graduates for professional nursing practice who are capable of providing holistic care for diverse individuals, families, communities and populations in a variety of settings. The faculty affirm that nursing is both a science and an art that is creative, goal-directed, research-based and concerned with the health and dignity of the whole person. Learning occurs in a highly personalized, student-centered community, which promotes academic excellence.

## "Caring To Make a Difference"

Nursing is a profession based on a culture of compassion, commitment and connection to individuals. Quinnipiac nursing students are taught that caring makes a difference in the health and well-being of all individuals.

## General Information

The undergraduate nursing curriculum, utilizing a holistic framework, 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. A master of science in nursing preparing adult and family nurse practitioners also is available. Both programs are accredited by the National League for Nursing Accrediting Commission (NLNAC). For more information about these offerings, please see the Graduate Studies section of the catalog.

## Admission Requirements

The requirements for admission into the undergraduate nursing program are the same as those for admission to Quinnipiac University. Students must complete all preprofessional component courses, including all sciences, by the end of the spring semester prior to starting the
professional component in the fall. A cumulative GPA of 3.0 is required for progression.

Current Quinnipiac students who wish to change into the nursing major will be evaluated on a space-available basis. Interested students should contact the undergraduate nursing program director in January of their sophomore year.

To progress and remain in continued good standing, the student must attain a semester GPA of $3.0(\mathrm{~B})$ and a grade of P (pass) in each hospital laboratory. A grade of C or less in a nursing course may result in dismissal from the program.

The policy for Advanced Standing/Placement, as stated in the Quinnipiac catalog, applies to the student seeking admission into the undergraduate program in nursing. 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 are accepted on a space-available basis. 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 (CLEP).

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-RN ${ }^{\top}$ ). In Connecticut, the laws of the state provide limitation to eligibility for licensure for any person convicted of a felony (according to Public Act 86.385). A copy of the act is available for review in the nursing department.

Select learning experiences in hospitals, physicians' offices, clinics and community health agencies begin with the first nursing course and continue throughout the curriculum. Students are responsible for transportation to and from clinical agencies. CPR certification must be obtained prior to enrolling in the first nursing course, and renewed annually. The nursing department has several additional health requirements in addition to those specified by the University, as well as technical standards. A criminal background check and drug testing may be required.

## Bachelor of Science in Nursing

## Undergraduate Program Outcomes

The undergraduate nursing program prepares a graduate to:

1. Synthesize knowledge from holistic nursing theory and the biological, physical, social and behavioral sciences in providing health care to diverse individuals, families and communities.
2. Apply critical thinking, ethical decision making, independent judgment and appropriate technologies in the utilization of the nursing process as a basis for providing holistic care.
3. Utilize leadership, management, delegation and collaborative skills in providing high quality, holistic nursing care.
4. Demonstrate professional role competency through accountability, social consciousness, advocacy and a commitment to lifelong learning, commensurate with bachelor's degree nursing preparation.
5. Utilize effective communication skills and teaching/learning strategies to meet client health teaching needs.
6. Apply theory and research findings to inform clinical practice.
7. Practice holistic nursing and ethical and professional standards, in accordance with the legal parameters of a registered nurse.

## BS in Nursing Curriculum

Course Title Credits
Fall Semester, First Year
BIO 101 Science (UC) 4
CHE 101 Fundamentals of Chemistry
EN 101 Freshman Composition (UC)
MA 275 Quantitative Literacy (UC)
QU 101 The Individual in the Community
Spring Semester, First Year
BIO 102 Science (UC)
CHE 102 Fundamentals of Chemistry
EN 102 Freshman Composition (UC)
UC Fine Arts
UC
Social Science
Fall Semester, Second Year
BIO 211 Anatomy \& Physiology I
BMS 213 Microbiology \& Pathology
or Open elective
UC
Humanities
QU 201Seminar on National CommunityOpen elective3
pring Semester,
UC Humanities ..... 3
Open elective or QU 201 ..... 3
Open elective or BMS 213 ..... 3-4
Fall Semester, Third YearNU 304 Alterations in Holistic Integrity Managedin the Community I3
NU 311 Holistic Health Assessment* ..... 4BMS 318 UC elective3
Spring Semester, Third YearNU 303 Alterations in Holistic Integrityof Individuals II*5NU 356 Elective3NU 404 Alterations in Holistic Integrityof Individuals III *5NU 402 Alterations in Holistic Integrity Managedin the Community II *5
Individuals IV (Preceptorship)* ..... 5
N 40 Isoduction to Nursing Research3
Total 16

Total Credits 132 practicum components.
NU 410 is also offered in the fall semester, senior students wishing to take 18 credits in fall semester senior year may take it at this time. NU 310 must be completed before taking NU 410.

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 May, with students concentrating solely on nursing courses.

Accelerated BSN students complete an intensive summer session and then join undergraduate students in the traditional program to complete the remainder of the nursing major requirements in the fall and spring. The accelerated BSN must be pursued on a full-time basis.

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 (may be taken at Quinnipiac). 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. The application deadline is October 1; applicant information is available on the Quinnipiac web site.

The BSN degree is 132 credits, including: prerequisites, general education requirements and nursing courses distributed as follows:
Nursing Course Prerequisites Course Credits
Anatomy \& Physiology I \& II (with labs) 8
Microbiology (with lab) 4
Pathophysiology 3
Statistics 3
Total 18

## General Education Courses <br> English <br> 6

Fine Arts ..... 3
Social Science ..... 6
Humanities ..... 6
Open electives ..... 37

Nursing Courses Total 56

A detailed curriculum plan and additional information are available from the accelerated track coordinator. Graduates are eligible to take the NCLEX-RN ${ }^{\odot}$ examination, and qualify for entrylevel 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 (p.183).

## 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 professional, arts and sciences experiences that provide a general education, a professional knowledge base, and entry-level skills and judgment.

In addition, faculty encourage practical and clinical reasoning and problem solving, based on the principles and current philosophy, frame of reference and theory 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 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 also 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 involving academic and clinical faculty, to 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 developmental-humanistic curriculum design. The occupational therapy student learns to become an effective change agent
in this 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), located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. ACOTE's phone number c/o AOTA is 301-652-AOTA. The ACOTE on-site evaluation awarded the program full accreditation status in August 1999. The next evaluation will be 2009. 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 will be 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 web site.


## 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 30 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 into the occupational therapy program dependent upon successful completion of the University Curriculum and sciences prerequisite courses with a GPA of 3.0. In addition the 30 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 are offered in the summer, in January and during the semester.

## Transfer Students from within Quinnipiac

 Students currently attending Quinnipiac in other programs are accepted into the occupational therapy program. Students may apply through the department. All prerequisite courses as listed in the catalog must be completed with a GPA of 2.75. In addition, 30 hours of observation in occupational therapy is 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.
## 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 2.75 quality 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. A grade of C or lower may result in dismissal from the program. All three fieldwork level II expe-
riences must be completed with a " P " or pass to graduate. If two fieldwork level II experiences are graded either " F " or " W " the student is dismissed from the program without appeal. A student dismissed from the program may follow the appeal procedure outlined in the OT student manual. Following a first dismissal, an acceptance of an appeal indicates that no further appeals are allowed. A second dismissal is a final dismissal. 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.

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 during the junior year and are updated, if required, before each Fieldwork Level II experience.

## Entry Level Master's Degree in

 Occupational Therapy Curriculum Course TitleFall Semester, First Year

| BIO 101 | Science (UC) | 4 |
| :--- | :--- | :--- |
| EN 101 | Freshman Composition (UC) | 3 |

MA 275 Quantitative Literacy (UC) 3
UC Social Sciences 3
QU 101 The Individual in the Community 3
OT 111 Fundamentals of Occupational Therapy 1
Total 17
Spring Semester, First Year
BIO 102 Science (UC) 4
EN 102 Freshman Composition (UC) 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
PHY 101 Physics 1014
UC UC elective 3
UC Humanities 3
OT 210 OT Skills in the Therapeutic Use of Self 2
Total 16

| Spring Semester, Second Year |  |  |
| :--- | :--- | :--- |
| BIO 212 | Anatomy \& Physiology II | 4 |
| UC | Fine Arts | 3 |
|  | Open elective | 3 |
|  | Open elective | 3 |
| OT 212 SL | Group Leadership (Service Learning) | 2 |
| QU 201 | Seminar on National Community | 3 |

Total 18
Fall Semester, Third Year
OT 315 Anatomy \& Lab 4
OT 325 Principles of Human Development \& Occupation3
OT 335 Functional Neuroanatomy 3
OT 345 Theory of Occupation \& Fieldwork I: Wellness 3
OT 355 Occupational Therapy Framework (SL) 2
OT 355L Community Service Learning 1
Total 16
$\begin{array}{lll}\text { Spring Semester, Third Year } \\ \text { OT } 316 & \text { Kinesiology \& Lab } & 4\end{array}$
OT 326 Principles of Human DevelopmentThe Older Adult3

OT 336 Functional Neuro-behaviors 3
OT 356 Documenting OT Practice \& FW1 3
OT 365 Problem Based Learning:
Risk Factors Impacting Human Occupation 2
QU 301 Seminar on Global Community 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
OT 466 Problem Based Learning:
Health Conditions \& Occupation I 1
Total 18
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
1
Total 19
Total credits 139

Upon successful completion of the fourth year, the BS in health and science studies is awarded. Award of this degree leads to matriculation into the graduate level of the program.

| mmer Between Fourth Year and Graduate |  |  |
| :---: | :---: | :---: |
| OT 500 | Fieldwork Level II | 6 |
| 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 2 (Hybrid) |  |
| OT 511 | Administration \& Management in OT (Hybrid)4 |  |
| OT 535 | Integrative Interventions: Sensory |  |
|  | Integration \& Neurorehabilitation | 6 |
| OT 550 | OT Research |  |
| T 560 | Contemporary Modalities |  |

Total 18
Spring Semester, Graduate Year
$\begin{array}{lll}\text { OT } 536 & \text { Intervention: Ergonomics \& Assistive } \\ & \text { Technology, FW, Lab }\end{array}$
OT 555 Pharmacology \& Environmental Toxins Affecting Human Performance 3
OT 556 Professional Development 3
OT 565 Integrative Case Studies 2
OT 570 Capstone Project 3 Total 17

## Summer and Fall Following Graduate Year

OT 580 Fieldwork Level II 6
OT 581 Fieldwork Level II 6
Total 12
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. The curriculum, as designated occupational therapy courses, is subject to modification as deemed necessary to maintain a high quality educational experience.

## Department of Physical Therapy

Athletic Training/Sports Medicine
Athletic Training/Sports Medicine and
Doctor of Physical Therapy
Doctor of Physical Therapy ( $3^{1} / 2$-year preprofessional and $3^{1} / 2$-year professional components)

## Bachelor of Science in Athletic Training/Sports Medicine

The athletic training/sports medicine program in the Department of Physical Therapy 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/sports medicine 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/sports medicine program, graduates are prepared to enter the profession of athletic training and assume a leadership role.

The athletic training/sports medicine 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/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/sports medicine 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/sports medicine, unless officially accepted into the program.

Students enrolled in the program's preprofessional component (semester 1-3) must achieve a B- or better in AT 114, AT 214 and AT 230 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.

## Technical Standards for Admission

The athletic training/sports medicine 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/sports medicine program establish
the essential qualities considered necessary for admitted students to this program to achieve the knowledge, skills, and competencies of an entrylevel 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/ sports medicine 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/sports medicine program.


## Transfer Students from Other Colleges and Universities

Transfer students from other colleges and universities may be accepted into the athletic training/sports medicine 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 214 and AT 230 prior to entry into the professional component of the program or the fourth semester of the course sequence. AT 114, AT 214 and AT 230 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/sports medicine 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 214 and AT 230 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/ Sports Medicine 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/sports medicine 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 |
| :--- | :--- | ---: |
| MA 275 | Biostatistics | 3 |
| BIO 101-102 | General Biology I \& II | 8 |
| CHE 101-102 | Fund. Gen., Org, Biol. Chemistry I \& II | 8 |
| BIO 211-212 | Anatomy \& Physiology I \& II | 8 |
| PHY 101 | Elements of Physics | 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/sports medicine program. All AT courses must be taken at Quinnipiac.
Course Title

Credits
AT 114 Introduction to Athletic Training/ Sports Medicine
AT 214 Care \& Prevention of Athletic Training 3
AT 214L Care \& Prevention of Athletic Training Lab 1
AT 230 Nutrition, Conditioning \& Fitness 3

## Professional Component

The Admissions Progression and Retention Committee for the program in athletic training/sports medicine 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. Most off-campus sites are within 15 miles from the main campus. Moreover, students involved in varsity athletics may require additional semester(s) to complete the program.

## BS in Athletic Training Curriculum Course Title Credits

Fall Semester, First Year
BIO 101 Science (UC) 4
CHE 101 Fundamentals of Chemistry I 4
EN 101 Freshman Composition (UC) 3
UC Fine Arts 3
QU 101 The Individual in the Community 3
Total 17
Spring Semester, First Year
BIO 102 Science (UC) 4
CHE 102 Fundamentals of Chemistry II 4
EN 102 Freshman Composition (UC) 3
UC Social Sciences* 3
AT 114 Introduction to AT/SM 3
Total 17

Students interested in graduate school or AT/DPT dual major should substitute CHE 110/111 for
CHE 101/102.
Fall Semester, Second Year

| BIO 211 | Anatomy \& Physiology I | 4 |
| :--- | :--- | :--- |
| PHY 101 | Elements of Physics | 4 |
| MA 275 | Quantitative Literacy (UC) | 3 |
| AT 214 | Care \& Prevention of Athletic Injuries** | 4 |
| AT 230 | Nutrition, Conditioning \& Fitness | 3 |

Total 18
Students interested in graduate school or AT/DPT dual major should substitute PHY 110/111 for PHY 101.

## Spring Semester, Second Year

BIO 212 Anatomy \& Physiology II 4
AT 215 Therapeutic Modalities** 4
AT 298 Clinical Practicum I** 3
AT 338 Kinesiology \& Athletic Injury Evaluation I** 4
QU 201 Seminar on National Community 3
Total 18
Fall Semester, Third Year
BMS 300 Physiology of Human Performance I** 4
AT 339 Kinesiology \& Athletic Injury Evaluation II** 4
AT 398 Clinical Practicum II** 3
AT 410 Therapeutic Exercise I** 4
Total 15
Spring Semester, Third Year
BMS 301 Physiology of Human Performance II** 4
AT 498 Clinical Practicum ** 4
AT 411 Therapeutic Exercise II ** 4
AT 440 Biomechanics ** 4
Total 16
Fall Semester, Fourth Year
UC UC elective

AT $450 \quad$ Administration \& Management 3
AT 399 Clinical Practicum IV ** 3
QU 301 Seminar on Global Community
Total 12
Spring Semester, Fourth Year
AT 499 Clinical Practicum V ** 3
UC Social Sciences * 3
UC UC elective 3
UC Humanities 3
UC Humanities 3
Total 15
Total Credits 129
*Take PS 101 and PS 272 for UC Social Sciences, if interested in AT/DPT dual major.
**These AT courses have a laboratory and/or clinical component.

The curriculum for the professional component is subject to modification as deemed necessary to present to the students a progressive and meaningful educational experience.

A GPA of 3.0 must be maintained each semester during the professional component; C, D and F grades are unacceptable in the professional component of the program.

## Bachelor of Science in Atbletic Training/Sports Medicine and Doctor of Physical Therapy ( $7^{1 / 2}$ years)

Contact undergraduate admissions for further details on direct entry into the dual program of athletic training/sports medicine and doctor of physical therapy.

Students enrolled in the athletic training/sports medicine program may apply for entry into the dual program in athletic training/sports medicine and doctor of physical therapy at the completion of their third year. Students applying from the athletic train$\mathrm{ing} /$ sports medicine program would be required to follow the dual program curriculum in their freshman, sophomore and junior years and meet all of the academic performance standards of both athletic training/sports medicine and physical therapy programs. Following a joint review of the applicants by the program directors of physical therapy and athletic training/sports medicine, students would be accepted into the dual major at the completion of the junior year, based on performance and space availability.

See physical therapy for required standards to successfully complete the preprofessional component of that program. Additionally, the following courses in athletic training/sports medicine must be completed with a B- or better and an overall GPA of 3.0: AT 114, 214, 215, 230, 298, 338, 339, 398, 399, 410 and 411 and BMS 300, 301.

## Entry-Level Doctor of Physical Therapy

The mission of the program in physical therapy is to graduate a doctoral-prepared, entry-level therapist who will practice as a generalist, serve as an advocate for clients and the profession, and interact collaboratively with a variety of health care professionals. As a practitioner of physical therapy, the graduate is prepared to practice autonomously, assess risk, promote health and wellness and provide education at all levels of service. The graduate should be able to employ critical thinking skills to assess the efficacy of interventions and engage in research to support the scope of practice as it continues to evolve. Emphasis on community service, lifelong learning and professional development strengthen the educational foundation of the physical therapy program.

To achieve its mission, the program in physical therapy shares the University's commitment to three major values: excellence in education, sensitivity to students, and a spirit of community. The foundation of its curriculum consists of the arts and sciences, including humanistic and social science traditions. This foundation allows the program to cultivate the student's critical and creative thinking skills, communication skills and clinical competencies. The program uses a model of evidenced-based learning and authentic assessment in a highly personalized learning environment that features small classes, multiple hands-on and authentic laboratory activities.

## General Information

The program in physical therapy is divided into a $3^{1 / 2}$-year preprofessional component and a 3-year professional component. Following completion of $31 / 2$ years of study, students receive a bachelor of science in health and science studies. Students receive a doctor of physical therapy upon completion of the program. The preprofessional component provides a broad liberal arts education, as well as the basic science foundation for the professional component. Consistent with Quinnipiac's mission, this integration of the arts and sciences with professional studies prepares students to be responsible decision makers in a society that increasingly demands its professionals understand the humanities, the social and natural sciences, and technology. During the professional component, the students develop the specific
knowledge base, clinical skills, problem-solving ability and professionalism necessary to become entry-level physical therapists.

The program objectives are: to prepare physical therapy clinicians sensitive to the evolving concept of comprehensive health care and prepared to cooperate with other health professionals in meeting the changing health needs of society; assist the student in the acquisition of the basic skills for assuming beginning responsibilities in the areas of patient care, administration, education and research; cultivate in the student a knowledge, understanding and appreciation of the social, political and economic aspects of health in conjunction with the humanities.

The program in physical therapy is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

## 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 (SAT) or the College Entrance Examination board of the American College Testing (ACT) program 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. Applicants must have observation hours in at least two different clinical settings, preferably one in a rehabilitation facility and one in an acute care hospital. A minimum of 10 hours in each setting 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 program in physical therapy, unless officially accepted into the program.

Students enrolled in the program's preprofessional component must achieve a minimum overall GPA of 3.0, as well as a 3.0 cumulative GPA in program science and math requirements upon completion of the second year, and in each semester of the third and fourth years of the preprofessional curriculum, to be eligible for admission to the professional component of the program. ( D and F grades in the required science and math courses are unacceptable.)

In addition to the overall 3.0 GPA required in each semester of the third and first semester fourth years, a grade of $\mathrm{C}+$ or better is required in biology and physical therapy courses in each of these semesters.


Professional component students whose averages for each semester fall below 3.0 are subject to dismissal from the program. In addition a grade of $\mathrm{C}+$ or better is required in all professional component courses.

Transfer students are considered for admission to the physical therapy program on a spaceavailable basis.

## Doctor of Physical Therapy Curriculum Preprofessional Undergraduate Component Requirements <br> Course Title <br> \section*{Credits}

First Year, Fall Semester
BIO 101 General Biology I (UC) 3
BIO 101L General Biology I Lab (UC) 1
CHE 110 General Chemistry I 3
CHE 110L General Chemistry I Lab 1
EN $101 \quad$ Freshman Composition (placement by exam) 3 (UC)
MA 141 Quantitative Literacy (placement by exam) 3
QU 101 The Individual in the Community 3

## Total 17

First Year, Spring Semester
BIO 102 General Biology II (UC) 3
BIO 102L General Biology II Lab (UC) 1
CHE 111 General Chemistry II 3
CHE 111L General Chemistry II Lab 1
EN 102 Freshman Composition (UC) 3
PS 101 Social Sciences elective (UC) 3
UC Humanities elective 3
Total 17
Second Year, Fall Semester
BIO 211 Anatomy \& Physiology I 4
PHY 110 General Physics I 3
PHY 110L General Physics I Lab 1
UC Fine Arts elective 3
UC Humanities elective 3
QU 201 Seminar on National Community 3
Total 17
Second Year, Spring Semester
BIO 212 Anatomy \& Physiology II 4
PHY 111 General Physics II 3
PHY 111L General Physics II Lab 1
PS 272 Social Sciences elective (UC) 3
MA 275 Open Core elective (UC) 3
Free Elective 3
Total 17

## Third Year, Fall Semester

BMS 300 Human Performance Physiology I 4
HSC 338 Human Anatomy I 4
HSC 340 Kinesiology I
HSC 342 Neuroanatomy I
PT 300 Intro to Phys Therapy Process I


Total 17

Following completion of the fall semester of the fourth year with 122 cumulative credits, students receive a bachelor's degree in health and sciences studies.

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. The above physical therapy course requirements must be fulfilled in the appropriate semester as indicated. Any deviations from the prescribed program require the prior approval of the department's Review and Evaluation Committee. The following courses in the preprofessional component must be successfully completed with a C - or better. Where applicable, they may be used to satisfy University Curriculum requirements.
MA 275 Biostatistics
CHE 110-111 General Chemistry
PS 101 Introduction to Psychology
BIO 211-212 Anatomy \& Physiology
PS 272 Abnormal Psychology
PHY 110-111 General Physics
BIO 101-102 General Biology
MA 141 Calculus of a Single Variable I

The following courses in the third year, third year summer, and first semester of the fourth year must be completed with a C+ or better. In addition, a student must achieve an overall GPA of 3.0 in each semester during the third year and in the first semester of the fourth year.
PT 300 Introduction to Physical Therapy Process
BMS 300 Human Performance Physiology I
HSC 338 Human Anatomy
HSC 340 Kinesiology I
HSC 342 Neuroanatomy I
PT 301 Introduction to Physical Therapy Process II
BMS 301 Human Performance Physiology II
HSC 339 Human Anatomy II
HSC 341 Kinesiology II
HSC 343 Neuroanatomy II
PT $400 \quad$ Clinical Experience I
PT 401 Issues/Topics in Physical Therapy
PT 402 Introduction to Clinical Decision Making
BMS 200 Biology of Aging
The following courses must be taken at Quinnipiac: BIO 101-102, CHE 110-111, PHY 110-111, BIO 211-212, MA 141, MA 275, BMS 300, HSC 338, HSC 340, HSC 342, PT 300, BMS 301, HSC 339, HSC 341, HSC 343, PT 401 and PT 402.

A total of 122 credits are required for the bachelor's degree in the preprofessional component of the program. All requirements must be completed by the end of the fall semester of the fourth year to be guaranteed a position in the professional component.

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 5 on the AP exam for calculus will be awarded credit for MA 141. However, if AP credits are awarded and accepted for CHE 110-111, BIO 211-212, PHY 110-111, MA 141 and MA 275, the following courses must be taken in their place.

## CHE 110-111 General Chemistry I \& II

CHE 201L Lab Fundamentals of Organic Chemistry
CHE 205L Lab Fundamentals of Physiological Chemistry
BIO 211-212 Anatomy \& Physiology I \& II
BIO 346L Lab Cell Physiology
BIO 347 General Physiology
PHY 110-111 General Physics I \& II
BIO 282L Lab Genetics
BIO 317L Lab Developmental Biology
MA $141 \quad$ Calculus of a Single Variable I

MA 142
Calculus of a Single Variable II
MA 275 Biostatistics
MA 381

The Review and Evaluation Committee for the program in physical therapy is responsible for evaluating and screening candidates during the preprofessional and professional 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 Component (Graduate level) Course Title Credits Fourth Year, Spring Semester
PT 520 Pathophysiology I 3

PT 523 Applied Pharmacology I 1
PT 528 PTP Musculoskeletal I 3
PT 531 PTP Acute Care and Cardiopulmonary I 4
PT 548 PTP Physical Agents 3
PT 557 Diagnostic Imaging 3
Total 17

## Fourth Year, Summer Term

PT $671 \quad$ Clinical Education I (8 weeks) 4
Total 4
Fifth Year, Fall Semester
PT 521 Pathophysiology II 3
PT 524 Applied Pharmacology II 1
PT 529 PTP Musculoskeletal II 5
PT 532 PTP Acute Care and Cardiopulmonary PT II 3
PT 533 PTP Neurological Rehabilitation I 4
Total 16
Fifth Year, Spring Semester
PT 522 Pathophysiology III 3
PT 525 Applied Pharmacology III 1
PT 534 PTP Neurological Rehabilitation II 3
PT 562 Applied Concepts in Education 2
PT $564 \quad$ Psychosocial Aspects of Phys Disability 3
PT 565 Research Theory 3
PT 568 Professional Issues 2
Total 17
Fifth Year, Summer Term
PT $672 \quad$ Clinical Education II (8 weeks) 4
Total 4
Sixth Year, Fall Semester
PT 629 PTP Musculoskeletal III 3
PT 649 PTP Selected Topics in Rehabilitation 4
PT 658 Differential Diagnosis 3

| 661 | Administration \& Management |  |
| :---: | :---: | :---: |
| PT 666 | Research Application |  |
|  |  | Total 16 |
| Sixth Year, Spring Semester |  |  |
| PT 636 | PTP Neurological Rehabilitation II |  |
| PT 644 | PTP Manual Therapy |  |
| PT 659 | Advanced Clinical Decision Making |  |
| PT 663 | Topics in Community Health \& Wellness |  |
| PT 667 | Capstone Research Project |  |
|  |  | Total 16 |
| Sixth Year Summer/Seventh Year Fall |  |  |
| Summer Term/Fall Semester |  |  |
| PT 681 | Clinical Internship I (10-12 weeks) |  |
| PT 682 | Clinical Internship II (10-12 weeks) |  |
|  |  | Total 12 |
| Followi with 102 the doc The includi apply t the firs underg credits compo preprof subject present meanin in com standar <br> A semest progran courses progra | ompletion of the graduate compon mulative credits, students are awar of physical therapy. <br> ular full-time tuition requirements, propriate charges above 16 credit first $31 / 2$ years of the curriculum. mmer clinical, the applicable summ ate credit charges apply. A total of equired to complete the profession of the program. The curriculum for nal and professional components modification as deemed necessary to he student a progressive and educational experience and to rem ce with professional accreditation <br> of 3.0 must be maintained each ring the graduate component of th grade of $\mathrm{C}+$ or better is required he professional component of the | onent <br> warded <br> ts, <br> dits, <br> . For <br> mer <br> of 102 <br> ional <br> for the <br> ts are <br> to <br> emain <br> n <br> the <br> d in all <br> e |

PT 661 Administration \& Management ..... 3
Total 16
PT 636 PTP Neurological Rehabilitation III ..... 4
PT 659Advanced Clinical Decision Making3
PT 663Capstone Research Project3
Total 16
Summer Term/Fall Semester ..... 6
Clical In II (10-12 wesk)
Clical In II (10-12 wesk)Total 12

Following completion of the graduate component with 102 cumulative credits, students are awarded the doctor of physical therapy.

The regular full-time tuition requirements, including appropriate charges above 16 credits, apply to the first $31 / 2$ years of the curriculum. For the first summer clinical, the applicable summer undergraduate credit charges apply. A total of 102 credits are required to complete the professional component of the program. The curriculum for the preprofessional and professional components are subject to modification as deemed necessary to present to the student a progressive and meaningful educational experience and to remain in compliance with professional accreditation standards.

A GPA of 3.0 must be maintained each semester during the graduate component of the program. A grade of $\mathrm{C}+$ or better is required in all courses in the professional component of the program.
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## Part-time Undergraduate Studies

## Office of Undergraduate Admissions Arnold Bernhard Library Building

Director of Part-time Admissions

Mary Wargo
LN-WG
582-8612
Quinnipiac University recognizes that the desire 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, Communications, Education, Health Sciences and 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 Center, 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 with access to offices at times compatible with their schedules.

## 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, Communications or Health Sciences should contact the Office of Parttime 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 web site (www.quinnipiac.edu) or from the Office of Part-time Admissions. 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, 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.
## 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 Spring semester and Aug. 15 for 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 six 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.

## Get Acquainted Program

In partnership with Connecticut community/technical colleges, Quinnipiac University offers a one-course scholarship to students admitted into a degree program in a Connecticut community/technical college who are considering transfer to a four-year college. Applications and information can be obtained through the Office of Part-time Admissions.

## 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.

## Dislocated Worker Program

In cooperation with the New Haven and MeridenMiddlesex Regional Workforce Development Boards, Quinnipiac offers certified dislocated workers wishing to explore new educational opportunities a one-course scholarship. Individuals who have been certified as dislocated workers should contact the New Haven or MeridenMiddlesex Regional Workforce Development Boards for information and an application prior to making an appointment with the Office of Parttime Admissions.

## 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 parttime 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 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. We work with part-time students to use all of the eligible credit they have earned at other colleges and universities.

## 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 to enter this creative program 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 for each semester may be obtained by calling the Office of Part-time Admissions at 203-582-8612. 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 in the course schedule. Students should check course descriptions in the catalog for any specific prerequisites prior to registering. Course changes and updates are posted on the Quinnipiac web site: www.quinnipiac.edu. New students should make an appointment with the Office of Part-time Admissions prior to registration.

## Special Programs

## No-Risk Enrollment-Our Guarantee of 100\% Satisfaction

We guarantee the quality of our courses through our No-Risk Enrollment option. Register for your first course as a part-time student and, if you decide to withdraw within the first three weeks, receive a full refund. (The No-Risk period varies in length for accelerated courses.) Forms are available through the Office of Part-time Admissions and must be submitted with your course registration form.

## 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 limited number of accelerated, online or 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 |
| :--- | :--- | ---: |
| IB 201 | Globalization \& International Business (UC) | 3 |
| IB 313 | International Marketing \& Marketing Research 3 |  |
| IB 324 | Negotiating Internationally | 3 |
| IB 335 | International Finance | 3 |
| IB 345 | Two-way Management of the Global Supply |  |
|  | Chain | 3 |

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 | Globalization \& International Business (UC) | 3 |
| IB 335 | International Finance | 3 |
| IB 345 | Two-way Management of the Global Supply |  |
|  | Chain | 3 |
| IB 352 | International Management | 3 |
| Plus, choose one of the following courses: |  |  |
| IB 324 | Negotiating Internationally |  |
| or IB 498 | 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 and 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 indepth knowledge in the student's area of interest. Health and science studies and liberal studies programs are described in detail below.

## Bachelor of Science in

## Health and Science Studies

The health and 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 and science fields, as well as in other areas such as business, management, psychology and sociology.

| Program Requirements: (122 credits) |  |
| :--- | ---: |
| Foundational Science (20 credits) | Credits |
| Biology | 8 |
| Chemistry | 8 |
| Physics | 4 |

Health/Science Courses ( $\mathbf{3 0}$ credits)
Courses taken in a health or basic science area outside the requirement of the foundational science listed above.

| Electives ( $\mathbf{3 3}$ credits) |  |  |
| :--- | :--- | ---: |
| University Curriculum Requirements ( $\mathbf{3 9}$ credits) |  |  |
| Course | Title | Credits |
| EN 101 | Elements of Composition I | 3 |
| EN 102 | Elements of Composition II | 3 |
|  | Quantitive Literacy | 3 |
|  | QU 101, 201, 301 | 9 |
|  | Fine Arts | 3 |
|  | Social Sciences | 6 |
|  | Humanities | 6 |
|  | UC electives | 6 |

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. Students entering under the new University Curriculum should consult with the dean of the College of Arts and Sciences.


## Bachelor of Arts and Bachelor of Science Degrees-Traditional Majors

Part-time students may enroll in virtually all of the bachelor's degree programs offered by the academic schools of the University (physical therapy, athletic training, nursing and occupational therapy require full-time status).

The following bachelor's degree programs usually can be completed through evening study and normally do not require students to take classes during the day.

## Bachelor of Science

Diagnostic Imaging ${ }^{\dagger}$ Health and Science Studies
$\dagger$ Available evenings to licensed professionals seeking advanced placement.

More information on specific programs available to part-time students can be found in the sections for the schools of Business, Communications, Health Sciences and College of Arts and Sciences.

## Graduate \& Online Studies

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## Graduate \& Online Studies

Administrative Officers
Director of Graduate Admissions
Associate Director of Graduate Admissions Jennifer Boutin
Assistant Director of Graduate Admissions Kristin Parent
Director of Graduate Financial Aid
Heather Hamilton

Office
LN-WG Phone

LN-WG
NH1-160C 582 582

LN-WG

## Online Graduate Programs

Director of Marketing and Admissions for Online Programs
Associate Director of Admissions and Marketing Operations
Managing Associate
Director of Admissions
Assistant Director of Admissions
Assistant Director of Admission
Assistant Director of Admissions
Admissions Coordinator
Ken Boutelle
Joe Catrino
Valerie Brennan
Jonathan Bailey
Chris Peterson
Luis Moyano
Katharina Wagner

## Program Directors

College of Arts and Sciences
MS in Molecular and Cell Biology
Charlotte Hammond

## School of Business

Master of Business Administration
MBA in Health Care Management
MS Computer Information Systems
MS in Organizational Leadership
School of Communications
MS in Interactive Communications
MS in Journalism
MS in Public Relations
School of Education
Assistant Dean
Master of Arts in Teaching
Sixth-Year Educational Leadership
School of Health Sciences
Doctor of Physical Therapy
MHS Cardiovascular Perfusion
MHS Medical Laboratory Sciences
MHS Pathologists' Assistant
MHS Physician Assistant
MHS Radiologist Assistant
MS Nursing
MS in Occupational Therapy
School of Law

Kim McKeage
Kim McKeage
Bruce White
Kim McKeage

TBA
Rich Hanle
Kathy Fitzpatrick

Bernadine Krawczyk
Kevin Basmadjian
Gary Alger

Donald Kowalsky
Michael Smith
Kenneth Kaloustian
Kenneth Kaloustian
Cynthia Lord
Ramon Gonzalez
Jeanne LeVasseur
Ann Burkhardt
Admissions Office

OS-QU Online
582-3866
OS-QU Online
582-3616
OS-QU Online 582-8949
OS-QU Online 582-3714
OS-QU Online 582-3712
OS-QU Online 582-3744
OS-QU Online
TBD

## 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, 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 available and are needed by students who enter new fields at the graduate level.

## Graduate Admission

Applications for all graduate programs may be obtained from the Office of Graduate Admissions or on the University web site at www.quinnipiac.edu. For information about online admissions, visit the web site at www.quinnipiac.edu/quonline. The application, along with the appropriate fee, is to be returned with official transcripts of all college-level work completed at other institutions. Applicants also are required to submit an autobiography, essay or 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 scores are required for admission into the MBA program. GRE scores are required for the MS in public relations 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. 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.

## 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. TOEFL and IELTS 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.

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 in any of the concentration curricula: environmental science, evolution and genetics; molecular and cell biology; and physiology and comparative biology. (Students in the environmental science, evolution and genetics track may need to take additional courses.)

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 2.5 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 <br> Programs in Business

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 include the MBA, MBA/HCM (health care management), MBA-CFA ${ }^{\circledR}$ track (chartered financial analyst), MBA-SCM track
(supply-chain management) and the MS in computer information systems. Students may apply for admission to the combined business programs upon earning 75 credits at Quinnipiac 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.

## 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.

## Meeting minimum admissions 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.

## 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.

## Transfer of Credit and Challenge Policy

 Graduate course credit completed with a grade of $B$ or better at other 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 beconsidered 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 cardiovascular perfusion, physician assistant and pathologists' 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.

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 or MS in computer information systems programs. 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 part-time 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 the director of graduate admissions.

## Internship Waivers and Clinical Affiliations

 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 tuition reduction during the internship semesters.Clinical Affiliations: Students accepted into certain health science programs will receive a reduced tuition charge during their required clinical affiliations.

## 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 graduate students who demonstrate exceptional promise of achieving academic excellence. The scholarships are offered to full-time students who are entering the following programs: physician assistant, pathologists' assistant, radiologist assistant, cardiovascular perfusion,
molecular and cell biology, medical laboratory sciences, nursing, interactive communications, journalism, computer information systems and business administration. 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 application process. Financial need is not a factor in the selection.

Candidates interested in merit scholarships are encouraged to apply early in the 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 then 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 .

## Graduate Assistance Program Grant

The University also offers a limited number of institutional grants. Incoming full-time students are automatically considered for this grant, which is a one-time award of a designated amount with respect to financial need as demonstrated by the FAFSA.

## 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.ed.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 web site.

## Requirements for Graduation

## For the 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 (passing) on the appropriate PRAXIS II test(s).

## For the 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.

## For the Master of Business Administration in Health Care Management

1. Satisfactory completion of all MBA in health care management 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.

## For the Master of Health Science in Medical Laboratory Sciences, Pathologists' Assistant and Physician Assistant

1. Satisfactory completion of at least 34 credits of graduate study.
2. Satisfactory completion of specific course requirements.
3. A cumulative GPA of at least 3.0.

## For the Master of Health Science in

 Radiologist Assistant1. Satisfactory completion of American Registry of Radiologic Technologists and program requirements.

## For the Master of Science in Computer Information Systems

1. Satisfactory completion of all MS in computer information systems program requirements (36 credits).
2. A cumulative GPA of at least 3.0.
3. A minimum grade of C in all MS program courses taken at Quinnipiac.

## For the Master of Science in Interactive Communications

1. Satisfactory completion of 36 credits of graduate study.
2. A cumulative GPA of at least 3.0.

## For the Master of Science in Journalism

1. Satisfactory completion of 36 credits of graduate study.
2. A cumulative GPA of at least 3.0


## For the 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. A cumulative GPA of at least 3.0.

## For the 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.

## For the Master of Science in

## Occupational Therapy

1. Satisfactory completion of all MS in occupational therapy program requirements (32 credits).
2. A cumulative GPA of at least 3.2.

## For the 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.

## For the 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.

## For the 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.

## Graduate Academic Policies

## Academic Achievement and Graduation <br> 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 academic dean provides each program director 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.

## Graduate Academic Honors

## Academic Awards

## Excellence in Scholarship and Teaching Award, Education

The award, from the faculty in education, goes to the graduate of the program who has demonstrated the best combined performance in course work and student teaching.

Two awards are granted: one to a graduate in elementary education and one to a graduate in secondary education.

## 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 Accounting
Master of Science in Computer Information Systems
Master of Science in Interactive Communications
Master of Science in Journalism
Master of Science in Public Relations

## 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 Science in Molecular and Cell Biology Master of Science in Nursing

## Alpha Iota Mu Society

Alpha Iota Mu Society is a national honor society that recognizes graduate computer information systems students for academic achievement.

## 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.

## Excellence in Occupational Therapy Award

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.

## Richard K. Gershon, MD, Memorial Scholarship

This scholarship was established in 1986 in memory of Dr. Gershon, professor of immunology, biology and pathology at the Howard Hughes Medical Institute. The fund was established by his wife for graduate students enrolled in health sciences, public health and microbiology.

## Carissa M. Neubig Award

This award is given by Gaylord Hospital to a physical therapy student in his/her final year of the program. The award is given in honor of Carissa Neubig, a former graduate of the Quinnipiac University 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 sixth-year 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.

## 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.

# College of Arts and Sciences 

Master of Science

Master of Science in Molecular and Cell Biology MS Program<br>Combined BS/MS

## 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 thesis options. Each student selecting the thesis option then carries out original laboratory research either in a faculty laboratory or an industrial/hospital research laboratory. Students who choose the nonthesis option must take additional course work and a written comprehensive examination to test their knowledge of core curricula.

## 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.xml) 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

Applicants must have a minimum undergraduate cumulative GPA of 2.5. 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).

## Curriculum

Core Curriculum
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
Total 20
Thesis Option

|  | Core Curriculum Requirements | 20 |
| :--- | :--- | ---: |
| BIO 650 | Thesis I | 4 |
| BIO 651 | Thesis II | 4 |
|  | Graduate electives | 6 |
|  | Total | 34 |

## Non-Thesis Option

Core Curriculum Requirements 20
BIO 675 Comprehensive examination 2
Graduate electives 12
Total 34
Graduate Elective Courses
Course Title Credits
BIO 500 Writing and 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. Students are encouraged to meet with the program director before registering for the comprehensive exam.

## Combined BS in Biology/MS in Molecular and Cell Biology

The Department of Biological Sciences offers a combined BS/MS program in biology and molecular and cell biology to qualified undergraduates in any of the concentration curricula: environmental science, evolution and genetics; molecular and cell biology; and physiology and comparative biology. (Students in the environmental science, evolution and genetics track may need to take additional courses.)

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 2.5 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 degreegranting 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.

## Program of Study

Students interested in the combined BS/MS
program are required to take the following courses:
Course Title
Course Title Credits
PHY 110/110L General Physics I 4
PHY 111/111L General Physics II 4
BIO 282/282L Genetics 4
BIO 346/346L Cell Physiology 4
CHE 315/315L Biochemistry 4
The following courses are strongly recommended in preparation for graduate study:
BIO 317/317L Developmental Biology 4
BMS 370/370L Microbiology
Students must work with their undergraduate advisers as well as the director of the graduate program in molecular and cell biology to ensure that the appropriate courses are taken and that the courses are applicable to both degree programs.

## Recommended Curriculum (Fourth Year)

 Students in the combined BS/MS program follow the first three years of the recommended curriculum for the BS in biology (see College of Arts and Sciences: Department of Biological Sciences-Undergraduate Studies section).During the fourth year of the program, in addition to the courses listed in the recommended curriculum for the BS in biology, students should take a minimum of two graduate courses in preparation for the MS degree in molecular and cell biology. These courses from the core curriculum (BIO 515, BIO 568, BIO 571, BIO 605, BIO 606) will substitute for the "open elective" requirements for the BS in biology.

Upon successful completion of all of the requirements for the BS degree in biology as well as the graduate admission standards for the MS in molecular and cell biology, students enter the fifth year.

## Recommended Curriculum (Fourth Year)

Graduate Core Requirement 4
Graduate Core Requirement Total

## Summer Study

Graduate Core/Electives
Total 6-8

Non-Thesis Option
Fall Semester
Graduate Core Requirement 4
Graduate Core Requirement 4
Graduate elective 3-4
Total 11-12
Spring Semester
Graduate elective
3-4
Graduate elective
3-4
BIO 675 Comprehensive exam
Total
Thesis Option
Fall Semester
Graduate Core Requirement Graduate Core Requirement
BIO 650
Thesis I
Total

## Spring Semester

Graduate elective 4
BIO 651
Thesis II
Total

## School of Business

Master of Business Administration (MBA)
MBA Program*
MBA-CFA ${ }^{\circledR}$ Track (Chartered Financial Analyst)*
MBA-SCM Track (Supply Chain Management)
Combined BA/MBA
Combined BS/MBA
MBA/HCM (Health Care Management)*
JD/MBA (Juris Doctor) and JD/MBA in
Health Care Management
Master of Science in Computer Information Systems

MS CIS Program
Combined BS/MS in Computer Information Systems
Master of Science in Organizational Leadership*
MS OL Program
Professional Focus Tracks:
Human Resources Leadership Track
Public Service/Nonprofit Leadership Track
Strategic Leadership Track
Certificates in Health Care Administration
Health Care Compliance
Long-term Care Administration
For specific information about the mission and learning goals for each of the graduate programs, please visit the University web site at www.quinnipiac.edu.
*Programs marked with an asterisk also are offered online.


## Master of Business Administration

The School of Business offers an MBA program for working adults and full-time students whether or not they have formal business education.

The MBA program provides individuals with a broad professional education and acquaints them with the theories, principles and strategies needed for successful careers in business.

Beyond acquiring the knowledge of course content and an understanding of business systems, students are taught to be innovative in their approach to solving problems and making decisions. Exposure to sound ethical standards and skill development in the areas of negotiation, cooperation and interpersonal relations are an integral part of the curriculum. Graduates are action-oriented and can effectively apply the competencies and skills they have acquired at Quinnipiac. Courses are offered in a traditional classroom format, online and in a limitedresidency hybrid format.

Students who have a professional CPCU designation may receive up to 9 credits toward the MBA program.

## MBA Program

## Admission

Admission to the MBA program at Quinnipiac University is competitive. Applications are considered on a rolling basis and students may apply to enter during the fall, spring or summer semesters. Applications are evaluated once all materials and fees are received by the University. A complete application consists of the following:

- application form and fee
- letter of intent
- official GMAT score report
- two letters of recommendation
- current resume
- official transcripts of all undergraduate and graduate work completed
Applications for the MBA program are accepted throughout the year for both full- and part-time study. Candidates are encouraged to submit applications as early as possible to ensure consideration for the semester desired.
Program of StudyCourse Title
Credits
Required Core Courses
MBA 600 Strategic Business Problem Solving ..... 3
MBA 605 Business Communications ..... 1
MBA 610 Business Decision Analysis ..... 3
AC 600 Strategic Cost \& Profitability Analysis ..... 3
CIS 600 Information Systems Strategy ..... 3
EC 600 Managerial Economics ..... 3
FIN 600 Financial Analysis \& Decision Making ..... 3
IB 600 Managing in a Global Economy ..... 3
MG 600 Business Ethics \& Legal Environment ..... 3
MG 610 Managing People \& Organizations ..... 3
MG 690 Strategic Management(capstone taken in final semester)3
MK 600 Managing Customers \& Markets ..... 3
MBA Electives
All MBA students take 12 credits of electives.
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, management and marketing. Elective courses are listed by department in the graduate course descriptions section of the catalog.


## 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
Course ..... Title
Credits
Foundations for Effective Management
MBA 600 Strategic Business Problem Solving3
MBA 605 Business Communications ..... 1AC 600 Strategic Cost \& Profitability Analysis
EC 600 Managerial Economics
FIN 600 Financial Analysis \& Decision Making
MBA 610 Business Decision Analysis ..... 3IB 600 Managing in a Global EconomyMG 600 Business Ethics \& Legal Environment3MG 610 Managing People \& Organizations3
MK 600 Managing Customers and Markets3
Concentration Courses
AC 613 Financial Statement Analysis ..... 3
FIN 610 Global Investment Analysis ..... 3
FIN 612 Fixed Income Investments ..... 3
FIN 690 Capstone Seminar in Investment Analysis ..... 3
Electives ( 6 credits)In addition to the courses listed above, students mustcomplete 6 additional credits in finance.


## MBA-SCM Track (Supply Chain Management)

The MBA-SCM is a specialized track within the MBA program. Supply chain management is an approach to coordinating the functions, processes and enterprises associated with the order-fulfillment cycle. A supply chain typically extends across multiple tiers, including manufacturers and their suppliers, transportation carriers, warehouses, retailers and the customers themselves. SCM focuses on the integration across functions within a firm as well as across enterprise lines.

The MBA-SCM track has the same number of credits as the MBA program. The first 34 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 StudyCourse TitleCredits
Required Core Courses
MBA 600 Strategic Business Problem Solving ..... 3
MBA 605 Business Communications ..... 1
MBA 610 Business Decision Analysis ..... 3
AC 600 Strategic Cost \& Profitability Analysis ..... 3
CIS 600 Information Systems Strategy ..... 3
EC 600 Managerial Economics ..... 3
FIN 600 Financial Analysis \& Decision Making ..... 3
IB 600 Managing in a Global Economy ..... 3
MG 600 Business Ethics \& Legal Environment ..... 3
MG 610 Managing People \& Organizations ..... 3
MG 690 Strategic Management (capstone taken in final semester) ..... 3
MK 600 Managing Customers \& Markets ..... 3
SCM Track Courses
MG 640 Strategic Sourcing \& Supply Management ..... 3
MG 641 Operations \& Supply Chain Management ..... 3
MG 642 Transportation Management ..... 3
MK 615 Managing Marketing Channels ..... 3

## Fast Track Combined BA/MBA

The Fast Track BA/MBA program is designed for outstanding undergraduate students outside of the School of Business. 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. 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. Admission into the combined program is competitive. Only students who have earned at least 75 credits at Quinnipiac with an overall GPA of 3.0 are considered.

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 | Titte | Credits |
| :--- | :--- | ---: |
| AC 101 | Financial Accounting | 3 |
| EC 111 | Microeconomics |  |
| 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 are officially admitted into the graduate program upon completion of their BA degree.

## Fast Track Combined BS/MBA

The Fast Track BS/MBA program is designed for outstanding undergraduate School of Business 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. Admission into the combined program is competitive. Only students who have earned at least 75 credits at Quinnipiac 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 are officially admitted into the graduate program upon completion of their BS degree.

## MBA in 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 in health care management. This program 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, gaining a comprehensive knowledge of business subjects that are increasingly important in the complex health care industry.

The MBA in health care management is taught by doctoral-trained or professionally qualified faculty with extensive experience in health services. 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 of health services.

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 administration curriculum.

Admission to the MBA in health care management program is on a rolling basis throughout the year for both full- and part-time students, allowing students to begin their studies during the summer, fall or spring semesters. 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 scores, two recommendations, a current resume and letter of intent, and transcripts of all undergraduate and graduate work.

Work experience and recommendations also are considered in the admissions process.

| Program of Study |  |
| :--- | :--- | ---: |
| Course Title | Credits |
| MBA Foundation \& Strategic Performance Courses |  |$\quad 3$

MBA Foundation \& Strategic Performance Courses
MBA 600 Strategic Business Problem Solving 3
MBA 605 Business Communications 1
MBA 610 Business Decision Analysis 3
AC 600 Strategic Cost \& Profitability Analysis 3
FIN 600 Financial Analysis \& Decision Making 3
MG 600 Business Ethics \& Legal Environment 3
MG 610 Managing People \& Organizations 3
MG 690 Strategic Management 3
MK 600 Managing Customers \& Markets 3

| Health Management 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 (capstone) | 3 |
| HM 668 | Legal Aspects of Health Care Delivery | 3 |
| HM 670 | Health Economics | 3 |
| Elective Courses (complete 6 credits) |  |  |
| HM 630 | Corporate Compliance in the |  |
|  | Health Care Industry | 3 |
| HM 660 | Human Resource Management in |  |
|  | Health Care Administration | 3 |
| HM 664 | Financial Management in Health Care |  |
|  | Organizations | 3 |
| HM 667 | Strategic Planning \& Marketing in Health Care |  |
| HM 669 | Organization \& Management of |  |
|  | Long-Term Care Facilities | 3 |
| HM 780/781 | Internship I \& II | 6 |
| HM 783/784 | Consulting Practicum I \& II | 6 |
| MG 603 | Project Management | 3 |
| MG 641 | Operations \& Supply Chain Management | 3 |

## $J D / M B A$ and $J D / M B A$ in

## Health Care Management

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.

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 Computer Information Systems

## MS in Computer Information Systems

The target audience for this degree is twofold. One group is information systems management majors who wish to continue their education in this discipline to obtain in-depth knowledge of the information technology field and to be better equipped to manage information technology projects and organizations. Another group consists of persons who are, or desire to be, employed in information systems-related areas and who wish to gain in-depth knowledge in the field to both improve their performance and productivity in their current positions and enhance career opportunities with current and/or future employers.

Applications to the MS in computer information systems program at Quinnipiac University are considered on a rolling basis and are not evaluated until all materials and fees are received by the University. A complete application consists of the following: an application form, application fee, two recommendations, a recent resume and official transcripts of all undergraduate and graduate work completed.

To be admitted to the program, an applicant must have completed an undergraduate degree program with a GPA of at least 2.7. Work experience and recommendations also are strongly considered in the admission process.

The prerequisites for the program are:

1. An undergraduate degree in a field of business, computer science or computer technology completed within the last five years or
2. Completion of the Quinnipiac courses ISM 301 and ISM 370 or their equivalent.

## Program of Study

The program consists of 36 credits at the 600 level consisting of six required courses (18 credits) and six elective courses ( 18 credits).
Six required core courses as follows: Course Title Credits
CIS 600 Information Systems Strategy 3
CIS 620 Data Management 3
CIS 630 Business Design \& Object-oriented Analysis 3
CIS 640 Communications \& Networking 3
CIS 691 Information Systems Capstone 3

| CIS 695 | Enterprise Architecture | 3 |
| :---: | :---: | :---: |
| Six elective courses chosen from the following: |  |  |
| CIS 622 | Database Architecture \& Administration | 3 |
| CIS 625 | ERP Design \& Implementation | 3 |
| CIS 627 | Data Warehousing \& Data Mining | 3 |
| CIS 628 | Business Intelligence \& Knowledge Based Systems | 3 |
| CIS 642 | Network Design \& Implementation | 3 |
| CIS 650 | Information Systems Security | 3 |
| CIS 652 | Advanced Topics in Information |  |
|  | System Security | 3 |
| CIS 660 | Electronic Commerce Implementation | 3 |
| CIS 685 | Emerging Information Technologies | 3 |
| CIS 690 | Managing Information Technology |  |
|  | Projects \& Organizations |  |

## Combined BS/MS in

## Computer Information Systems

The combined BS/MS in computer information systems program is designed for outstanding undergraduate School of Business students. The program enables students to start taking courses toward an MS in computer information systems during their senior year. Interested students must apply for admission to the BS/MS program during the last semester of their junior year.

A special application form for the combined
program is available in the School of Business. Admission into the program is competitive. Applicants must have earned at least 75 credits at Quinnipiac with an overall GPA of 3.0.

Students in the combined BS/MS program may complete up to three graduate business courses during their senior year, which also fulfill undergraduate requirements. Students work with their undergraduate adviser and the MS in computer information systems director to ensure that the information systems director to ensure that the
appropriate courses are taken and fit into both degree programs.

Students are not officially admitted into the MS in computer information systems program until they graduate with their BS degree and meet all other program requirements. during their senior year. Interested students must

## Master of Science in Organizational Leadership

## Graduate Program Requirements

Students who meet the admissions standards are considered for matriculation into the master of science in organizational leadership program. Admission is competitive. To apply, students must meet the following admissions standards:

1. A bachelor's degree from a regionally accredited institution of higher learning
2. A minimum cumulative GPA of 2.75 for courses taken in achieving that bachelor's degree; however, other factors such as work experience and GPA on most recently taken courses, will be considered
3. Work experience of at least four years Students who have a professional CPCU designation may receive up to 3 credits toward the MS in organizational leadership.

## MS in Organizational Leadership

The curriculum is composed of courses specifically designed to be highly rigorous and valuable to working adult students trying to advance their careers by developing a more sophisticated understanding of leadership in their organizations. Courses are designed to 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

The program is writing intensive, building on the University's emphasis on effective writing. This emphasis is consistent with expectations consistently voiced by business leaders.

| Degree Requirements |  |  |
| :---: | :---: | :---: |
| Course | Title | Credits |
| Required Courses (24 credits) |  |  |
| OL 601 | Foundations of Organizational Leadership | p 3 |
| OL 610 | The Power \& Politics of Communication | 3 |
| OL 615 | Leadership Across Boundaries | 3 |

OL 630 Performance Management
OL 640 Project Management
OL 650 Leading Organizational Change
OL 662 Principled Leadership
OL 690 Leadership Consulting Capstone
Plus one professional focus track ( 9 credits), for a total of 33 credits.

## Professional Focus Tracks

The master of science in organizational leadership offers three professional focus tracks to enhance the leadership foundation courses. The professional focus tracks allow 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.

## Human Resource Leadership Track

Students pursuing this track must complete all the required courses in the MS in organizational leadership plus the following three courses:
OL 681 Leadership in Human Resources
OL 682 Employment Law for the Non-Lawyer
OL 683 Employee Development Strategies for Organizational Leaders

## Public Service/Nonprofit Leadership Track

Students pursuing this track must complete all the required courses in the MS in organizational leadership plus the following three courses:
OL 686 Leading Public Service Organizations
OL 687 Strategic Planning for Public Service Organizations
OL 681 Leadership in Human Resources

## Strategic Leadership Track

Students pursuing this track complete three additional courses ( 9 credits). They may select any course from either the human resources leadership track or the public service/nonprofit leadership track or from the following electives:
CIS 600 Information Systems Strategy
CIS 650 Information Systems Security
CIS 660 Electronic Commerce Implementation
CIS 695 Enterprise Architecture
IB 600 Managing in a Global Economy
MG 600 Business Ethics \& Legal Environment
Operations \& Supply Chain Management

## Managing Customers and Markets

Marketing Planning

## Health Care Compliance

Quinnipiac University, through a program jointly developed by the School of Business 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.

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 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.

Required: 3 credits
Course Title Credits
HM 630 Corporate Compliance in the Health Care Industry
General Management: two courses ( 6 credits) required
HM 621 Quality Management 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
Law Courses: two courses ( 6 credits) required
HM 668 Legal Aspects of Health Care Delivery (prerequisite for non-law students)
LAW 345 Law \& Medicine
LAW 348 Advanced Law \& Medicine
LAW 352 Health Care Business Transactions
LAW 542 Regulation of Health Care Industries
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 or a nondegree certificate of study.

The certificate course of study consists of two components: an academic course and a 900 -hour 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.

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 Communications
On Campus Program
Online-only Program
Master of Science in Journalism
Master of Science in Public Relations

## Master of Science in Interactive Communications

The master of science program in interactive communications focuses on the principles and practices of creating content for specific distribution through the Internet, portable media devices and related digital platforms. Through a balance of courses that teach students how to create and deploy animation, audio, graphics, still images, text, video and user-generated content into a single narrative, students learn how to transform traditional media forms and create a non-linear, multimedia experience for the audience.

Students completing the program can compete for opportunities as producers for advertising, entertainment, information and news organizations engaged in the creation and distribution of their content through digital platforms. The program encourages applications from prospective students who want to apply skills acquired during their undergraduate education or professional careers to multimedia content development to mirror the audience shift from traditional, linear media such as broadcast and print to interactive, non-linear media found online.

The program is offered in two formats: a traditional on-campus program and an online-only program. Both are identical in terms of courses and outcomes. Students must select one when applying and cannot cross from one to the other.

The on-campus program offers a select number of online courses as part of its routine program of studies but is not an online-program. Students follow the traditional arc of the semester, taking up to five courses per semester. To finish in one calendar year, students need to take five courses in the fall, five in the spring and two in the summer, including the program capstone thesis or project. Alternatively, students may choose to enroll on a part-time basis, with a minimum of two courses per semester.

The online-only program requires students to serve brief residencies during their program of studies, but all courses otherwise are offered online. The online-only program follows a sevenweek sequence. Students take one course in each of the two seven-week modules in the fall and spring and take two courses during the summer, for a total of six courses per calendar year. They thus finish the program in two years.

To earn the master's degree, students must complete 36 credits with a minimum 3.0 GPA. Students complete their program with a master's thesis or master's project, which counts for 3 credits toward the 36 credits required to graduate. The thesis is a work of research that advances knowledge in the field. The project is a professional work of multimedia designed to reach a public audience.

In addition to course work that emphasizes professional production techniques and tools, students also engage in rigorous academic study of communications theory and innovative thinkers whose work is indispensable to understanding the shift from legacy media to online. The combination of study in the intellectual and production aspects of interactive communications transforms students into leading practitioners and leaders.

## Admission

The graduate programs in the School of Communications invite applications from prospective students who wish to pursue the professional practice of interactive communications. 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 highly 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
- a portfolio of written, visual or audio work
- a 500-word personal statement (see application)


## Program of Study

Note: Students who demonstrate proficiency in any required course or courses may take electives instead with the expressed written permission of the graduate program director.

## Requirements

Course Title Credits
$\begin{array}{ll}\text { ICM } 501 & \text { Introduction to the Study of Interactive } \\ \text { Communications }\end{array}$
ICM 502 Visual Aesthetics 3
ICM 504 Information Animation 3
ICM 505 Web Programming 3
ICM 506 Writing for Interactive Media 3
ICM 508 Media Imaging \& Sound Design 3
$\begin{array}{ll}\text { ICM } 512 & \text { Interactive Development for Strategic } \\ \text { Communications }\end{array}$
ICM 522 Communications, Media \& Society 3
ICM 552 Media Law 3
ICM 601 Master's Project
or ICM 602 Thesis
Electives (Any three)
ICM 503 Advanced Visual Aesthetics 3
ICM 513 Applied Usability 3
ICM 520 Game Design \& Development 3
ICM 525 Media Management 3
ICM 530 Independent Study 3
ICM 531 Graduate Internship 3
ICM 540 Special Topics in Media 3
ICM 542 Graduate Seminar 3
ICM 590 Project Planning 3

## Master of Science in Journalism

The master of science in journalism prepares students for professional careers as reporters, editors and producers in broadcast, print and online media. Through systematic training in both beginning and advanced reportorial practices and technologies, students learn how to write news, shoot and edit videos, create audio reports and assemble multimedia stories.

Our alumni are pursing careers as reporters and producers in many major broadcast television markets, for the Associated Press, for ESPN and Fox News Channel, and for numerous online news sites, newspapers and magazines. The journalism program welcomes qualified students who do not have journalism experience and encourages prospective students with some experience who wish to upgrade or polish existing skills to apply and ultimately join our network of highly successful alumni.

To earn the master's degree, students must complete 36 credits with a minimum 3.0 GPA. It is possible to complete the program in one
calendar year. Students admitted to the program may enroll for full-time (three or more courses per semester) or part-time study. A 3-credit capstone masterwork experience is required. Students can meet this requirement in the form of a master's project such as an investigative magazine piece or a thesis that advances knowledge of the field.

Quinnipiac University's journalism professors and instructors have served as staff reporters, editors and producers with decades of experience at the highest levels of news gathering. Guest speakers drawn from leading news organizations such as the Associated Press appear frequently to address classes on specific developments and issues in news coverage.

In addition to classes, students may enroll in a 3 -credit internship as an elective to acquire professional experience while still attending school. Students have completed internships at CNBC, ESPN, Fox News Channel, The Hartford Courant, New Haven Register and Reader's Digest, at network affiliate broadcast stations throughout the U.S. and at emerging media companies such as patch.com, among many others. The program maintains close ties with traditional and emerging news organizations and routinely posts career opportunities for students to pursue.

All journalism graduate students have access to the school's news technology production facilities within the fully staffed Ed McMahon Mass Communications Center. The center features a high-definition television studio, access to video and audio production gear for covering stories, and digital editing suites. Most classes are held at the center, giving students first-hand, in-class experience in a professional environment.

## Admission

The graduate programs in the School of Communications invite applications from prospective students who wish to pursue the professional practice of journalism. Recent graduates of a bachelor's program outside of the communications or journalism fields 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 highly 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
- a portfolio of written, visual or audio work
- a 500-word personal statement (see application)


## Program of Study

Note: Students who demonstrate proficiency in any required course or courses may take electives instead with the expressed written permission of the graduate program director.

## Required Courses

Course Title Credits
JRN 502 Introduction to the Practice of Journalism 3
JRN 503 Computer-Assisted Reporting 3
JRN 504 Reporting for Print 3
JRN 521 Writing for the Ear 3
JRN 524 Broadcast Journalism 3
JRN 534 Story in Journalism 3
JRN 522 Communications, Media \& Society 3
JRN 538 Reporting for the Web 3
JRN 552 Media Law 3
$\begin{array}{lll}\text { JRN } 601 & \text { Master's Project } \\ \text { or JRN } 602 & \text { Thesis }\end{array}$
Electives (any two)
JRN 526 Editing for Print 3
JRN 527 Covering Government \& Politics 3
JRN 532 Advanced Broadcast Journalism 3
JRN 533 Advanced Print Reporting 3
JRN 536 Opinion Journalism 3
JRN 539 History of Journalism 3
JRN 540 Broadcast Performance 3
JRN 525 Media Management 3
JRN 530 Independent Study 3
JRN 531 Graduate Internship 3
JRN 542 Graduate Seminar 3

## Master of Science in <br> 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.

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 attending full-time can 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. Students also may elect to complete the program on a part-time basis.
Course Title

Credits

Core requirements: (21 credits)

PRR 501 Principles and Theories of Public Relations 3
PRR 502 Public Relations Research Methods 3
PRR 503 Public Relations Research Design 3
PRR 504 Law and Ethics in Public Relations 3
PRR 505 Public Relations Writing 3
PRR 506 Public Relations Management 3
PRR 507 Strategic Planning in Public Relations 3
Public relations elective requirements: (6 credits)
Two courses from the following:
PRR 510 Crisis Management 3
PRR 511 International Public Relations 3
PRR 512 Investor Relations 3
PRR 513 Issues Management in Health Care 3
PRR 514 Public Relations and New Media 3
PRR 515 Special Topics in Public Relations 3
PRR 531 Graduate Internship in Public Relations 3
PRR 606 Independent Study 3
$\begin{array}{ll}\text { ICM } 501 & \text { Introduction to the Study of Interactive } \\ \text { Communication }\end{array}$
ICM 506 Writing for Interactive Media 3
Free elective: (3 credits)
Public relations elective (from list above)
or Outside elective approved by adviser
Capstone requirement ( 6 credits)
PRR 601 Professional project 6
or PRR 602 Research thesis 6
Total requirements $\quad 36$ credits

## School of Education

Five-Year BA/MAT Programs in Elementary and Secondary Education

Five-Year BA/MAT Program in
Elementary Education
Five-Year BA/MAT Program in Secondary Education
Five-Semester MAT Programs in
Elementary and Secondary Education
Five-Semester MAT Program in
Elementary Education
Five-Semester MAT Program in Secondary
Education
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 National Council for the Accreditation of Teacher Education 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 Depart-
ment 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 three-year professional component. 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. The summer semester immediately following graduation, students begin their graduate study.

The five-year BA/MAT program is fully accredited by the National Council for Accreditation of Teacher Education (NCATE). The U.S. Department of Education recognizes NCATE 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

Students are admitted into the five-year BA/MAT program upon meeting the following admission requirements:
a) at least a B- (2.67) overall undergraduate GPA (from all colleges and universities attended) for 45 credits of course work with a subject area major or appropriate interdisciplinary major;
b) a passing score on the PRAXIS I test (PPSTs) or a PRAXIS I waiver;
c) at least two written recommendations from individuals who have knowledge of the applicant's suitability as a prospective educator;
d) a written essay completed on site;
e) a formal interview during which the applicant is expected to demonstrate: an ability to communicate clearly; an ability to respond appropriately to potential classroom situations; a demeanor appropriate to the teaching profession; a maturity and attitude necessary to meet the demands of the MAT program.
The demands of the program require that students
seek admission into the five-year BA/MAT program as soon as possible and no later than midterm of their sophomore year. Applicants are assigned an MAT adviser who works collaboratively with the student's major adviser to monitor the student's progress during the junior and senior year. The MAT adviser assumes sole responsibility for the student's advisement during the graduate year of study.

Special consideration is given to transfer students; however, transfer students may not enter the program later than second semester of the junior year.

## Retention

Teacher candidates in the program 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 Responsibilities for Teachers. Candidates must maintain an overall B(2.67) undergraduate GPA with a B- or better in any professional course. Candidates must maintain a 3.0 GPA for graduate courses in each semester with at least B- or better in any education course. A grade of $\mathrm{C}+$ or below in an education course requires the candidate to retake the course and earn a minimum of B-.

If a candidate, once formally accepted into the program, fails to maintain the minimum GPA, that candidate may be allowed to remain in the program for a single semester on a 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 dean's approval and is neither automatic nor guaranteed.

Candidates failing to meet professional standards in the program may be subject to suspension or dismissal.

## Completion

To complete all requirements of the MAT program, a candidate must complete all course work, fulfill the internship responsibilities and successfully complete all performance tasks. Quinnipiac University's TITLE II HEA institutional pass rate for 2007-08 is 100 percent for all reported content areas.

Candidates must meet all program requirements within five years of admission to the program. Only candidates who have an approved leave of
absence are exempted from the five-year completion requirement. Any candidate who, for whatever reason, does not complete his/her student teaching must earn 6 graduate credits through approved electives.

## The Internship/Field Study

Candidates participate in an internship during their graduate studies. Quinnipiac has developed collaborative partnerships with school districts throughout central and southern Connecticut to provide graduate students with guided, hands-on professional practice and to defray 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 onsite adviser and from a Quinnipiac faculty member. Candidates have the opportunity to participate in staff meetings and take part in all school operations, becoming valued members of the school faculty. In the late afternoon and early evening, candidates continue their formal studies on the Quinnipiac campus.

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 mid- to 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.

## The 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 a transdisciplinary 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

## 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 ${ }^{1}$
- History 131
- History 132
- Math 110 or higher ${ }^{2}$
- Math $206^{3}$
- World Language-Level $101^{4}$
- World Language-Level $102^{5}$
- Psychology 101
- Psychology 236
- Psychology 358
- Fine Arts-6 credits
- Science-7-8 credits
- Physical Education-1 credit


## Professional Component <br> Course Title

## Credits

ED 301 Elementary Field Study I
ED 302 Elementary Field Study II 3
ED 315 Diversity, Dispositions \& Multiculturalism 3
ED 320 Social \& Philosophical Foundations of Education

ED 401
ED 402
ED 436
ED 440
ED 441
ED 468
ED 550
ED 552
ED 554
ED 555
ED 556
ED 558
ED 562 Facilitating the Arts in the Classroom 2
ED 566 Elementary School Social Studies: Content \& Pedagogy2
ED 569 Teaching Mathematics in Grades 4-6 ..... 3
ED 575 Teacher Discourse: Language \& CommunicationIssues in the Elementary Classroom3
ED 601 Student Teaching \& Seminar ..... 6
ED 693 Research I ..... 1
ED 694 Research II ..... 2

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. may be substituted with PS 206 or MA 275
4. or test out
5. or test out

## The 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 ${ }^{2}$
- Math $206^{3}$
- World Language—Level $101^{4}$
- World Language-Level $102^{5}$
- Psychology 101
- Psychology 236
- Social Sciences-3 credits
- Fine Arts-3 credits
- Science-7-8 credits
- Physical Education-1 credit


## Professional Component Secondary Course Title <br> Credits

## ED 310 Field Study I 3

ED 311 Field Study II 3
ED 325 Diversity in the Classroom 3
ED 408 Classroom Environment
ED 412 Field Study III 3
ED 413 Field Study IV 3
ED 421 Social \& Philosophical Foundations of Education
ED 482 Special Education 3

ED 50_ Methods II
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 601 Student Teaching \& Seminar 6
ED 609 Health Issues in the Classroom 2
ED 693 Research I
ED 694 Research II
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. may be substituted with PS 206 or MA 275
4. or test out

5 . or test out

Five-Semester 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 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 with close attention to the teaching standards for the state of Connecticut and to the standards of the National Council for the Accreditation of Teacher Education (NCATE). 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 five-semester 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 five-year BA/MAT program is fully accredited by the National Council for Accreditation of Teacher Education (NCATE). The U.S. Department of Education recognizes NCATE 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

Applicants are admitted into the five-semester MAT program upon meeting the following admission requirements:
a) at least a B- (2.67) overall GPA (from all colleges and universities attended);
b) prescribed studies leading to competencies in language arts, mathematics, natural sciences, social sciences and history (including U.S. history), fine arts, a world language, physical education, and child/ developmental psychology (elementary education);
c) a passing score on the PRAXIS I test (PPSTs) or a PRAXIS I waiver;
d) at least two written recommendations from individuals who have knowledge of the applicant's suitability as a prospective educator;
e) a written essay completed on site;
f) a formal interview during which the applicant is expected to demonstrate: an ability to communicate clearly; an ability to respond appropriately to potential classroom situations; a demeanor appropriate to the teaching profession; a maturity and attitude necessary to meet the demands of the MAT program.

## Retention

Teacher candidates in the program 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 Responsibilities for Teachers. Candidates must maintain a 3.0 GPA for graduate courses in each semester with at least B- or better in any education course. A grade of $\mathrm{C}+$ or below in an education course requires the student to retake the course and earn a minimum of B-.

If a candidate fails to maintain the minimum GPA, that candidate may be allowed to remain in the program for a single semester with 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 dean's approval and is neither automatic nor guaranteed. Candidates failing to meet professional standards in the program may be subject to suspension or dismissal.

## Completion

To complete all requirements of the MAT program, a candidate must complete all course work and successfully complete all performance tasks. Any candidate who, for whatever reason, does not complete his/her student teaching must earn 6 graduate credits through approved electives.

## The 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 graduate portion 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.

## Five-Semester 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 fulltime graduate students. To ensure admission into the program with a placement in an internship, applicants should complete the application process early.


ED 542 Cultivation, Design \& Management of an Elementary Classroom

| ED 543 | Clinical Practice in Reading | 3 |
| :--- | :--- | ---: |
| ED 544 | Developing Literacy in the Primary Grades | 3 |
| ED 545 | Elementary Internship \& Seminar II | 1 |
| ED 547 | Philosophy of Education | 3 |
| ED 550 | Issues \& Research in Education | 3 |
| ED 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 \& Pedagogy | 2 |
| 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 |

## Five-Semester 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 early.

| Secondary Education MAT Curriculum |  |  |
| :--- | :--- | ---: |
| Course | Title | Credits |
| ED 500 | Internship \& Seminar I | 1 |
| ED 501 | Internship \& Seminar II | 1 |
| ED 508 | Classroom Environment | 3 |
| 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 |
| ED 582 | Special Education | 3 |
| ED 601 | Student Teaching \& Seminar | 6 |
| ED 609 | Health Education | 2 |
| ED 693 | Research I | 1 |

ED 500
Internship \& Seminar I
ED 501
Internship \& Seminar II 3
ED 509 Reading \& Writing Across the Curriculum 3
ED 510
Adolescent Development
Social \& Philosophical Foundations
ED 524 Methods I
ED 525 Diversity in the Classroom
ED 550 Issues \& Research in Education
ED 582 Special Education
3
ED 601 Student Teaching \& Seminar 6
ED 60 Health Education
Research I

| 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 4 graduate content discipline courses

## Sixth-Year Diploma in 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 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 sixth-year diploma in educational leadership program offers Quinnipiac students a post-master'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 program 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 Con-
necticut 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 3.00 ;
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.

## The Internship

Students must participate in an internship after completing EDL 601, 603 and 605. The Internship in Educational Leadership (EDL 607) consists of a primary leadership experience cooperatively developed by the student, a faculty member and a school district mentor. The internship engages each candidate in a significant project related to the improvement of student learning. Other experiences are developed, as necessary, so that each student has an opportunity to engage in work related to all Connecticut standards for school leaders. Each student must demonstrate these standards through self-assessments, assessments by faculty and the district mentor, a reflection journal summarizing work during the internship, and artifacts from the field work. The internship is scheduled only during the fall or spring semester to ensure the most authentic experience possible. Candidates are required to complete these activities before, during and/or after the regular school day. A minimum of 216 hours over a six-month period is required, or approximately 9-12 hours per week.

## Sixth-Year Diploma in Educational Leadership Curriculum

Course Title Credits
EDL 601 Leading \& Managing the Contemporary School 6
EDL 603 Leading \& Managing the Instructional Program 6
EDL 605 Leading \& Managing School Improvement 6
EDL 607 Internship in Educational Leadership 3
EDL 609 Educational Program Evaluation 3
EDL 611 Educational Law 3
EDL 613 Public School Finance 3
Total 30

## School of Health Sciences

Master of Health Science
Cardiovascular Perfusion
Medical Laboratory Sciences
Pathologists' Assistant
Physician Assistant
Radiologist Assistant
Master of Science in Nursing
Adult Nurse Practitioner Track
Family Nurse Practitioner Track
Post-master's Certificate
Adult Nurse Practitioner Track
Family Nurse Practitioner Track
Master of Science in Occupational Therapy
(Post-professional)*
Certificate of Advanced Graduate Study in
Occupational Therapy (Post-professional)*
*Programs marked with an asterisk also are offered online.

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 full-time program for pathologists' assistants provides training in pathology, anatomy and the medical sciences. The physician assistant program provides full-time instruction in the basic medical and clinical sciences needed for certification and a graduate degree in a growing profession.

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 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 program admits students on a yearly basis. The deadline for completed applications to CASPA is October 1. Interviews are conducted from the early fall through midJanuary. Classes begin in late May/early June.

## Master of Health Science

## 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 ( 6654 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 in the biological, medical or health sciences. 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 with a bachelor's degree in another field 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 microbiology
- one semester of 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 2.5 , 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.

## Curriculum

Course Title
First Year (college-based didactic course work) Fall Semester I
PR 500 Theoretical Foundations of Cardiovascular Perfusion ..... 2
PR 502 Systems Anatomy \& Physiology I ..... 3
PA 535 Disease Mechanisms ..... 4
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 ..... 4
Total 14
Second Year (hospital-based clinical training session) Summer Session
PR 514 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 |
|  |  | Total 7 |

## Spring Semester II

PR 604 Cardiovascular Perfusion Practicum III 5
Total 5
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 prepare students to function effectively in the greatly expanding field of biomedical research and diagnostic testing. The three specialties included in the program (biomedical sciences, microbiology and laboratory management) 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 laboratory professional in pharmaceutical, biotechnology and medical research as well as diagnostic settings. Students who successfully complete their studies have the option of employment by research/development industry, diagnostic companies or continuing their education toward a degree in PhD programs.

## 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 laboratory professionals in both research and medical diagnostic settings. The program provides the training that is necessary to stay current with today's rapidly changing technology and to assume positions of greater responsibility.

## Admission

Students who hold a bachelor's degree in the biological, medical or health sciences 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.

## Program of Study

Students may choose either a thesis or a non-thesis option in the medical laboratory sciences program. Both options require students to take four courses 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. Obtain up-to-date knowledge of foundations and recent advances in the biomedical, biotechnological and clinical sciences.
2. Develop the ability to apply basic knowledge of medicine, chemistry and biology to advanced laboratory specialties.
3. Demonstrate competency in research theory and methodology to solve laboratory problems as economically and expeditiously as possible. The curriculum is constructed to allow students either to work with a particular specialty or to move among related medical laboratory sciences. In view of the fact that the medical laboratory sciences represent the application and extension of the concepts and techniques of physics, chemistry and the biological sciences, it is deemed both necessary and desirable that the state of the art of these basic sciences be surveyed.

## A. Thesis Option Requirements

The curriculum includes a minimum of 35 credits including eight credits of thesis (LS 650, 651). A minimum of four courses in an area of specialization is required. Elective courses could be chosen from any area of specialization.

| Courses | Credits |
| :--- | :---: |
| LS 650, 651 Thesis | 8 |
| Minimum of four courses in area of specialization | $12-16^{*}$ |
| Electives | $11-15^{*}$ |

Total Minimum of 35 credits

## B. Non-Thesis Option Requirements

The curriculum includes a minimum of 38 credits including 2 credits of comprehensive examination (LS 670 series exam courses). A minimum of four courses is required in an area of specialization. Elective courses may be chosen from any area of specialization.
Courses Credits
Comprehensive Exam
Minimum of four courses in area of specialization 12-16*
Electives
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 two-fold. 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 (Specialization Courses)

| Course | Title | Credits |
| :--- | :--- | ---: |
| BIO 515 | Advanced Biochemistry | 4 |
| BMS 518 | Pathophysiology | 3 |
| BMS 527 | Pharmacology | 3 |
| BMS 532 | Histology | 4 |
| BIO 560 | Protein Biochemistry \& Enzymology | 3 |
| BIO 568 | Molecular \& Cell Biology | 4 |
| BIO 571 | Molecular Genetics | 4 |
| BMS 576 | Drug Discovery \& Development | 3 |
| BMS 578 | Cellular Basis of Neurobiological Diseases | 3 |
| BMS 579 | Molecular Pathology | 3 |
| BIO 580 | Animal Cell Culture | 4 |
| BMS 581 | Receptors \& Regulatory Mechanisms | 3 |
| BMS 583 | Forensic Pathology | 3 |
| BIO 589 | Neurophysiology | 3 |
| BMS 591 | The New Genetics \& Human Future | 3 |
| BMS 595 | Transplantation Immunology | 3 |
| BIO 605 | Molecular \& Cell Laboratories I | 4 |
| BIO 606 | Molecular \& Cell Laboratories II | 4 |
| BMS 552 | Introduction of Biochemical Toxicology | 3 |
| BMS 521 | Advances in Hematology | 3 |
| BMS 522 | Immunology | 3 |
| BMS 530 | Endocrinology | 3 |
| BMS 532 | Histology \& Histochemistry | 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 |
| PA 515 | Human Physiology | 4 |

## Lab Management and Administration

$\begin{array}{lll}\text { HM 600 } & \text { Organization \& Management of Health Care } & \\ & \text { Facilities } & 3 \\ \text { HM 621 } & \text { Quality Management in Health Care Facilities } & 3 \\ \text { HM 626 } & \text { Epidemiology \& Population Health } & 3\end{array}$

| HM 660 | Human Resource Management in Health <br>  <br> Services Administration | 3 |
| :--- | :--- | ---: |
| HM 663 | Integrated Health Systems \& Managed Care | 3 |
| HM 664 | Financial Management in Health Care |  |
|  | Management |  |
| HM 667 | Strategic Planning \& Marketing in Health |  |
|  | Services | 3 |
| HM 668 | Legal Aspects of Health Care Delivery | 3 |
| HM 669 | Organization \& Management of Long-term |  |
|  | Care Facilities |  |
| HM 670 | Health Economics | 3 |
| MK 600 | Managing Customers \& Markets | 3 |
| MK 610 | Research for Marketing \& Business Decisions 3 |  |

Microbiology
BMS 528 Advanced Clinical Parasitology ..... 4
BMS 529 Medical Entomology ..... 4
BMS 530 Advanced Clinical Protozoology ..... 4
BMS 531 Advanced Clinical Helminthology ..... 4
BMS 533 Air, Water \& Soil Microbiology ..... 4
BMS 534 Industrial Microbiology/Biotechnology ..... 4
BMS 542 Advanced Microbiology ..... 4
BIO 568 Molecular \& Cell Biology ..... 4
BMS 569 Antimicrobial Therapy ..... 3
BMS 570 Virology ..... 4
BIO 571 Molecular Genetics ..... 4
BMS 572 Pathogenic Microbiology ..... 4
BMS 573 Mycology ..... 4
BMS 574 Microbial Physiology ..... 4
BMS 575 Food Microbiology ..... 4
BMS 576 Drug Discovery \& Development: ..... 3
BMS 579 Molecular Pathology ..... 3
BIO 580 Animal Cell Culture ..... 4
BMS 596 Immunology of Infectious Diseases ..... 3
BIO 605 Molecular \& Cell Laboratories I ..... 4
BIO 606 Molecular \& Cell Laboratories II ..... 4
BMS 522 Immunology ..... 3
Medical Laboratory Sciences Electives ..... 3
BIO 515 Advanced Biochemistry ..... 4
BMS 517 Human Embryology ..... 3
BMS 518 Pathophysiology ..... 3
BMS 526 Principles of Epidemiology ..... 3
BMS 527 Pharmacology ..... 3
BMS 528 Advanced Clinical Parasitology ..... 4
BMS 529 Medical Entomology ..... 4
BMS 530 Advanced Clinical Protozoology ..... 4
BMS 531 Advanced Clinical Helminthology ..... 4
BMS 532 Histology ..... 4

| BMS 534 | Industrial Microbiology/Biotechnology |
| :---: | :---: |
| BIO 560 | Protein Biochemistry \& Enzymology |
| BIO 568 | Molecular \& Cell Biology |
| BMS 569 | Antimicrobial Therapy |
| BMS 570 | Virology |
| BIO 571 | Molecular Genetics |
| BMS 572 | Pathogenic Microbiology |
| BMS 573 | Mycology |
| BMS 574 | Microbial Physiology |
| BMS 575 | Food Microbiology |
| BMS 576 | Drug Discovery \& Development |
| BMS 578 | Cellular Basis of Neurobiological Disorders |
| BMS 579 | Molecular Pathology |
| BIO 580 | Animal Cell Culture |
| BMS 581 | Receptors \& Regulatory Mechanisms |
| BMS 583 | Forensic Pathology |
| BIO 589 | Neurophysiology |
| BMS 591 | The New Genetics \& Human Future |
| BMS 595 | Transplantation Immunology |
| BMS 596 | Immunology of Infectious Diseases |
| BIO 605 | Molecular \& Cell Laboratories I |
| BIO 606 | Molecular \& Cell Laboratories II |
| BMS 552 | Introduction of Biochemical Toxicology |
| HM 600 | Organization \& Management of Health Care Facilities |
| HM 621 | Quality Management in Health Care Facilities |
| HM 625 | Introduction to Physician Practice Management |
| HM 626 | Epidemiology \& Population Health |
| HM 660 | Human Resource Management in Health Services Administration |
| HM 663 | Integrated Health Systems \& Managed Care |
| HM 664 | Financial Management in Health Care Management |
| HM 667 | Strategic Planning \& Marketing in Health Services |
| HM 668 | Legal Aspects of Health Care Delivery |
| HM 669 | Organization \& Management of Long-term Care Facilities |
| HM 671 | Health Policy \& Politics |
| HM 670 | Health Economics |
| MK 600 | Managing Customers \& Markets |
| MK 610 | Research for Marketing \& Business Decisions |
| BMS 510 | Biostatistics |
| BMS 521 | Advances in Hematology |
| BMS 522 | Immunology |
| BMS 530 | Endocrinology |
| BMS 532 | Histochemistry |
| BMS 561 | Immunohematology |
| LS 562 | Blood Coagulation \& Hemostasis |
| BMS 563 | Anemias |
| BMS 564 | Fundamentals of Oncology |

BMS 565 Leukemia ..... 3
BMS 688 Independent Study ..... 2
BMS 689 Independent Study ..... 2
PA 515 Human Physiology ..... 4
PA 535 Disease Mechanisms ..... 4
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 a 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 Dec. 15. Interviews are conducted throughout the year until February. The six-semester class cycle begins the first week of June.

## 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, clinical 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 Administration Medical Center, West Haven, CT; Hospital of St. Raphael, New Haven, CT; Norwalk Community Hospital, Norwalk, CT; St. Vincent's Medical Center, Bridgeport, CT; Stamford Hospital, Stamford, CT; St. Francis Hospital, Hartford, CT; CT State Medical Examiner Office, Farmington, CT; UConn Health Center, Farmington, CT; Hartford Hospital, Hartford, CT; Yale University School of Medicine, New Haven, CT; Baylor University, Houston, TX; Columbia Presbyterian Hospital, New York, NY; Massachusetts General Hospital, Boston, MA; Mayo Clinic, Minneapolis, MN, and Crouse Hospital, Syracuse, NY. The program consists of both classroom and clinical training. When not attending formal courses or working with specific tutors, trainees are assigned to the laboratory service of the Veterans Administration Medical Center and/or other hospitals for practical training in anatomic pathology. 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.

## Admission

Interested candidates who have a bachelor's degree in the biological or health sciences from regionally accredited institutions in the United States are eligible for admission to the pathologists' assistant 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 2.5 and a one semester course in microbiology.

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.

| Curriculum |  |  |
| :--- | ---: | ---: |
| First Year (college-based didactic course work) |  |  |
| Course $\quad$ Title | Credits |  |
| Summer |  |  |
| PA 502 | Medical Terminology: Advanced | 2 |
| PA 511 | Human Microscopic Anatomy | 4 |
| PA 512 | Human Anatomy | 4 |

First Year (college-based didactic course work)
Course Title
Summer Session
PA 502 Medical Terminology: Advanced
PA 511 Human Microscopic Anatomy 4
PA 512 Human Anatomy
PA 515 Human Physiology 4

PA 526 Biomedical Photography/Forensic Imaging 4 Total 18

## Fall Semester

PA 513 Basic Human Pathology I 3
PA 535 Disease Mechanisms 4
BMS 517 Human Embryology 3
BMS 532 Histology 4
PA 518 Laboratory Management
Total 17

## Spring Semester

PA 514 Basic Human Pathology II 3
PA $516 \quad 4$
PA 517 Applied Anatomic Pathology 4
BMS 532 Histochemistry 3
BMS 572 Pathogenic Microbiology 4
Total 18

## Second Year

(12-month hospital-based clinical training session) Summer Session
PA $520 \quad$ Autopsy Pathology I 6

PA 523 Surgical Pathology I
Fall Semester
PA 521 Autopsy Pathology II 6
PA 524 Surgical Pathology II

## Spring Semester

PA $522 \quad$ 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 at the veterans hospital. This facilitates early 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 physician assistant program of Quinnipiac University embodies the University's commitment to three important values: excellence in education, sensitivity to students, and a spirit of community. The University as a whole 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. The mission of the PA program is to foster the development of compassionate, professional and highly skilled healthcare 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, systemsbased practice 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." ${ }^{1}$

Specifically, the physician assistant program at Quinnipiac is dedicated to the development of knowledgeable and skilled physician assistants who are committed to:

1. Professionalism—Promoting professional and ethical health-care practices.
2. Leadership-Developing future leaders within the profession and the community.
3. Community Service-Instilling the importance of active community involvement.
4. Cultural Competence-Enhancing sensitivity to the social and cultural diversity in healthcare.
${ }^{1}$ Competencies for the Physician Assistant Profession. National Commission on Certification of Physician Assistants
(NCCPA). 2005.

## General Information

This program trains qualified individuals to be highly skilled members of the health care team who, working under the supervision of a physician, provide diagnostic and therapeutic patient care. 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 are able to do the following:

1. 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.
2. Perform and/or interpret routine diagnostic studies such as common radiologic studies, routine laboratory procedures and electrocardiographic studies.
3. Perform such routine procedures as injections, suturing, wound management, incision and drainage of superficial infections, cast application and simple fracture follow-up.
4. Assist the physician by performing patient rounds, recording patient progress notes and pertinent case summaries, determining and implementing diagnostic procedures and therapeutic plans at the direction of the physiciansupervisor.
5. 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.
6. 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.
7. Perform independent evaluation and initiate therapeutic procedures in life-threatening events.
8. Facilitate referral to community resources, health facilities and agencies and arrange appropriate patient follow-up.
9. 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 accred-
ited by the Accreditation Review Commission on Education for the Physician Assistant, Inc. (ARC-PA).

## Admission

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 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 should possess at a minimum:
- a cumulative GPA of 3.0 and science GPA of 3.0
- a minimum of one year ( 2,000 hours) direct patient care experience in the U.S. health-care system
The physician assistant program does not accept: transfer credits, applications for challenge examinations and/or credits for experiential learning. Admission to the program is highly competitive. Applications are reviewed relative to undergraduate cumulative and science GPA, patient care experience, completion of narrative and letters of reference. Personal interviews, required for admission, are offered to the most qualified individuals.

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.


Total 17

## Spring Session

PY 509 Principles of Obstetrics \& Gynecology
PY 510 Principles of Pediatrics
PY 511 Principles of Surgical \& Emergency Management
PY 512 Psychosocial Issues in Health Care
PY 513 Behavioral Medicine
PY 516 Clinical Pharmacology II
PY 504 History, Roles \& Responsibilities of the Physician Assistant

## Second Year

PY 611 Clinical Residency I
PY 612 Clinical Residency II
PY 613 Clinical Residency III
PY 614 Clinical Residency IV
PY 615 Clinical Residency V
PY 616 Clinical Residency VI
PY $617 \quad$ Clinical Residency VII
PY 618 Clinical Residency VIII
3

PY 619 Clinical Residency IX
Total 27
Third Year
Summer Session
PY 526 Principles of Epidemiology
PY 536 Biostatistics
PY 546 Ethics in Health Care Delivery
PY 608 Graduate Seminar
PY 676 Comprehensive Examination

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 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.

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.

## 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 ease a national shortage of radiologists and to meet the increasing demands of imaging technology. The demand for imaging studies is expected to

soar to 250 billion procedures within the next few years. According to the Bureau of Labor Statistics, the growth in the field of radiography will be faster than average with a projected increase of 18 to 26 percent during the next decade.

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 certified radiologist.

## 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 radiologic 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 post-radiography certification, certification in CPR for Healthcare Professionals and have completed the following prerequisite course requirements:
-3-4 credits of physics or chemistry

- 3 credits of college-level mathematics
- 12-15 credits of biology with labs
- 6-8 credits of human anatomy and physiology

MS in Radiologist Assistant Curriculum
Course Title Credits

Summer I
BIO 518 Pathophysiology 3
PA 502 Medical Terminology: Advanced 2
RA 517 Human Anatomy 4
RA 517L Human Anatomy Lab 0
RA 520 Radiation Safety \& Health Physics 2
Total 11

## Fall I

RA 505 Clinical Pharmacology 3
RA $530 \quad \begin{aligned} & \text { Image Critique \& Pathologic Pattern } \\ & \text { Recognition I }\end{aligned}$
$\begin{array}{ll}\text { RA } 532 & \text { Interventional Procedures I with } \\ & \text { Clinical Observation }\end{array}$
RA 542 Patient Assessment, Management \& Education 3
RA 545 Research Methods \& Design 3
Total 15

## Spring I

RA 531 Image Critique \& Pathologic Pattern Recognition II

3
RA 535 Interventional Procedures II 3
RA 550 Seminar I 1
RA 570 Radiologist Assistant Clinical I 4
RA 590 Thesis I 1
Total 12
Summer II
RA 551 Seminar II 1
RA 571 Radiologist Assistant Clinical II 5
RA 591 Thesis II 2
Total 8
Fall II
RA 552 Seminar III 3
RA 572 Radiologist Assistant Clinical III 5
Total 8
Total credits for the program 54

## Clinical Experiences

Clinical experiences during the concluding year of study serve as capstone courses that enable students to apply the knowledge learned in the first two semesters of the program. During the first clinical semester, students are in the clinical setting three consecutive days per week; during the second clinical semester, they serve four days per week, and, during the final clinical semester, five days per week. In total, the program requires approximately 1,500 hours of clinical experience. Quinnipiac provides all clinical placements throughout the program. Among the many distinguished affiliations are hospitals, medical centers and clinics in the greater New Haven area.

## Master of Science

## Master of Science in Nursing

The mission of the Department of Nursing at Quinnipiac University is to prepare graduates for professional nursing practice who are capable of providing holistic care for diverse individuals, families, communities and populations in a variety of settings. The faculty affirm that nursing is both a science and an art that is creative, goal-directed, research-based and concerned with the health and dignity of the whole person. Learning occurs in a highly personalized, student-centered community, which promotes academic excellence.

The graduate nursing program is accredited by the National League for Nursing Accrediting Commission.

## General Information

Graduate nursing education broadens the scope of practice and provides for the acquisition of expertise in an area of specialization. This education is directed toward preparing students to manage clients of diverse cultural backgrounds in various multidisciplinary settings and promotes traditional as well as complementary approaches appropriate to client care.

The graduate nursing program offers several tracks leading to the master of science in nursing. Students may elect to pursue preparation as an advanced practice nurse in one of two specialty areas. These areas are adult nurse practitioner and family nurse practitioner. Students enrolled in the master's program complete the graduate nursing and advanced practice core curriculum in addition to courses in their chosen specialty. Students who already hold a master's degree in nursing may enroll to attain a post master's certificate, and complete course work focusing on their chosen specialty. The master of science in nursing and post master's certificate offerings allow students to matriculate full or part time. Full-time students can complete the degree requirements for a master of science in nursing in two academic years. Students electing to complete a precepted clinical practicum outside of Connecticut need to be licensed in the designated state. For more information about any of these offerings, please contact the graduate nursing program via email at nurs-
ing@quinnipiac.edu, by phone at 203-582-3484 or by visiting the graduate nursing program web page at www.quinnipiac.edu.

## Admission

An applicant to the graduate nursing program must be a registered nurse and hold a bachelor's degree in nursing or another field. An undergraduate cumulative GPA of 3.0 or better is preferred.
Applicants should submit the following to the Office of Graduate Admissions:

- a completed admissions application including a resume and a personal essay
- official transcripts from all schools previously attended
- official recent results of the Test of English as a Foreign Language (TOEFL) or (IELTS) International English Language Testing System for international applicants
- two letters of recommendation
- proof of current licensure or eligibility for licensure as a registered nurse in the state of Connecticut. Candidates applying for full-time admission for the fall term must submit a completed application by May 15. Candidates interested in part-time admission for the fall term should submit a completed application by July 30. Applications also are accepted for spring semester with a suggested deadline of Dec. 15. Candidates are accepted 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 is arranged.

## Graduate Nursing Program Outcomes

The graduate nursing program prepares graduates to:

- Synthesize theoretical and scientific knowledge to practice holistically in a specialized area of nursing
- Incorporate critical thinking, ethical decision making, and independent judgment to provide culturally competent specialized health care to diverse communities.
- Assume a leadership and management role to affect health care policy and the delivery of cost effective health care services within a variety of health care systems.
- Demonstrate professional role competency through social consciousness, advocacy, political acumen commensurate with advanced nursing preparation; and a commitment to lifelong learning.
- Integrate effective communication skills and
current technology into advanced holistic nursing practice.
- Evaluate and use theory and research findings to inform clinical practice and organizational decision making.
- Integrate professional, ethical and legal standards and principles of collaboration into advanced holistic nursing practice.


## Adult Nurse Practitioner Track (43 credits)

The adult nurse practitioner track prepares qualified professional nurses to practice at an advanced level in primary care settings as adult nurse practitioners. 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 570 hours of precepted practice, thereby enabling graduates to diagnose and manage most common and many chronic illnesses, and to assume the responsibilities commensurate with prescriptive authority. Working independently and collaboratively with physicians and other members of the health care team, graduates are competent to provide high quality, cost effective, and individualized 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 (47 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 570 hours of precepted practice, thereby enabling graduates to diagnose and manage most common and many chronic illnesses, and to assume the responsibilities commensurate with prescriptive authority. Working independently and collaboratively with physicians and other members of the health care team, program graduates are competent to provide high quality, cost effective, and individualized primary care across the lifespan of adults or family members of all ages. Graduates are eligible to take a national examination for certification as family nurse practitioners.

## Post-master's Certificate

## Adult Nurse Practitioner Track

Nurses who already hold a master of science in nursing degree and who wish to become adult nurse practitioners may apply for admission to the program and earn a post-master's certificate as an adult nurse practitioner. Post-master's students complete all adult nurse practitioner specialty courses, and may receive advanced placement credit for core courses that were taken as part of their prior graduate preparation. Students completing the certificate offering are eligible to take a national certification examination.

## Family Nurse Practitioner Track

Nurses who already hold a master of science in nursing degree and who wish to become family nurse practitioners may apply for admission to the program and earn a post-master's certificate as a family nurse practitioner. Post-master's students complete all family nurse practitioner specialty courses, and may receive advanced placement credit for core courses that were taken as part of their prior graduate preparation in nursing. Students completing the certificate offering are eligible to take a national certification examination.

## Program of Study

The graduate core and advanced practice core are taken by all master's students. Post-master's certificate students may receive advanced placement credit. Students take appropriate specialty courses depending upon the specialty track elected by the student. Courses designated as a practicum are precepted clinical experiences, and have a ratio of 1 credit to 4 clinical contact or clock hours. Nonmatriculated students may register for selected graduate nursing core courses with the permission of the graduate program director.

## Graduate Nursing Core (9 credits) <br> Course Title Credits

NU 500 Theoretical Foundations of Advanced Practice 3
NU 502 Issues \& Roles in Healthcare 3
NU 504 Methods of Nursing Research 3
Advanced Practice Core (10 credits)
NU 506 Advanced Health Assessment 4
NU 508 Advanced Pharmacology 3
BMS 518 Pathophysiology 3


Adult Nurse Practitioner Specialty Courses (24 credits)
NU 517 Principles of Electrocardiography 1
NU 518 Principles of Radiography 1
NU 570 Holistic Primary Care I
NU 571 Holistic Primary Care Practicum I
NU 626 Hillic Prin Can
NU 626 Holistic Primary Care II 4
NU 627 Holistic Primary Care of Adults: Practicum II 4
NU 630 Holistic Primary Care III 4
NU 631 Holistic Primary Care of Adults: Practicum III 4
Family Nurse Practitioner Specialty Courses (28 credits)
NU 517 Principles of Electrocardiography 1
NU 518 Principles of Radiography 1
NU 570 Holistic Primary Care I 3
NU 571 Holistic Primary Care Practicum I 3
NU 626 Holistic Primary Care II 4
NU 628 Primary Healthcare of the Family: Maternal/Child Focus
NU 629 Holistic Primary Care of the Family: Practicum II
NU 630 Holistic Primary Care III
NU 632 Primary Health Care of the Family: Pediatric Focus
NU 633 Holistic Primary Care of the Family: Practicum III

The graduate nursing program student handbook provides additional information regarding program policies and procedures.

## Master of Science in

 Occupational Therapy (Postprofessional online-only program)The post-professional master of science in occupational therapy is designed for practicing clinicians who currently have a bachelor's degree in occupational therapy and want to merge their experience and practical skills with prevailing professional knowledge. The program enables occupational therapy professionals to advance their knowledge of emerging research, leadership, critical thinking and entrepreneurial concepts of occupational therapy.

The degree is tailored for working professionals and can be completed in five semesters online with minimal on-campus requirements. Courses run consecutively in seven-week modules during the fall and spring semesters. During the two summer semesters, courses run in seven- and five-week modules, respectively. Practitioners are required to attend a one-day, on-campus orientation at the beginning of the program and at a one-day scholarly seminar to present their work at the end of the program.

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. Currently, the program has a fall start date.

Through this guided mentorship opportunity, practitioners develop leadership skills so they can build on their experience, refine clinical skills in specialized practice and participate in research.
Program of Study
Course Title ..... Credits
First semester
OT 600 Evidence Based Practice in OT ..... 3
OT 601 Research Methods I ..... 4
Second semester
OT 602 Practice Trends in OT ..... 3
OT 603 Research Methods II (OT 601 is a prerequisite) ..... 4
Third semester
OT 604 Directed Study in Evidence Based Practice(OT 600 is a prerequisite)3
OT 605 Directed Study in Clinical Practice ..... 3
Fourth semester
OT 606 Professional Paper or Project ..... 3
OT 607 Educational Leadership ..... 3

Fifth semester
OT 608 Entrepreneurial Concepts for $0 T$
OT 609 Scholarly Seminar (OT 601 \& 603 are prerequisites)

## Certificate of Advanced Graduate Study in Occupational Therapy (Post-professional online-only program)

Individuals who currently have an entry-level master's degree in occupational therapy may decide to pursue the online certificate of advanced graduate study in occupational therapy. This program is designed for therapists who wish to obtain advanced skills that will help promote the occupational therapy profession and build on their current experience while refining their clinical skills.

## Certificate of Advanced Graduate Study in Occupational Curriculum <br> Course Title <br> Credits

Required Courses
OT 600 Evidence Based Practice in OT
3
OT 602 Practice Trends in OT
3
OT 606 Professional Paper or Project
Recommended Elective Courses for the Certificate of Advanced Graduate Study (student will select 3 or 4)
OT 601 Research Methods I
OT 603 Research Methods II (OT 601 is a prerequisite)4
OT 604 Directed Study in Evidence Based Practice (OT 600 is a prerequisite)
OT 605 Directed Study in Clinical Practice 3
OT 607 Educational Leadership 3
OT 608 Entrepreneurial Concepts for OT 3
OT 609 Scholarly Seminar (OT 601 \& 603 are prerequisites)

## School of Law

For information about the course of study and admission to the School of Law, see page 38 of this catalog and/or contact the school's Office of Admissions at 203-582-3400; the email address is ladm@quinnipiac.edu.

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| Administrative Officers |  | Office | Phone |
| :--- | :--- | :--- | ---: |
| Vice President \& Dean of Students | Manuel Carreiro | SA | $582-8721$ |
| Associate Dean of Student Affairs | Carol Boucher | SA | $582-8722$ |
| Associate Dean of Student Affairs | Monique Drucker | SA | $582-8723$ |
| Associate Dean of Student Affairs | Gina Frank | SH | $582-3542$ |
| Director of Student Health Services | Kathryn Macaione | IRMA | $582-8738$ |
| Director of Student Center \& |  |  |  |
| Student Leadership Development | Daniel Brown | SC | $582-8110$ |
| Director of Residential Life | Cindy Long Porter | SA | $582-8722$ |
| Director of Community Service | Vincent Contrucci | AC | $582-5351$ |

## The Division of Student Affairs

The Division of Student Affairs is a composite of programs designed to facilitate student development, which Quinnipiac University comprehends as the application of human development concepts as they relate to college students. Human development is a life process leading to the development of selfdetermination and self-direction for more effective behavior. Students are viewed as collaborators with the faculty and administration in the process of learning and growing. The Division of Student Affairs consists of the following departments: the Department of the Student Center and Student Leadership Development, campus ministry, counseling, residential life, the dean's office, multicultural affairs, graduate life and student health services.

Student Affairs staff oversees a variety of services including student conduct; alcohol and drug education; diversity education; new student orientation and community service.

The Division of Student Affairs, located on Bobcat Way, is a central resource area for students requiring assistance with any issues or concerns, or questions relating to student life. The vice president and dean of students and associate deans of student affairs have offices here, as well as the residential life staff.

## Student Resources and Services

## Career Services

Quinnipiac University offers an array of career services specifically geared to students in each of the schools. Please contact the assistant dean for career services in the appropriate school for further information.

## Services for International Students

Quinnipiac is committed to ensuring that international students have a successful educational experience. Assistance is provided with F and J visa regulations, as well as other immediate concerns. International students should contact the Office of International Education for further information.

## Counseling Services

Counseling is available to undergraduate and graduate students on an individual and group basis. The Health and Wellness Center office is open Monday through Friday and services are offered free of charge. Students wishing to make an appointment must complete an intake form, which is available online or in the office. Once the intake form is received, an appointment is scheduled. In cases of emergency, students are seen as quickly as possible. The telephone number for the office is 203-582-8680.

## Community Service

The Office of Community Service develops a number of opportunities throughout the year to engage students in community service. Activities include publishing a directory of local nonprofits and alerting the community to specific nonprofit requests for service. The Office of Community Service and the Albert Schweitzer Institute offer alternative break programs that engage students in community service during spring break in a variety of national and international locales. Students also may work with a local nonprofit organization for work-study employment. Many student clubs and organizations perform service including Community Action Project, Habitat for Humanity and Alpha Phi Omega. Students interested in service are encouraged to join these student organizations.

## Student Health Services

Located in the Health and Wellness Center on Bobcat Way, Student Health Services is staffed by registered nurses 24 hours a day, 7 days a week, while students are in residence, excluding the summer term, with a physician available 35 hours a week. The highest priority of the staff is meeting the health needs of the student population and providing ongoing health education opportunities as an integral part of the Quinnipiac experience.

All students must submit, on forms provided by Quinnipiac, a complete history of immunization and the results of a pre-entrance physical examination. This examination must be administered by a qualified physician no more than one year before actual entrance to Quinnipiac. The forms serve as a basis for health counseling and for decisions about physical activities in which students can engage.

Student health services are available only to students who complete the required forms and have proof of adequate immunization. Students who do not comply are not permitted to register, including preregistration for the second semester.

It is extremely important that students have insurance coverage while they pursue their studies. If a student does not have health insurance through his/her own or family plan to cover the medical costs of an unexpected illness or injury, his/her education could be interrupted or even terminated. To prevent this from happening, the University has a health insurance requirement. To complete a comprehensive health care package, Quinnipiac has partnered with the Chickering Group, an Aetna Company, to offer a studentfocused health insurance plan that complements the services provided on campus.

There is no charge for services or supplies provided in Student Health Services except for gynecological examinations and contraceptive supplies. Individual prescriptions may be taken to local pharmacies to be filled at the usual and customary fee.

Students engaged in allergen immunotherapy prior to coming to Quinnipiac may continue this therapy in Student Health Services. Students participating in this program must bring complete orders on forms supplied by Student Health Services and extracts from their allergist. In addition, they must make an appointment for the administration of their extract during regular doctor's hours, on the day the nurse in charge of
this program is scheduled to work. An appointment time and day may be maintained for the entire semester.

## Department of Security and Safety

The Department of Security and 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 inservice 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 Security and Safety can be reached at 203-582-6200.



## The Department of the Student Center and Student Leadership Development

The Department of the Student Center and Student Leadership Development regards education as a process concerned with the total development of students. Therefore, the Student Center staff works to extend student learning beyond the classroom by offering high-quality experiential activities that challenge students to develop and practice leadership skills. The office provides a formal, deliberate and structured leadership development program in addition to opportunities gained by involvement in campus organizations and employment within the office. This involvement allows students to lead active, vibrant campus lives while preparing them to provide solutions to complex issues in their communities and in their chosen professions.

In all its interactions with students, the Department of the Student Center and Student Leadership Development fosters essential life skills that enable students to participate as effective and responsible citizens. To this end, the staff challenges students to:

- enrich and deepen their self-knowledge
- develop self-confidence and competence
- manage their time, energy and efforts to live a balanced life
- recognize and assume accountability for their actions and decisions
- communicate and interact effectively
- think creatively and critically
- embrace the responsibilities associated with becoming an ethical leader
- respond to the needs of others and utilize their talents, skills and resources to help the community.
Some of the comprehensive training and leadership programs offered by the Department of the Student Center and Student Leadership Development include: the Emerging Leaders program for new students; Collaborative Leaders for sophomores and juniors; Citizen Leaders for juniors and seniors; Annual Leadership Conference; Greek Roundtable Series; and New Member Retreat. Additionally, the Student Center staff works with individual students, student organizations and many campus departments to develop creative cultural, social, educational and recreational programming that enhances students' personal growth, community development and leisure-time activity.

The Department of the Student Center and

Student Leadership Development is located in the Carl Hansen Student Center, room 214, and can be reached at 203-582-8673.

## Clubs and Organizations

The Department of the Student Center and Student Leadership Development 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 the Student Center and Student Leadership Development. All policies and guidelines pertaining to organizations are subject to the interpretation of the Department of the Student Center and Student Leadership Development, 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.
Accounting Society
Alpha Chi Omega
Alpha Phi Omega
American Marketing Association
ANIME Club
Asian/Pacific Islander Student Association
Association to Maximize Italian Cultural Influence (AMICI)
Athletic Training Club
Black Student Union
Branches
Campus Crusade for Christ
The Chronicle (campus newspaper)
Community Action Project
Dance Company
Diagnostic Imaging Society
Economics/Finance Club
Fourth Wall
Gay, Lesbian and Straight Supporters
Habitat for Humanity
Hellenic Society
Hillel
Information Systems Management Club
Interfraternity Council
International Business Society
International Club

Investment Club
Kappa Alpha Theta
Lambda Pi Eta (communications honor society)
Latino Cultural Society
Montage (literary magazine)
Order of Omega
Panhellenic Council
Peer Educators
Phi Sigma Sigma
Physical Therapy Club
Physician Assistant Club
Psychology Club
Pi Theta Epsilon (honorary)
Praise "2" Him Ensemble
Prehealth Professional Society
Prelaw Society
Public Relations Students Society of America
Q-30 (Quinnipiac Television Station)
QU After Dark
QU Ballroom Society
QU Do It Yourself
QU Snow
QU Stand
Quinnipiac Film Society
Quinnipiac Undergraduate Future Teachers Organization
Quinnipiac University Association of Black Journalists
Quinnipiac University Democrats
Quinnipiac University Irish Club
Quinnipiac University Republicans
Residence Hall Council
Roots and Shoots
Rotaract Club
Sigma Phi Epsilon
Society for the Advancement of Management
Society, Life and Justice Club
Society of Professional Journalists
Step to Perfection
Student Diversity Board
Students Against Destructive Decisions
Students Helping Advocate Diversity
Students in Free Enterprise
Student Government Association
Student Nursing Association
Student Occupational Therapy Association
Student Programming Board
Summit (yearbook)
Tau Kappa Epsilon
Vet Tech Club
VITA (pro-life awareness)
Women Activists Vocalizing Equality
WQAQ (radio station)

## Carl Hansen Student Center

The Department of the Student Center and Student Leadership Development manages the Carl Hansen Student Center. This multipurpose facility provides 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

TD Bank operates a full-service branch on the first floor of the 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 Friday 9:30 a.m. to 2:30 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 Diner). 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 Student Center, between the post office and the bank. The bookstore carries textbooks, general books, school supplies, insignia giftware, greeting cards, snacks, as well as health and beauty aids. The store hours are Monday through Thursday: 9 a.m. to 8 p.m.; Friday: 9 a.m. to $4: 30$ p.m.; Saturday: 11 a.m. to 3 p.m. The bookstore is closed on Sundays.

## Campus Ministry

The Office of Campus Ministry provides spiritual and pastoral counseling, worship, sacraments and celebratory activities. Campus Ministry also provides an opportunity for students to interact and become aware of the diversity of the Quinnipiac University community. A full-time priest and rabbi are on staff, as well as a part-time protestant minister who represent their own faith communities, and are the spiritual representatives at University gatherings such as Commencement and Convocation. The chaplains strive to create an environment that will enhance religious and spiritual awareness.

Father Jonathan Kalisch's office is located on the second floor of the Student Center in the Campus Ministry offices. He can be reached at 582-8257.

Rabbi Reena Judd's office and all Jewish events are held at Campus Hillel House, located on New Road. For more information about Hillel, contact Rabbi Reena Judd at 582-8206 or email reena.judd@quinnipiac.edu.

## Campus Reservations

The centrally located Campus Reservations and Information Center is a resource for the Quinnipiac community and visitors. The staff provides information pertaining to campus events and directions for procedures unique to student activities. Requests for room reservations must be made online at www.quinnipiac.edu. Click on the MyQ link at the top of the page.

## Commuter Lockers

There are 183 conveniently located commuter lockers on the second floor which are available at the beginning of the academic year on a firstcome, first-served basis. Interested commuter students should call the Campus Reservation and Information Center at 203-582-8351 for details.

## Office Locations

The long hallway on the second floor of the Student Center leads to offices for 40 student organizations such as the Student Government Association, the Student Programming Board, The Chronicle, Montage and the studios of WQAQ radio. This area also contains the graphic arts room, which provides space for students to design creative publicity for programs and events.

## Post Office

The post office, located on the first floor of the Student Center, is open Monday-Friday, 9 a.m.4 p.m. All resident students are assigned boxes.

## The Quiet Lounge

The Quiet Lounge, located on the first floor, is a comfortable space designed to accommodate members of the Quinnipiac community who wish to interact and/or study in a quiet atmosphere. This lounge is exclusively for individual quiet study and is not designed for group meetings.

## Residential Life

Living on campus is one of the many learning experiences at Quinnipiac University. Here, students have the unique opportunity to associate with students from a variety of geographical locations and cultural backgrounds. Quinnipiac believes that the experience of living on campus is enhanced by tolerance, respect for others, and regard for the standards of good citizenship.

Quinnipiac also places great emphasis on the individual student and his or her overall development, rather than on intellectual training alone. The residential life program is committed to providing students a supportive and inclusive living environment that enriches their educational experience. The department is guided by four core values: community, diversity, service and responsibility. All professional staff members and resident assistants are trained to develop and implement policies and programs that express this philosophy.

Quinnipiac housing is guaranteed for three years for incoming freshmen. More than 3,400 students live on campus in traditional residence halls, suites, townhouses and apartments. Transfer students are currently guaranteed housing for two years. As the University housing expands with the addition of 2,000 beds plus a student center on the nearby York Hill Campus, many of the seniors will be accommodated in housing as space becomes available beginning in 2009.

## Residence Halls and Off-Campus Properties

Forty-five residence halls are available on campus for men and women, offering several different styles of residence: traditional shared rooms, suites, townhouses and apartments. The Ledges, Commons, Irmagarde Tator and Dana English residence halls comprise traditional housing for freshmen students. In addition, some freshmen are housed in Larson and Troupe, which offer suitestyle living. Upperclass students have a variety of residence hall options available to them. Mountainview and the other suite-style residence halls offer four bedrooms per suite along with a living room and a bath. The Village has 28 separate split-level units with approximately 24 students per building. Each unit has three bedrooms, a living room, and a bathroom. Several residential areas (The Hill, Complex and The Crescent located at York Hill) represent
apartment-style housing. Each apartment has three bedrooms, a living room, a bathroom, and a kitchen. Furnishings in all residence halls are tasteful, modern and functional.

The Whitney Village apartment complex is available to transfer students. The complex is located approximately two miles from the campus. Shuttle service is available. The apartment complex features one-, two- and three-bedroom units, full kitchen, living room and dining room. Each apartment is fully furnished. Whitney Village offers a limited number of single bedrooms.

Quinnipiac University also is proud to offer select students the opportunity to live in the University-owned off-campus properties. Many of these properties are located within a mile of campus. The University also owns one complex approximately 15 minutes from campus.

## Dining Hall

The dining hall 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 6 p.m.; and Saturday and Sunday, 11 a.m. to 6 p.m. Details of the dining service are available from the business office. The facility also includes rooms that may be converted to private dining rooms for receptions and special meetings.

## The Bobcat Den

Located on Bobcat Way, the Bobcat Den is a place where students, faculty, staff and their guests gather to relax and socialize.


## Athletics and Recreation

## Administrative Officers

Director of Athletics \& Recreation
Jack McDonald
582-8621
Office located in Athletic and Recreation Center.
Quinnipiac recognizes the importance of athletics and recreation in student life. The University supports 19 highly competitive, Division I intercollegiate teams and a number of spirit groups including pep band and several dance groups. The campus recreation program, with access to a fully equipped fitness center, consists of intramurals, physical education classes for academic credit, aerobics and many leisure-time offerings.

## Athletics

Intercollegiate athletic teams for men include baseball, lacrosse, soccer, cross country, ice hockey, basketball and tennis. Women compete in cheerleading, tennis, softball, basketball, lacrosse, field hockey, soccer, cross country, ice hockey, indoor and outdoor track and volleyball.
Quinnipiac is proud of past champions who have been honored by selection to All-Conference and All-America teams and drafted by professional teams.

Quinnipiac has full memberships in the following NCAA Division I conferences:
Northeast Conference
ECAC Men's and Women's Hockey ECAC Lacrosse

## Spirit Groups

Several spirit groups lend their support to winter athletic teams. The Quinnipiac pep band, Boomer the Bobcat (mascot), Crazy Bobcats, and several dance groups (Dance Fusion, Kickline, Step to Perfection) perform at basketball and hockey events.

## Campus Recreation

## Intramural Program

The Quinnipiac intramural program offers the entire campus community a variety of competitive sports activities in a recreational setting. The intramural department believes its participants should 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 director and student staff compute daily league standings, scoring leaders, outstanding players and officials of the week.
Intramural offerings include:

- basketball (5 on 5 and 3 on 3)
- dodgeball
- field hockey
- flag football
- kickball
- soccer (indoor, outdoor)
- tennis (men's, women's, and mixed doubles)
- ultimate frisbee
- volleyball (4 on 4, and 6 on 6)
- wiffle ball

For more information about intramural sports, visit the web site at www.quinnipiac.edu/x367.xml.

## Physical Education Elective Course Credit

A variety of recreation and sports classes provides students with course credit as well as the opportunity to learn the skills needed to participate in a lifetime of leisure health and fitness activities.
Physical education offerings include:

- advanced golfer's weekend institute
- advanced tennis weekend institute
- aerobics
- ballroom dancing (beginning/intermediate)
- beginning golf
- beginning tennis
- canoeing weekend
- cardio kickboxing
- cardio pump
- dance-salsa
- fitness and nutrition
- fresh water fishing weekend
- fundamentals of boxing and kickboxing
- indoor rock climbing
- integrated strength training
- intramural officiating
- PE in the elementary school
- Pilates
- recreation games weekend
- rocks and ropes campout weekend
- sailing weekend
- spinning
- weight lifting for body builders
- yoga

Each class is valued at 1 academic credit. Students may earn up to 6 credits toward graduation.

## Aerobic/Activity Classes

Campus Recreation offers a full schedule of free lunchtime and evening activities taught by certified instructors. The activities include aerobic kickboxing, step aerobics, body sculpting, "Butts, Guts, Thighs," fencing, self-defense and yoga. Classes are offered on a first-come, first-served basis and are taught in our dance studios.

Free, one-hour classes are scheduled Sunday through Thursday evenings. Large "special-event classes" are occasionally scheduled on weekends or holidays. Most classes are limited to the first 40 people to sign up. Sign-up lists are available 15 minutes before scheduled class starting times.

Classes usually begin during the second week of the fall semester and spring semesters. Classes are not scheduled during summer. The schedule is emailed to the Quinnipiac community and copies are available on the recreation web site, outside the studio and in the Fitness Center.

For more information about fitness and aerobics classes, visit www.quinnipiac.edu/x369.xml.

## Open Recreation

"Open Rec" hours are scheduled in both the Recreation Center and Burt Kahn Court.
Quinnipiac community members are encouraged to walk or jog on the track; and to play basketball or volleyball in the Recreation Center. 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 hockey teams. The two arenas at the TD Bank 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.

## Gymnasium

This hardwood floor facility serves as the competitive site for Quinnipiac University home

volleyball games. The gymnasium also is used for intramurals and "open recreation." The area can be configured to accommodate simultaneously two regulation volleyball games or two intramural basketball contests.

## Aerobics Studios

Two mirrored aerobic studios each contain state-of-the-art stereo equipment for professional and student use. Each studio also is equipped with audio and video systems. Aerobics, physical education classes, dance groups, and many other campus groups share the studios. 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 to videos, fencing, martial arts, aerobics, dance, yoga and more.

The entry to the Recreation Center features a lobby and central access area through which all users and visitors can access the Recreation Center, Fitness Center and track. Student staff members are stationed at the reception desk to respond to questions, schedule cardio equipment usage, and sign out recreation equipment.

## Recreation Center

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

## Fitness Center

The Fitness Center is open to all members of the Quinnipiac community. Those who wish to use this facility must complete the orientation process. Prospective users are required to complete an information card, as well as a waiver and consent form, and to view a video that outlines center rules and regulations and proper equipment usage. Once the orientation session has been completed, the user's Quinnipiac ID is validated. The ID must be presented for entrance to the facility and the user is required to sign up for use of cardiovascular equipment.

The Fitness Center contains a full line of free weights, strength and cardiovascular equipment.

Most of the cardio equipment includes:

- bicycles (recumbent and upright)
- Concept II rowers
- Cybex strength equipment
- ellipticals
- freeclimbers/steppers
- treadmills

For more information about fitness and recreation, visit www.quinnipiac.edu/x368.xml.

## Indoor Track

The suspended track encircles the four Rec Center courts. 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 track have been outfitted with various pieces of cardiovascular equipment. Each corner (approx. 2,800 square feet) has treadmills, ellipticals, steppers and bikes. The fourth corner is designated as the "stretching" corner and is outfitted with mats and ab rollers.

## Multipurpose Room

A large multipurpose room is located in the southeast corner of the Rec Center. It is available to the Pep Band, dance groups, crafts classes and other student and recreational groups.

## Outdoor Venues and Fields

Quinnipiac's outdoor athletic facilities consist of athletic fields for softball, baseball, field hockey, soccer, lacrosse, touch football, basketball, as well as six lighted tennis courts. A hitting wall and basketball court are located adjacent to the Recreation Center. An artificial turf field, completed in 2005, 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. Equipment is provided for all physical education classes.

## Personnel

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## Board of Trustees

The Board of Trustees is currently composed of 32 public members, four alumni, faculty and student representatives, and 9 emeriti members.

## Public Members

Terry W. Goodwin '67, Chairman; Greenwich, CT
Murray Lender '50, Vice Chairman, Lender Management LLC; Woodbridge, CT
Robert Hauser '67, Vice Chairman; Senior Vice President, First American Title Insurance Co., King of Prussia, PA
William C. Weldon '71, Secretary; Chairman and CEO, Johnson \& Johnson, New Brunswick, NJ
David Nelson '81, Chairman of the Executive Committee; Calvert Health Partners, LLC, Baltimore, MD
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Richard Howard, Prospector Partners, Guilford, CT
Hugh Keefe, Esq. '64, Lynch, Traub, Keefe \& Errante, New Haven, CT
M.S. Koly, President, Venkol Oil, Darien, CT

John L. Lahey, PhD, President, Quinnipiac University
Frederick Mancheski, North Haven, CT
Marcus R. McCraven, Hamden, CT
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Kenneth Neilson, Hobe Sound, FL
Donald L. Perlroth '53, Donald L. Perlroth \& Co., CPAs, North Haven, CT
Arthur H. Rice, Esq. '73, Rice, Pugatch, Robinson \& Schiller, Fort Lauderdale, FL
Christian Sauska Sr., Founder, President \& CEO, Light Sources Inc., Orange, CT

Edward Scalone '52, Palm Beach, FL
Brian E. Spears, JD '92, Levett Rockwood P.C., Westport, CT

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## Administration

Please visit www.quinnipiac.edu/administration.xml for a list of administrative personnel. This list is intended to help students and their parents obtain information about Quinnipiac University and its programs.

## Full-time Faculty

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Louis C. Adler (1993), Fred Friendly Professor of Broadcast Journalism. (BS, State University of New York at Fredonia; MS, Purdue University at West Lafayette; JD, Quinnipiac University)
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Gary Alger (2007), Assistant Professor of Education \& Director of Educational Leadership Program. (BS, State University of New York at Oneonta; MS, State University of New York at Cortland; EdD, University of Bridgeport)
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## North Haven Campus



## York Hill Campus



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## Undergraduate Courses

## Accounting (AC)

AC 101 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. Prerequisites: MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141; Every Year, All

AC 102 Managerial Accounting ( 3 cr .) This course is 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. Prerequisite: AC 101; Every Year, All

AC 305 Intermediate Accounting I (3 cr.) Students study the standard-setting process as well as the application of generally accepted accounting principles and the accounting cycle. The content, structure and usefulness of the balance sheet and income statement are reviewed. Topics include the recognition, measurement and reporting of cash, receivables, inventories, plant assets and liabilities. Prerequisite: AC 101; Minimum grade C-; Every Year, Fall and Spring

AC 306 Intermediate Accounting II (3 cr.) This continuation of AC 305 covers such topics as stockholders' equity, earnings per share, revenue recognition accounting changes and correction of errors. Accounting for investments, income taxes, leases and pensions also are covered. In addition, the content, structure and usefulness of the statement of cash flows are reviewed. Prerequisite: AC 305; Minimum grade C-; Every Year, Fall and Spring

AC 323 Cost Accounting ( $\mathbf{3}$ cr.) This class includes an in-depth treatment of accounting theories and practices used to control and manage costs. Topics include joborder, process, activity-based costing systems, cost variance analysis, budgeting, cost-volume-profit analysis and product mix decision. Prerequisite: AC 102; Minimum grade C-; Every Year, Spring

## AC 335 Accounting Systems (3 cr.)

This class is an introduction to 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. Prerequisite: AC 102; Minimum grade C-; Every Year, Fall and 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 Accounting for Business Combinations, International Operations and Other Entities ( 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 bankruptcy liquidations and reorganizations. Prerequisite: AC 202 or AC 306; Minimum grade C-; Every Year, Fall and Spring

AC 411 Auditing Theory and Practice ( 3 cr .) This course focuses on generally accepted auditing standards and audits of corporations. The course includes ethics, legal liability, assessment of reliability, relevance and risks in business. The management and control of the audit and reliance on systems of internal controls provide the framework around which audits are planned, conducted and reported. Prerequisite: AC 202 or AC 305; Minimum grade C-; Every Year, Fall and Spring

AC 412 Advanced Auditing Theory and Practice (3 cr.) This course introduces students to the legal liability issues faced by auditors, with a focus on fraud auditing, development of overall audit plan and audit program, audits of fixed assets, accounts payable and inventory. The course concludes with a discussion of the steps necessary to complete an audit engagement. Prerequisite: AC 411; Minimum grade C -

AC 431 Federal Income Tax Procedure (3 cr.) This course examines the theory and problems of federal income taxes with emphasis on individual tax returns. Prerequisite: AC 102; Minimum grade C-; Every Year, Fall

AC 432 Advanced Federal Income Tax Procedure (3 cr.) This continuation of AC 431 considers applications of federal and state tax laws to partnerships, corporations, estates and trusts. Prerequisite: AC 431; Minimum grade C-; Every Year, Spring

Courses offered as needed
AC 101H Honors Financial Accounting (3 cr.)
Prerequisites: MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141

## Anthropology (AN)

## AN 101 (UC) 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 andsimilarities 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 222 (UC) Indigenous Peoples of North America

 ( 3 cr.) Students are introduced to the diversity of indigenous cultures as they changed and transformed from the time of human migration to the North American continent to today. There is particular emphasis on the contact period with European explorers and settlers. Attention is focused on the contemporary lives of indigenous peoples, including people living on reservations and in urban areas, with regard to the unique place they occupy in society and history and their continuing struggles for recognition and equality. Prerequisite: AN 101 or SO 101; Every Other Year, All
## AN 223 Latin American Societies and Cultures

(LAS 223) (3 cr.) The course explores the diversity of Latin American cultures and societies throughout North and South America as well as in the Caribbean, and traces the history of European and African encounters with the indigenous peoples living in the New World. An emphasis is placed on the events and forces that influence today's cultural and social traditions. Prerequisite: AN 101 or SO 101; Every Other Year

AN 224 Archaeology ( $\mathbf{3} \mathbf{c r}$.) This course introduced students to the social science of archaeology, one of the four subdisciplines within anthropology. The course explores the history and methodology of archaeology; human evolution and adaptation; the relationship between humans and the natural environment; and the interpretation of archaeological data. The ethics of doing archaeological fieldwork and the contemporary debates within the discipline also are discussed. Prerequisite: AN 101 or SO 101; Every Year, Fall

## AN 230 Visual Anthropology: Film and Culture (3 cr.)

 This course focuses on the use of ethnographic film as a professionally objective vehicle for interpreting, defining and communicating about human behavior. Students apply their knowledge of anthropological concepts and theory to a series of films as a way of developing an integrated cultural awareness, and also to critically evaluate the filming process itself. To further the understanding of the importance of visual representation, students create their own photographic essay of an ethnographic event that they have witnessed or participated in. Prerequisite: AN 101; Every Other Year, SpringAN 310 Cross-Cultural Perspectives on Gender, Sex, and Sexuality (WS 310) ( $\mathbf{3}$ 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. Prerequisite: 6 credits from AN or SO; Every Year, Fall

AN 315 Myth and Folklore ( $\mathbf{3} \mathbf{c r}$.) This course considers dragons and dreams, talking animals and heroic questswhat they mean and why they are important. Theories of anthropologists, psychologists and others are used to explore myths and folklore in an attempt to illuminate the nature of the human mind and its relation to society. Prerequisite: 6 credits from AN or SO; Every Other Year

## 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. Prerequisite: 6 credits from AN or SO; Every Other Year

Courses offered as needed
AN 101H (UC) Honors Introduction to Cultural
Anthropology (3 cr.)
AN 200 Special Topics (3 cr.) Prerequisite: AN 101
AN 229 Peoples of Africa (3 cr.) Prerequisite: AN 101 or SO 101
AN 299 Independent Study ( 3 cr )
AN 300 Special Topics (3 cr.)
AN 399 Independent Study (3 cr.)

## Arabic (ARB)

ARB 101 Elementary Arabic I ( $\mathbf{3} \mathbf{~ c r}$.) 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 Arabic-speaking world. Every Year, Fall and Spring

ARB 103 Continuing Elementary Arabic (3 cr.) This course is a continuation of the study of Modern Standard Arabic. Students further develop their listening comprehension, speaking, reading and writing abilities, and their understanding of the cultures of the Arabic-speaking world. Prerequisite: ARB 102; Every Year, Fall and Spring

Courses offered as needed<br>ARB 299 Independent Study: Advanced Arabic (3 cr.)

## 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 from prehistory through the medieval period. Students explore the stylistic elements that make great works typical of their era. Every Year, AllAR 103 (UC) Art History: Renaissance Through Contemporary ( $\mathbf{3}$ 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 non-Western arts from East Asia, South Asia, Africa, the PreColumbian 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 nonWestern 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, All

AR 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 Basic Visual Design ( $\mathbf{3} \mathbf{~ c r}$.) 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 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 210 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 art work 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 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 Color Theory ( $\mathbf{3}$ 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, discord, among others. Every Other Year, Spring

AR 242 Cartooning ( $\mathbf{3} \mathbf{c r}$ ) 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 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 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 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 257 AP Studio Art Introduction to Studio Methods ( 3 cr .) This eight-week accelerated course introduces students to basic studio methods. Both traditional and contemporary techniques are explored through a series of
short in-class projects and longer out-of-class assignments. Course work includes techniques and materials for a variety of media, including drawing, painting, watercolor, sculpture and printmaking. Every Year, Spring

AR 262 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, Spring

AR 263 Studio Art: Collage ( 3 cr .) This hands-on studio course enables students to explore materials and techniques involved in the art of making collage. This course looks at various ways to incorporate pre-made 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 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 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 317 Art of the Italian Renaissance ( $\mathbf{3} \mathbf{~ c r}$.) This course covers the period from c.1350-1600 in Italy. Participants study the painters, sculptors and architects of the period, including their artistic techniques, styles and use of symbolism. Topics include the writings by artists of the time as well as an examination of those artists and artistic movements that served as precursors to this compelling period of art history. Students further study the political, religious, economic and scientific advances of the period, including opportunities for women and the influence of regional geography on the arts. Prerequisite: AR 102, AR 103, AR 104 or AR 105; Every Other Year, Spring

AR 335 Digital Photography ( 3 cr .) This course is designed to help students learn digital camera operation, as well as computer-based image correction and manipulation through the use of Adobe Photoshop. Participants explore relevant topics through class lectures, demonstra-
tions, in-class exercises and out-of-class assignments. Topics include the methods and techniques used to create, edit and critically judge digital images. Prerequisite: AR 140, AR 158 or AR 255; Every Year, Spring

AR 342 Illustration ( $\mathbf{3} \mathbf{~ c r}$.) 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 250 Studio Art: Special Topic (3 cr.)
AR 254 Studio Art: Printmaking (3 cr.)
AR 255 Studio Art: Introduction to Darkroom Photography (3 cr.)
AR 280 History of Modern Design (3 cr.)
AR 299 Independent Study ( 3 cr.)
AR 300 Special Topics Course ( 3 cr .) Prerequisite:
AR 102, AR 103, AR 104 or AR 105
AR 360 Innovation in the Arts and Sciences (PL 360)
( 3 cr .)
AR 380 Interactive Art (PL 380) (3 cr.)
AR 399 Independent Study (3 cr.)
AR 499 Independent Study (3 cr.)

## Athletic Training (AT)

AT 114 Introduction to Athletic Training/Sports Medicine ( $\mathbf{3} \mathbf{c r}$.) This course is designed to familiarize the student with the role of an athletic trainer in sports and health care. 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/SM majors or those considering transferring into the major. It also is open to non-majors. (3 lab hrs.) Every Year, Spring
## 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 also receive credit for AT 214. Prerequisites: 1 group: BIO 101, BIO 101L; BIO 105, BIO 105L; BIO 106, BIO 106L; CHE 101, CHE 101L; PHY 101, PHY 101L; BMS 110, BMS 110L; BMS 117, BMS 117L; BMS 118, BMS 118L; SCI 101,SCI 101L; SCI 102, SCI 102L; SCI 105, SCI 105L; Every Year, Fall and Spring

AT 214 Care and Prevention of Athletic Injuries (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. Forty observation hours are required. Students who take AT 201 cannot also receive credit for AT 214. Prerequisite: AT 114; 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. (2 lab hrs.) Prerequisite: AT 114; Every Year, Fall

AT 215 Therapeutic Modalities (4 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 114, AT 214; Every Year, Spring

AT 215L Therapeutic Modalities Lab (0 cr.) This lab includes the practical application of therapeutic modalities and must be taken in conjunction with AT 215. (2 lab hrs.) Prerequisites: AT 114, AT 214; Every Year, Spring

AT 230 Nutrition, Conditioning and Fitness ( 3 cr.) Students are exposed to the importance of proper nutrition with an emphasis on conditioning and fitness. Every Year, Fall

AT 298 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, emergency care of suspected head and neck injuries, ambulatory aids, pre-participation examination, and the Quinnipiac University Emergency Action Plan. Hands-on practical experience is emphasized in class sessions. Prerequisites: AT 114, AT 214; Every Year, Spring

AT 298L Clinical Practicum I, Lab (1 cr.) During the semester, students gain 100 hours of clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. (3 lab hrs.) Prerequisites: AT 114, AT 214; Every Year, Spring

## AT 338 Kinesiology and Athletic Injury Evaluation I

( 4 cr .) This course covers kinesiology, advanced anatomy and evaluation knowledge and techniques involved in assessing athletic injuries/illnesses of the lower extremity, head and spine. Emphasis is placed on obtaining an understanding of kinesiological principles, as well as fine-
tuning injury/illness recognition skills and concepts. Prerequisites: AT 114, AT 214, BIO 211; Every Year, Spring

AT 338L Kinesiology and Athletic Injury Evaluation I, Lab ( $\mathbf{0} \mathbf{~ c r . ) ~ T h i s ~ l a b ~ i n c l u d e s ~ t h e ~ p r a c t i c a l ~ a p p l i c a t i o n ~ o f ~}$ kinesiology and athletic injury evaluation and must be taken in conjunction with AT 338 (2 lab hrs.) Prerequisites: AT 114, AT 214, BIO 211; Every Year, Spring

AT 339 Kinesiology and Athletic Injury Evaluation II ( 4 cr .) Kinesiology, advanced anatomy and evaluation knowledge and techniques involved in assessing athletic injuries/illnesses of the upper extremity, head and spine are covered in this course. Emphasis is placed on obtaining a continued understanding of kinesiological principles, as well as integrating kinesiological principles with injury/illness recognition skills and concepts. Prerequisites: AT 338, BIO 211, BIO 212; Every Year, Fall

AT 339L Kinesiology and Athletic Injury Evaluation II, Lab ( $\mathbf{0} \mathbf{~ c r . ) ~ T h i s ~ l a b ~ i n c l u d e s ~ t h e ~ p r a c t i c a l ~ a p p l i c a t i o n ~}$ of kinesiology and athletic injury evaluation and must be taken in conjunction with AT 339. (2 lab hrs.) Prerequisites: AT 338, BIO 211, BIO 212; Every Year, Fall

## AT 398 Clinical Practicum II, Athletic Protective

Equipment (2 cr.) Students are introduced to taping and wrapping techniques used in athletic training. The course includes instruction in fabricating and applying protective equipment, pads, splints and supports. Hands-on practical experience is emphasized in class sessions. Prerequisite: AT 298; Every Year, Fall

AT 398L Clinical Practicum II, Lab (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.) Prerequisite: AT 298; Every Year, Fall

AT 399 Clinical Practicum IV, Psychosocial Intervention and Referral ( 2 cr .) The psychological aspects of athletic training and sports medicine are covered. Over the course of the semester, students gain 200 hours of clinical experience. Students are required to complete specific NATA clinical competencies and proficiencies. Prerequisites: AT 298, AT 398, AT 498; Every Year, Fall

AT 399L Clinical Practicum IV Lab (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 298, AT 398; Every Year, Fall

AT 410 Therapeutic Exercise I ( $\mathbf{4} \mathbf{~ r . )}$ ) This course provides the student with a basic systemic approach to exercise program development. It includes techniques, indications and contraindications of exercise and exercise
progression as related to athletic injury, prevention, reconditioning and return-to-play guidelines. Prerequisite:
AT 338; Every Year, Fall
AT 410L Therapeutic Exercise I, Lab (0 cr.) This lab includes the practical application of therapeutic exercise and must be taken in conjunction with AT 410. (2 lab hrs.) Prerequisite: AT 338; Every Year, Fall

AT 411 Therapeutic Exercise II (4 cr.) This course provides the student with a basic systemic approach to exercise program development. It includes techniques, indications and contraindications of exercise and exercise progression as related to athletic injury, prevention, reconditioning and return-to-play guidelines. Prerequisites: AT 338, AT 339, AT 410; Every Year, Spring

AT 411L Therapeutic Exercise II Lab (0 cr.) This lab includes the practical application of therapeutic exercise and must be taken in conjunction with AT 411. (2 lab hrs.) Prerequisites: AT 338, AT 339; Every Year, Spring

AT 440 Biomechanics ( $\mathbf{4} \mathbf{~ c r}$.) 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: AT 338, AT 339, AT 410; Every Year, Spring

AT 440L Biomechanics Lab ( 0 cr.) This lab includes the practical application of biomechanics including the processes involved in data collection for forces, EMG and motion analysis data. Must be taken in conjunction with AT 440. (2 lab hrs.) Prerequisites: AT 338, AT 339, AT 410; Every Year, Spring

## AT 450 Administration and Management in Athletic

Training (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. Prerequisites: AT 338, AT 339, AT 410, AT 411; Every Year, Fall

## AT 481 Strength Training and Conditioning for The

 Athletic Trainer ( 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 combi-nation of classroom and laboratory experiences to ensure that students are capable of translating theory into practice. Prerequisite: AT 410; Every Year, Spring

AT 498 Clinical Practical IV, General Medical
Conditions ( 3 cr ) The common Conditions ( 3 cr .) The common general medical conditions and diseases that occur in sports medicine and athletic training environments are discussed. Emphasis is placed on pharmacological interventions of prescription medications, non-prescription medications and performance-enhancing drugs used in athletics. Prerequisites: AT 399, AT 410, AT 411, BMS 300, BMS 301; Every Year, Spring

AT 498L Clinical Practicum III Lab (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 298, AT 398; Every Year, Spring

AT 499 Clinical Practicum V, Professional and Career Preparation (2 cr.) This course is designed to provide students with a means to integrate and augment all concepts, skills and knowledge covered in the athletic training curriculum (Clinical Practicum I-IV, Advanced Anatomy and Lower/Upper Body Evaluation, Therapeutic Modalities, Therapeutic Exercise I and II, and Administration and Management in Athletic Training). Much of the course is discussion-based and requires the students to be fully participative. Prerequisites: AT 298, AT 398, AT 399, AT 498; Every Year, Spring

AT 499L Clinical Practicum V Lab (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 298, AT 398, AT 399, AT 498; Every Year, Spring

## Biological Sciences (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. An honors section lecture and lab are available. 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. (2 lab hrs.) Every Year, Fall and Summer

BIO 102 (UC) General Biology II (3 cr.) This course covers the basic concepts of the life science with emphasis on viral and cellular reproduction, genetics, evolutionary mechanisms, phylogenetic inference, a broad taxonomic survey, and ecology. Selected topics include sexual reproduction and classical genetic analysis, microevolution, speciation, macroevolution and application of comparative anatomy and physiology to illuminate evolutionary relationships and their ecological context. An honors section of lecture and lab are available. Second semester of a fullyear course; must be taken in sequence. Prerequisite: passing grade in BIO 101 and 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. (2 lab hrs.) Prerequisite: passing grade in BIO 101 and BIO 101L; 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 and Summer

## BIO 106 (UC) Introduction to Biological Sciences II

 ( 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 and SummerBIO 106L (UC) Introduction to Biological Science Lab II (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 110 (UC) The World of Microbes (4 cr.) Students are introduced to the relevance of microorganisms in everyday life. Topics include: microorganisms in the environment, infectious diseases, biotechnology, foods and beverages, antibiotics and host defense mechanisms. Laboratory work stresses standard procedures used in microbiology. Every Year, Fall and Spring

BIO 161 (UC) Introduction to the Biological Aspects of Science and Society ( $\mathbf{3}$ 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, All

BIO 205 Bioethics (PL 222) (3 cr.) This course explores major ethical issues in biomedical research and health care delivery, e.g. the concepts of health, the nature of human nature, ethical issues in decision making, human experimentation, genetic engineering, behavior modification, euthanasia, the right to health/health care. Prerequisite: BIO 101, BIO 102, PL 101, PS 101 or SO 101; Every Year, 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 ( $\mathbf{1}$ 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. Full-year course; must be taken in sequence. Prerequisites: BIO 101, BIO 102; 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.) Prerequisites: BIO 101, BIO 102; 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 218 Vertebrate Natural History (4 cr.) This course involves the observation, collection and identification of terrestrial and aquatic vertebrate animals. Emphasis is on life histories of local species. There are frequent field trips. ( 2 class hrs., 4 lab hrs.) Prerequisites: BIO 102, BIO 102; Every Year, Summer

## BIO 222 (UC) Evolution in Biology and Literature

( 3 cr .) This study of evolution as understood by biologists and of imaginative literature explores human origins, evolution and destiny. Impact of the concept of evolution on literature is considered, particularly Darwin's contribution. Prerequisites: 1 group: BI 101, BI 102; BI 105, BI 106; Every Year, Fall

## BIO 222 (UC) Evolution in Biology and Literature

( 3 cr .) This study of evolution as understood by biologists and of imaginative literature explores human origins, evolution and destiny. Impact of the concept of evolution on literature is considered, particularly Darwin's contribution. Prerequisites: 1 group: BIO 101, BIO 102; BIO 105, BIO 106; Every Year, Fall

BIO 223 Invertebrate Zoology ( 4 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: BIO 101, BIO 102; Every Year, Spring

BIO 223L Invertebrate Zoology Lab (0 cr.) Lab to accompany BIO 223. (3 lab hrs.) Every Year, Spring

BIO 227 Comparative Anatomy and Physiology (4 cr.) This course represents an evolutionary and developmen-
tal approach to discovering the changes that exist in structure and function among vertebrate animals. Organ systems discussed in lecture are reviewed in dissections (comparisons of vertebrate species) and inquiry-based physiology labs. Full-year course, must be taken in sequence with BIO 228. Prerequisites: BIO 101, BIO 102; Every Year, Fall

BIO 227L Comparative Anatomy and Physiology Lab (0 cr.) Lab to accompany BIO 227. (3 lab hrs.) Every Year, Fall

BIO 228 Comparative Anatomy and Physiology (4 cr.) This course represents an evolutionary and developmental approach to discovering the changes that exist in structure and function among vertebrate animals. Organ systems discussed in lecture are reviewed in dissections (comparisons of vertebrate species) and inquiry-based physiology labs. This full-year course must be taken in sequence with BIO 227. Requires a passing grade in BIO 227. Prerequisites: BIO 101, BIO 102, BIO 227; Every Year, Spring

BIO 228L Comparative Anatomy and Physiology Lab (0 cr.) Lab to accompany BIO 228. (3 lab hrs.) Every Year, Spring

BIO 282 (UC) Genetics (4 cr.) 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. Prerequisites: BIO 101, BIO 102; Every Year, Fall and Spring

BIO 282L (UC) Genetics Lab ( 0 cr .) Lab to accompany BIO 282. (3 lab hrs.) Every Year, Fall and Spring

BIO 298 Research Methods in Biology ( 2 cr.) This introduction to biological research includes discussion and demonstrated skills in library use, literature citation, academic integrity, experimental design, statistical and graphical treatment of data, and professional design and presentation of research as well as career development. The course culminates with a final research project. Prerequisites: BIO 101, BIO 102; Every Year, Spring

BIO 313 Introduction to Animal Science (4 cr.) Students are introduced to biology, husbandry, management and use in research of the common laboratory animal and pet species. Experience is gained via laboratory sessions in the restraint, anesthesia, specimen collection, drug and experimental substance administration, and identification procedures used in research institutions, commercial breeding laboratories and veterinary medical practice. Prerequisites: BIO 227, BIO 228; Every Year, Fall

BIO 313L Introduction to Animal Science Lab (0 cr.) Lab to accompany BIO 313. (3 lab hrs.) Every Year, Fall

## BIO 315 Veterinary Clinical Laboratory Techniques

(4 cr.) Blood, urine, feces, cerebrospinal fluid, and other clinical pathologic specimens are examined in the laboratory. Emphasis is on manual performance of basic laboratory diagnostic procedures and the value of the laboratory findings to the veterinary practitioner or research investigator. Prerequisite: BIO 313; Every Year, Spring

## BIO 315L Veterinary Clinical Laboratory Techniques

Lab (0 cr.) Lab to accompany BIO 315. (3 lab hrs.) Every Year, Spring

BIO 317 Developmental Biology ( 4 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: BIO 101, BIO 102; Every Year, Spring

BIO 317L Developmental Biology ( 0 cr.) Lab to accompany BIO 317. Research-based laboratory projects emphasize molecular and cellular events in early embryonic development and regeneration. (4 lab hrs.) Every Year, Spring

BIO 319 Biology of the Horse and Agricultural Species ( 4 cr .) The anatomy, physiology, nutrition, breeding and husbandry of the light horse and species of agricultural importance in New England are covered in this course. Diseases of farm animals are discussed with emphasis on recognition, prevention, and common control procedures. Laboratory sessions focus on restraint, specimen collection, and drug and experimental substance administration relevant to the species. Field trips and audiovisual aids are included. Enrollment is limited to veterinary technology seniors. Prerequisite: BIO 413; Every Year, Spring

BIO 319L Biology of the Horse and Agricultural Species Lab (0 cr.) Lab to accompany BIO 319. (3 lab hrs.) Every Year, Spring

BIO 326 Animal Parasitology (4 cr.) This study of the biology of animal parasites emphasizes the diagnosis, treatment and epizootiology of parasitic diseases of domestic animals. The laboratory focuses on clinical diagnosis, diagnostic techniques, including immunodiagnostic techniques, and experimental life cycle studies using both living and preserved materials. Prerequisites: BIO 101, BIO 102; Every Year, Fall

BIO 326L Animal Parasitology Lab (0 cr.) Lab to accompany BIO 326. (3 lab hrs.) Every Year, Fall

BIO 328 Human Clinical Parasitology (4 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: BIO 101, BIO 102; Every Other Year, Spring

BIO 328L Human Clinical Parasitology Lab (0 cr.) Lab to accompany BIO 328. (3 lab hrs.) Every Other Year, Spring

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: BIO 101, BIO 102; Every Year, Spring

BIO 331 Earth Science ( 4 cr .) This course focuses on the study of the earth as a dynamic body and the processes that change our planet. The fundamentals of geology, oceanography and meteorology are discussed to show how they produced and continue to modify the earth. The course investigates earth's place in the universe through astronomy. This course is designed exclusively for students in the BS/MAT five-year program in middle grades and secondary education, or the BS in biology, environmental science minor, or permission of the instructor. Every Year, Spring

BIO 331L Earth Science Lab ( 0 cr ) Lab to accompany BIO 331. (4 lab hrs.) Every Year, Spring

BIO 346 Cell Physiology (4 cr.) This course examines the physiology of the cell with emphasis on the structure and function of the eukaryotic cell. Topics include metabolism, protein synthesis, cytoskeleton, movement, communication and control of cellular reproduction. The lab involves current techniques for separating and identifying cell components and enzyme systems, and microscopic and physiological identification of a eukaryotic motility mutant. (3 lab hrs.) Prerequisites: BIO 101, BIO 102, CHE 210, CHE 211; Every Year, Fall

BIO 346L Cell Physiology Lab (0 cr.) Lab to accompany BIO 346. (3 lab hrs.) Every Year, Fall

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. Prerequisites: 1 group: BIO 211, BIO 212; BIO 227, BIO 228; Every Year, Fall

BIO 352 Botany ( $\mathbf{4} \mathbf{~ r r}$ ) The biology of plants, focusing on morphology, physiology, growth, genetics, evolution, ecology, ethnobotany and their importance to humans. Prerequisites: BIO 101, BIO 102; Every Year, Fall

BIO 352L Botany Lab (0 cr.) Lab to accompany BIO 352. (4 lab hrs.) Every Year, Fall

BIO 353 (UC) General Ecology (4 cr.) This course considers relationships between organisms and their biotic, chemical and physical environment. The class takes field trips to terrestrial, freshwater and marine habitats. Prerequisites: BIO 101, BIO 102; Every Year, Fall

BIO 353L General Ecology Lab (0 cr.) Lab to accompany BIO 353. (4 lab hrs.) Every Year, Fall

BIO 354 Marine Ecology ( 4 cr.) Studies of the marine environment and the factors influencing the survival of marine organisms are covered in this course. Field trips to oceanic and estuarine areas are scheduled and students receive field training in oceanographic techniques. Lab is included. Prerequisites: BIO 101, BIO 102; Every Other Year, Fall

BIO 356 Freshwater Ecology (4 cr.) This introduction to the study of the biology, chemistry, geology and the physics of ponds, lakes and streams includes studies of life histories of representative freshwater organisms. Students receive field training in limnological techniques. Prerequisites: BIO 101, BIO 102; Every Other Year, Spring

BIO 356L Freshwater Ecology Lab (0 cr.) Lab to accompany BIO 356. (4 lab hrs.) Every Other Year, Spring

BIO 358 Human Ecology (4 cr.) Students are introduced to the ecological and ethical position of humans in nature, and study the historical background of humans in relationship to the current ecological dilemma and realistic possibilities for solving it. The course focuses on the environmental issues of overpopulation, food, water, climate change, energy, biodiversity, natural resources, pollution, conservation, economics and politics. Selected field trips to study current ecological problems are scheduled. ( 2 class hrs., 4 lab hrs.) Prerequisites: BIO 101, BIO 102; Every Year, Spring

BIO 358L Human Ecology Lab (0 cr.) Lab to accompany BIO 358. (4 lab hrs.) Every Year, Spring

BIO 383 Evolution ( 4 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: BIO 101, BIO 102, BIO 282; Every Year, Spring

BIO 383L Evolution Lab (0 cr.) Lab to accompany BIO 383.(2 lab hrs.) Every Year, Spring

## BIO 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: BI 211, BI 212; Every Year, Spring

BIO 413 Veterinary Technology I (4 cr.) This course includes lectures, demonstrations and laboratory exercises in general anesthetic technique, standard surgical procedures, radiologic principles and proper operating room conduct. Emphasis is on aspects of surgical technology of greatest value to the veterinary surgeon or research investigator, including equipment and supply nomenclature, patient monitoring, aseptic technique and therapeutics. Care of the patient prior to and following surgery is also considered. Prerequisite: BIO 313; Every Year, Fall

BIO 413L Veterinary Technology I Lab (0 cr.) Lab to accompany BIO 413. (3 lab hrs.) Every Year, Fall

## BIO 414 Clinical Practice in Veterinary Technology

 ( 4 cr ) Students gain practical in-house clinical experience in animal health technology and laboratory animal science. This is an opportunity to develop and perfect skills introduced during the preclinical animal technology courses while under the direct supervision of licensed veterinarians representing a wide variety of clinical interest and practice styles. Limited to veterinary technology majors. Concurrent registration in BIO 413-415 required. This course is graded Pass/Fail effective fall 2009. Every Year, FallBIO 415 Veterinary Technology II (4 cr.) This course includes lectures concerning a variety of clinical topics of importance to the veterinary technologist. Students gain knowledge of pharmacology, fluid therapy, toxicology,
clinical nutrition, wound management, animal reproduction and breed identification. Prerequisite: BIO 413; Every Year, Spring

BIO 416 Clinical Practice in Veterinary Technology (4 cr.) Students gain practical in-house clinical experience in animal health technology and laboratory animal science. This is an opportunity to develop and perfect skills introduced during the preclinical animal technology courses while under the direct supervision of licensed veterinarians representing a wide variety of clinical interest and practice styles. Limited to veterinary technology majors. Concurrent registration in BIO 413-415 required. This course is graded Pass/Fail effective fall 2009. Prerequisite: BIO 414; Every Year, Spring

BIO 417 Small Animal Diseases (3 cr.) This course is a survey of the diseases of small animal domestic species. Students discuss the basic pathologic principles necessary for the identification and understanding of the diseased state, as well as the etiology, pathogenesis, treatment and prevention of common infectious and noninfectious diseases. Prerequisite: BIO 315; Every Year, Fall

BIO 471 Molecular Genetics ( 4 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. Prerequisite: BMS 370; Every Year, Spring

BIO 471L Molecular Genetics Lab (0 cr.) Lab to accompany BIO 471. (4 lab hrs.) Every Year, Spring

Courses offered as needed
BIO 219 Ornithology (4 cr.) Prerequisites: BIO 101, BIO 102
BIO 351 (UC) Natural History of New England (4 cr.)
Prerequisites: BIO 101, BIO 102
BIO 351L Natural History of New England Lab (0 cr.)
BIO 382 Human Genetics ( 4 cr .) Prerequisites: BIO 101, BIO 102
BIO 382L Human Genetics Lab (0 cr.)
BIO 399H Honors Research in Biological Sciences (3 cr.) Prerequisites: BIO 101, BIO 102, BIO 227, BIO 228, BIO 298
BIO 488 Independent Study in Biology (1 cr.)
BIO 489 Independent Study in Biology (1 cr.)
BIO 498 Independent Study in Biology ( 1 cr.)
BIO 499 Independent Study in Biology (1 cr.)

## Biomedical Sciences (BMS)

BMS 104 Orientation to Physician Assistant Seminar I (1 cr.) Students gain a basic knowledge of the fundamentals of the physician assistant profession. The physician assistant role expectations, practice and ethics in the health care field are examined. In addition, historical information on the profession is presented. Students must have active AAPA membership. Every Year, Spring

BMS 110 (UC) The World of Microbes ( 4 cr.) Students are introduced to the relevance of microorganisms in everyday life. Topics include: microorganisms in the environment, infectious diseases, biotechnology, foods and beverages, antibiotics and host defense mechanisms. Laboratory work stresses standard procedures used in microbiology. Every Year, Fall and Spring

BMS 110L (UC) World of Microbes Lab (0 cr.) Lab to accompany BMS 110. (2 lab hrs.) Every Year, Fall and Spring

BMS 114 (UC) Microbes in Action (4 cr.) This course is designed to emphasize the applied aspects and disease potential of microorganisms. Of particular interest is the role microorganisms play in the environment. Every Year, Spring

BMS 114L (UC) Microbes in Action Lab (0 cr.) Lab to accompany BMS 114. (2 lab hrs.) Every Year, Spring

BMS 117 (UC) Human Organism (4 cr.) Concepts in human biology designed primarily (although not exclusively) for students in non-science programs are covered in this course. Emphasis is on the human organism from a developmental and a biological perspective. Consideration and discussion of societal issues relative to human biology is an integral aspect of this course. Laboratory applications include exercises in the study of basic human biology. Every Year, Fall and Spring

BMS 117L (UC) Human Biology Lab (0 cr.) Lab to accompany BMS 117. (2 lab hrs.) Every Year, Fall and Spring

BMS 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: two courses from BIO 101, BIO 102, BMS 117, BMS 118; 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, SpringBMS 213 Microbiology and Pathology (4 cr.) This introductory overview of microorganisms presents a detailed study of the interactions of pathogenic microbes and humans particularly as they apply to the hospital environment. This course is designed primarily for the health practitioner. Prerequisites: BIO 101, BIO 102; Every Year, Fall and Spring

BMS 213L Microbiology and Pathology Lab (0 cr.) Lab to accompany BMS 213. (4 lab hrs.) Every Year, Fall and Spring

BMS 276 Drug Development ( 3 cr .) Students study the processes required to develop new drugs and the regulations 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: BIO 101, BIO 102, BMS 117, BMS 162; Every Year, Spring

## BMS 300 The Physiology of Human Performance

( 4 cr .) This course presents a detailed examination of muscle and nerve physiology, and central nervous system control of posture and locomotion. Cardiorespiratory and thermoregulatory responses to exercise are considered. Anatomical and physiological factors limiting various types of physical performance are discussed. Full-year course; must be taken in sequence. Prerequisites: BIO 211, BIO 212; CHE 102 or CHE 111; PHY 101 or PHY 110; Every Year, Fall

BMS 300L Physiology of Human Performance Lab (0 cr.) Lab to accompany BMS 300 (3 lab hrs.) Every Year, Fall

## BMS 301 The Physiology of Human Performance

( 4 cr .) This course presents a detailed examination of muscle and nerve physiology, and central nervous system control of posture and locomotion. Cardiorespiratory and thermoregulatory responses to exercise are considered. Anatomical and physiological factors limiting various types of physical performance are discussed. Full-year course; must be taken in sequence. Prerequisite: BMS 300; Every Year, Spring

## BMS 301L Physiology of Human Performance Lab

 (0 cr.) Lab to accompany BMS 301. (3 lab hrs.) Every Year, SpringBMS 304 Biological Chemistry ( $\mathbf{3}$ cr.) This course 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: BIO 101, BIO 102, BIO 211, BIO 212, CHE 110, CHE 111, CHE 210, CHE 211; Every Year, Spring

BMS 310 Neuroanatomy I ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ o f f e r s ~ t h e ~}$ 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 (UC) 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: 1 group: BIO 211, BIO 212; BIO 227, BIO 228; Every Year, Fall and Spring

BMS 320 Pharmacology ( $\mathbf{3}$ cr.) 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: 1 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 ( $\mathbf{3}$ 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. Prerequisites: BIO 101, BIO 102; Every Year, Fall

BMS 332 Histology ( 4 cr ) This study of the microscopic and ultramicroscopic structure of cells, tissues and organs emphasizes their functional mechanisms. Students learn how to prepare normal tissues and organs for histological and histochemical study and how to examine prepared slides. Prerequisites: three courses from BIO 211, BIO 212, CHE 201, CHE 205, CHE 210, CHE 211; Every Year, Fall and Spring

BMS 332L Histology Lab (0 cr.) Lab to accompany BMS 332. (3 lab hrs.) Every Year, Fall and Spring

BMS 370 General Microbiology ( 4 cr .) This study of the biology of bacteria and other microorganisms emphasizes techniques of isolation, observation, cultivation and identification. The role played by microorganisms in nature and in industry is also considered. Prerequisites: BIO 101, BIO 102; CHE 110, CHE 111; Every Year, Fall and Spring

BMS 370L General Microbiology Lab (0 cr.) Lab to accompany BMS 370. (4 lab hrs.) Every Year, Fall and Spring

BMS 372 Pathogenic Microbiology (4 cr.) This study of the cultural, biochemical, serological and pathogenic characteristics of disease-producing microorganisms emphasizes identifying disease microorganisms and differentiating them from closely related species that represent human's indigenous flora. Prerequisite: BMS 370; Every Year, Spring

BMS 372L Pathogenic Micro Lab (0 cr.) Lab to accompany BMS 372. (4 lab hrs.) Every Year, Spring

BMS 373 Mycology ( 4 cr .) The morphology, taxonomy and phylogeny of fungi are studied in this course. Laboratory exercises include the cultural and biochemical reac-
tion of selected human pathogens. Prerequisite: BMS 370; Every Other Year, Fall

BMS 373L Mycology Lab ( 0 cr.) Lab to accompany BMS 373. (4 lab hrs.) Every Other Year, Fall

BMS 375 Immunology (4 cr.) This course entails a study of the basic principles and regulatory mechanisms of the immune response in mammals, in particular, the human immune response. Innate defenses along with cellular and humoral immune defense mechanisms are studied in detail. Abnormal immune system function is explored via study of: immune deficiency states, hypersensitivity and autoimmune disease. Vaccines, tissue transplantation and the immunology of cancer also are discussed. (BMS 370 co-requisite with permission) Prerequisite: BMS 370; Every Year, Spring

BMS 375L Immunology Lab ( 0 cr.) Lab to accompany BMS 375. (2 lab hrs.) Every Year, Spring

BMS 388 Clinical Training I ( $\mathbf{3} \mathbf{~ r}$.) This course is for non-ELMPA majors. It provides classroom and clinical experience for students interested in obtaining emergency medical technician basic training. Emphasis in study is placed on patient assessment, clinical signs and symptoms, pathophysiology and the pre-hospital care of patients. Clinical rotations on an ambulance service are required. Successful completion of the BMS 388BMS 389 sequence and the fulfillment of state mandated hours of instruction are required to be eligible for certification. Every Year, Fall

BMS 388L Clinical Training I Lab (0 cr.) Lab to accompany BMS 388. (3 lab hrs.) Every Year, Fall

BMS 389 Clinical Training II ( 3 cr .) This course is a continuation of BMS 388. Every Year, Spring

BMS 389L Clinical Training II Lab (0 cr.) Lab to accompany BMS 389. (3 lab hrs.) Every Year, Spring

BMS 470 Virology ( 4 cr ) This course covers methods for the growth and identification of viral agents, preparation and inoculation of tissue culture, animals, embryonated eggs, plaque formation, and immunological techniques. Prerequisite: BMS 370; Every Other Year, Spring

BMS 470L Virology Lab ( 0 cr.) Lab to accompany BMS 470. (4 lab hrs.) Every Other Year, Spring

BMS 472 Biotechnology ( $\mathbf{4}$ cr.) 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

BMS 473 Infections of Leisure ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ l o o k s ~}$ 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 Other 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. Diseases, especially infectious diseases, have significantly shaped the course of our history. 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 476 Environmental Microbiology ( 4 cr.) This course is designed to examine the role of unique and exciting microorganisms found in the natural environment, especially those from extreme environments such as deep sea vents, hot springs, high salt or acidophilic environments, which are also of considerable industrial interest. This hands-on course examines air, soil and water microorganisms with respect to their isolation, unique physiology, ecological relationships, significance, and government/health regulations. The course is designed for biology, health science and microbiology/biotechnology majors. Prerequisite: BMS 370; Every Other Year, Spring

BMS 476L Environmental Microbiology Lab (0 cr.) Lab to accompany BMS 476. (4 lab hrs.) Every Other Year, Spring

BMS 479 Microbiology Research (2 cr.) Independent projects in selected areas of microbiology and biotech-
nology are completed under the direction of a faculty member. Every Year, Spring

BMS 481 Research Methods in Biomedical Sciences I
(1 cr.) Students learn the basic principles of research methodology in biomedical sciences. Every Year, Spring

Courses offered as needed<br>BMS 475 Special Topics in Microbiology (4 cr.) Prerequisite: BMS 370<br>BMS 478 Microbiology Seminar (1 cr.)<br>BMS 482 Independent Study in Biomedical Science (1 cr.)<br>BMS 498 Independent Study in Biology (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 simulator. Topics include accounting, marketing, management and finance. Every Year, Fall

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 211 Business Communications ( $\mathbf{1} \mathrm{cr}$.) 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. Prerequisite: SB 101; Every Year, Fall and Spring

SB 212 Ethics and Diversity ( $\mathbf{1}$ 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. Prerequisite: SB 101; 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 102, FIN 201, IB 201, MK 201, MG 210, MG 211, MA 118; Every Year, Fall and Spring

Courses offered as needed
SB 185 Personal Finance (3 cr.)
SB 488 Independent Study: Business (1 cr.)

## Career Practicum (CAR)

CAR 295 Career Practicum (1 cr.) Practical training for an occupation requiring a Bachelor's degree. Course involves supervised work (paid or unpaid) in an employment setting and career development research and reflection. This course may be taken once, and the final grade is pass/fail.

## 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, buffers). A math placement score of 3 or higher is required to enroll in CHE 101. Students with scores below a 3 must complete recommended math courses to improve proficiency in algebraic skills before enrolling in CHE 101. Students placing in MA 100 or MA 107 are not eligible to register for CHE 101. Must be taken in conjunction with CHE 101L. This course is designed for health science majors. Every Year, Fall and Summer

CHE 101L (UC) Fundamentals of General, Organic and Biological Chemistry I Lab (1 cr.) Lab must be taken with CHE 101. (3 lab hrs.) Every Year, Fall and Summer

CHE 102 (UC) Fundamentals of General, Organic and Biological Chemistry II ( $\mathbf{3}$ 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; Every Year, Spring and Summer

CHE 102L (UC) Fundamentals of General, Organic and Biological Chemistry II Lab ( 1 cr .) Lab must be taken with CHE 102. (3 lab hrs.) Prerequisites: CHE 101, CHE 101L; Every Year, Spring and Summer

CHE 110 (UC) General Chemistry I (3 cr.) Students are introduced to 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 and chemical bonding. A math placement score of 3 or higher is required to enroll in CHE 110. (Students with scores below 3 must complete recommended math courses to improve proficiency in algebraic skills before enrolling in CHE 110. Students placing in MA 100 or MA 107 are not eligible to register for CHE 110.) Must be taken in conjunction with CHE 110L. (Note: This course is designed for science majors.) Every Year, Fall and Summer

CHE 110L (UC) General Chemistry I Lab (1 cr.) Lab must be taken with CHE 110 or CHE 110H. (3 lab hrs.) Every Year, All

CHE 111 (UC) General Chemistry II (3 cr.) Students are introduced to 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; 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; Every Year, Spring and Summer

CHE 201L Fundamentals of Organic Chemistry Lab (1 cr.) Lab must be taken with CHE 201. (3 lab hrs.) Every Year, Fall

CHE 205L Fundamentals of Physiological Chemistry Lab (1 cr.) Lab must be taken with CHE 205. (3 lab hrs.) Every Year, Spring

CHE 210 Organic Chemistry I ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ p r e s - ~}$ ents 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. Specific groups covered are alkanes, alkyl halides, alkenes and alkynes. Must be taken in conjunction with CHE 210L. Prerequisites: CHE 111, CHE 111L; 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, Fall and Summer

CHE 211 Organic Chemistry II (3 cr.) This continuation of CHE 210 covers specific groups such as aromatic compounds, dienes, alcohols, ethers and epoxides, aldehydes, ketones, carboxylic acids and their derivatives, amines, phenols and heterocyclic compounds, along with their analysis by infrared and nuclear magnetic resonance spectroscopy. Must be taken in conjunction with CHE 211L. Prerequisites: CHE 210, CHE 210L; 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 ( $\mathbf{3}$ 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 only, and chemistry minors. Prerequisites: CHE 111, CHE 111L; Every Year, Fall

CHE 215L Analytical Chemistry Lab (1 cr.) Lab must be taken with CHE 215. (3 lab hrs.) Every Year, Fall

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 mechanism also are investigated. Prerequisites: CHE 211, CHE 215, MA 142, PHY 111, PHY 111L; 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; 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, Spring

CHE 305 Instrumental Analysis (3 cr.) This course covers the following instrumental analysis techniques: FTIR, NMR, UV-VIS, GC-MS, as well as chromatography and electronics. Other current techniques are studied as well.

Must be taken in conjunction with CHE 305L. Prerequisites: CHE 211, CHE 211L, CHE 215, CHE 215L; 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 General Biochemistry ( $\mathbf{3}$ cr.) This comprehensive study of biologically active compounds and their metabolism, biosynthesis and relationship to biological systems includes a detailed presentation of bioenergetics, enzyme kinetics and buffer systems. Must be taken in conjunction with CHE 315L. Prerequisites: CHE 211, CHE 211L; Every Year, Fall and Spring

CHE 315L General Biochemistry Lab (1 cr.) Lab must be taken with CHE 315. (3 lab hrs.) Every Year, Fall and Spring

CHE 410 Inorganic Chemistry ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ g e n e r a l ~}$ review of the electronic structure of atoms covers 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; Every Other Year, Fall and Spring

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 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 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 begun in CHE 490. A minimum of 100 lab hours is required. Enrollment restricted to senior chemistry and biochemistry majors. Prerequisites: CHE 475, CHE 490; Every Year, Spring

Courses offered as needed
CHE 399 Independent Study in Chemistry I (3 cr.) CHE 499 Independent Study in Chemistry II (3 cr.)

## Chinese (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

Courses offered as needed
CN 299 Independent Study (3 cr.)
CN 399 Independent Study ( 3 cr.)

## Computer Science (CSC)

CSC 101 Introduction to Internet Studies (3 cr.) This course covers the history of the Internet, software and hardware connected with the Internet, the Internet and commerce, and education and social issues. The future of the Internet also is explored. Browsers, search engines, and email software packages are examined. The HTML markup language is introduced. Every Year, All

CSC 105 Introduction to Computer Science (3 cr.) This course is an introduction to the field of computer science. Students learn about the history of computers and computing and explore the many disciplines that comprise this dynamic field such as operating systems, graphics and artificial intelligence. The algorithmic thinking necessary in the creation of computer programs is covered as students create 3D movies by providing instructions to characters in an animation. Every Year, All

## 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 object-oriented programming. A lab is included. Every Year, All

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; Every Year, Spring

CSC 205 Introduction to Discrete Mathematics (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. Prerequisites: CSC 110, MA 110; MA 118, MA 140 or MA 141; 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; 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; Every Year, Fall

CSC 225 Introduction to Software Development (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; 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; Every 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. They also discuss various possible attacks on these communications. Students learn about classical privatekey 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; Every Other Year, Spring
CSC 320 Compilers ( $\mathbf{3}$ cr.) This course presents a study of the design and implementation of compilers. Topics include translators and compilers, lexical analysis, syntax analysis and parsing, runtime environments, and code generation. Prerequisites: CSC 210, CSC 215, CSC 225; Every Other Year, Fall

CSC 345 Computer Graphics ( 3 cr .) This course is an introduction to theory and programming in computer graphics. Topics include graphic systems, fundamental techniques in graphics, basic rendering, basic geometric modeling, visualization, virtual reality, computer animation, advanced rendering, and advanced geometric modeling. Prerequisites: CSC 215, CSC 225; Every Other Year, Spring

CSC 350 Intelligent Systems ( 3 cr.) Artificial Intelligence is an umbrella topic covering efforts in a variety of fields all searching for one goal: to get computers to perform well at tasks at which humans excel. Topics include fundamental issues in intelligent systems, search and optimization methods, knowledge representation and reasoning, learning, agents, computer vision, natural language processing, pattern recognition, advanced machine learning, robotics, knowledge-based systems, neural networks and genetic algorithms. Prerequisites: CSC 215, CSC 225; Every Other Year, Spring

CSC 355 Programming Language Concepts ( 3 cr.) This course represents an introduction to different paradigms of programming languages and their role in the problemsolving process. Topics covered include history and overview of programming languages, introduction to language translation, language translation systems, models of execution control, declaration, modularity, and storage management, programming language semantics, functional programming paradigms, object-oriented programming paradigms, logic programming paradigms, languagebased constructs for parallelism. Prerequisites: CSC 215, CSC 225; Every Other Year, Fall

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; Every Year, Spring

CSC 491 Senior Project 1 ( $\mathbf{1} \mathbf{c r}$.) This is the first of a twocourse 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; Every Year, Spring

## Courses offered as needed <br> CSC 220 Introduction to the Dynamic Web (3 cr.)

Prerequisite: CSC 101 or IDD 161
CSC 305 Dynamic Web Design ( 3 cr.) Prerequisite: CSC 220
CSC 325 Database Systems ( 3 cr .) Prerequisites: CSC 215, CSC 225
CSC 340 Networking and Distributed Processing (3 cr.) Prerequisites: CSC 210, CSC 215, CSC 225
CSC 399 Independent Study (1 cr.)

## Criminal Justice (CJ)

CJ 200 Special Topics ( 3 cr .) A variety of special topics courses are offered Every Year. Every Year, All

CJ 205 Orientation to Sociology and Criminal Justice and Gerontology (SO/GT 205) ( 1 cr.) This course introduces sociology, social services, 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 professions within criminal justice, sociology, social services and gerontology through interaction with departmental faculty, former students and practitioners in the field. For criminal justice majors only. This course is graded on a pass/fail basis. 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 283; Every Year, FallCJ 240 Organized Crime ( $\mathbf{3}$ 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 283; Every Other Year

CJ 241 Police and Policing ( $\mathbf{3}$ 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. Prerequisites: SO 101 or LE 115; SO 283 or CJ 283; Every Year, All

CJ 242 Race Crime and Justice (SO 242) (3 cr.) In this course, students explore the intersections of race, crime and law in terms of the historical context, present-day situations and future directions. They examine the concepts of race, crime and law from the viewpoints of the offender, the victim and the criminal justice practitioner within the various aspects of the criminal justice process-from law enforcement to courts to corrections. The course also focuses on the interrelationship between theory, policy and practice. Prerequisite: SO 101; Every Year, Fall

CJ 243 Investigative Techniques ( $\mathbf{3} \mathbf{~ c r}$.) 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 283 or CJ 283; Every Year, Spring

CJ 250 Youth Crime and Adolescent Gangs (SO 250) ( $\mathbf{3} \mathrm{cr}$.) Although young people are processed through a different system of criminal justice than adults, theories of criminal behavior address motivations for both juvenile and adult crime. Of interest is the ongoing tendency to treat serious crimes committed by young people as if they were committed by adults. This course examines the consequences for problematic behavior in the criminal justice system, including incarceration and alternative programming for juveniles. Prerequisite: SO 101 or CJ 283; Every Year, Spring

## CJ 251 Probation Parole and Community Corrections

 (3 cr.) Offenders are sentenced to one of these alternatives to incarceration in order to change or control behavior. Methods of supervision, special goals such as shock pro-bation or parole, electronic and other high-tech monitoring, controversies over effectiveness and punitive aspects of these technologies are considered. Prerequisite: SO 283 or CJ 283; Every Year, Fall

CJ 261 Prisons and Jails (3 cr.) This course covers the history and evolving ideology of confinement. Topics included are prison architecture, management and security levels, the development of the modern super prison, prison labor, chain gangs, crowding, women's and men's prisons, life in prison, prison culture and inmate social structure, prison riots, violence in prison, geriatric and mentally ill inmates, inmates who are ill, particularly those with AIDS. Prerequisite: SO 283 or CJ 283; Every Other Year

CJ 271 Public Order Crimes (3 cr.) Approximately twothirds 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 283; Every Year

CJ 283 Crime and Society (SO 283) ( $\mathbf{3}$ 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. Prerequisite: SO 101; Every Year, All

CJ 330 Perspectives on Violence (SO 330) ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~}$ 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 theoretical explanations. Prerequisites: two courses from SO, CJ; Every Other Year, Fall

CJ 335 Criminal Justice System (SO 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. Prerequisite: SO 283 or CJ 283; Every Year, All

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.
Every Year, Fall
CJ 353 Sexual Violence ( 3 cr.) This course takes a historical perspective on the societal and psychological aspects 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 sexual violence and those who are the victims of it. The course encourages students to deepen their understanding of the social structural and individual treatment modalities that are employed within the system to decrease sexual violence. Prerequisite: CJ 283 or SO 283; Every Other Year, Spring

CJ 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 crimerelated 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 CJ, SO; Every Other Year, Fall

## CJ 370 Constitutional and Ethical Issues in 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 283 or CJ 283; Every Year, AllCJ 381 Criminal Justice Methods ( $\mathbf{3}$ 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, and how these apply to program evaluation. For criminal justice majors in their junior or senior year. Every Other Year, Fall and Spring

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. Prerequisite: CJ 381; Every Year, All

CJ 392 Internship ( $\mathbf{3}$ cr.) The major requires two semesters of internship in a criminal justice setting such as a police department, a prison or jail, a probation or parole office or a court. Major only. Every Year, All

CJ 394 Internship ( 3 cr.) The major requires two semesters of internship in a criminal justice setting such as a police department, criminal court, a prison or jail, a pro-
bation or parole office or a court. For majors only. Every Year, All

Courses offered as needed
CJ 299 Independent Study in Criminal Justice (1 cr.)
CJ 300 Special Topics ( $\mathbf{3}$ cr.)
CJ 368 Violent Offenders: Assessment and Treatment
( 3 cr.) Prerequisite: SO 283 or CJ 283
CJ 399 Independent Study in Criminal Justice ( 3 cr.)

## Diagnostic Imaging (RS)

## 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. Every Year, Spring

RS 210 Radiographic Procedures I (2 cr.) This course introduces the student to the basic concepts, principles and applications of radiographic and radiologic procedures of the chest, abdomen, upper extremities and shoulder girdle. Additional applications related to orthopaedic terminology, pathologies and procedures, trauma and patient-related modifications also are presented. Prerequisite: RS 101, BIO 101, BIO 102 or MA 110; Every Year, Fall

RS 211 Laboratory Practicum I (1 cr.) This practicum develops preclinical competency in radiographic procedures studied in RS 210, as well as routine hospital procedures and radiographic tasks, basic radiographic analysis, patient management, communications and manipulation of imaging equipment. 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. Every Year, Spring

RS 220 Radiographic Procedures II (2 cr.) This course builds on the previous foundations developed in RS 210. Radiographic, radiologic and orthopaedic procedures related to the lower extremities, pelvic girdle and spine are presented. Trauma, pathologies and patient-related modifications also are included and expanded. Prerequisites: RS 210, RS 211; Every Year, Spring

RS 221 Laboratory Practicum II (1 cr.) Designed to develop preclinical competency in radiographic procedures studied in RS 220, this practicum focuses on radiographic tasks, basic radiographic analysis, patient management, communications and manipulation of imaging equipment. Every Year, Spring

RS 230 Radiographic Procedures III (2 cr.) This course provides continued integration and expansion on the concepts, principles and applications developed in RS 210 and RS 220. Radiographic and radiologic procedures related to the spine and contrast media procedures related to the gastrointestinal, urinary and biliary systems are presented, along with common pathological processes. The course also introduces students to basic concepts of computed tomography (CT). Prerequisites: RS 220, RS 221; Every Year, Fall

RS 231 Laboratory Practicum III (1 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. Every Year, Fall

RS 240 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. Every Year, Fall

## RS 240L Radiographic Image Production and Evalua-

 tion Lab I ( 0 cr .) The laboratory is designed to demonstrate and reinforce the concepts and principles presented in RS 240. (2 lab hrs.) Every Year, FallRS 245 Radiographic Image Production and Evaluation II ( 3 cr .) This course expands on the foundations developed in RS 240. 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. Prerequisite: RS 240; Every Year, Spring

RS 245L Radiological Processing and Exposure Lab (0 cr.) Lab to accompany RS 245. (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 210 and RS 211 are developed and assessed. Prerequisites: RS 101, BIO 101, BIO 102; Every Year, Fall

RS 251 Radiologic Clinical Education II (2 cr.) This course is a continuation of RS 250. Prerequisite: RS 250; Every Year, Spring

RS 252 Radiologic Clinical Education III (2 cr.) This course is a continuation of RS 251. Prerequisite: RS 251; Every Year, Summer

## 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. Prerequisite: RS 101; Every Year, FallRS 290 Advanced Radiographic Procedures IV ( 2 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 and image intensification systems. Prerequisites: RS 230, RS 231; Every Year, Spring

RS 290L Laboratory Practicum (1 cr.) This practicum develops preclinical competency in radiographic procedures studied in RS 290. (2 lab hrs.) Every Year, Spring

RS 298 Methods of Patient Care ( $\mathbf{3} \mathbf{~ c r}$.) 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 non-invasive imaging studies; basic clinical skills in infection control, including aseptic technique, vital signs and O 2 administration; effective communication with emphasis on prob-lem-solving skills. (2 lab hrs.) Every Year, Fall

RS 298L Methods of Patient Care Lab (0 cr.) This lab develops preclinical competency for the procedures described and demonstrated in RS 298. Prerequisite: RS 101; Every Year, Fall

RS 300 Introduction to Diagnostic Medical Sonography ( 3 cr .) This introductory course to the field of diagnostic medical sonography discusses the role of diagnostic medical sonography in the field of radiology and the role of the sonographer. Professional ethics and legal issues pertinent to sonography are covered. Ultrasound terminology and ultrasound tissue characterization are presented. Cross-sectional anatomy of the upper abdomen in the sagittal, transverse and coronal planes utilizes schematic images and ultrasound correlation. Patient positioning, labeling of images, image orientation and scanning protocol of the upper abdomen are covered. Basic scanning techniques are introduced. Every Year, Fall

RS 318 Pathology for Imaging Sciences ( $\mathbf{3} \mathbf{c r}$.) 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. Every Year, Spring

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 real-time techniques. Prerequisite: RS 300; Every Year, Summer

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 330 Diagnostic Assessment (3 cr.) This course provides advanced skills in patient care, venipuncture and analysis of ECG and clinical lab values. Techniques utilized for patient preparation for invasive studies, H and P , and IV drug administration and pharmacology are presented. Every Year, Fall

RS 330L Diagnostic Assessment Lab (0 cr.) Lab to accompany RS 330. (2.5 lab hrs.) Prerequisite: RS 298; Every Year, Fall

RS 331 Electrocardiography for the Radiographer (1 cr.) The basic principles and concepts of electrocardiography are presented and demonstrated. In addition, students develop preclinical competency on the equipment and basic interpretation skills. Every Year, Fall

RS 332 Phlebotomy and Vital Signs for the Radiographer ( $\mathbf{1} \mathbf{c r}$.) The basic principles and concepts regarding venipuncture and the physiologic factors that influence blood pressure, pulse, temperature and respiration are presented. In addition, students develop preclinical competency for these procedures. Every Year, Fall

RS 333 Pharmacology for the Radiographer (1 cr.) The major classifications/categories, clinical applications and implications of pharmaceuticals used in diagnostic imaging and interventional procedures are presented. Every Year, Fall

RS 338 Introduction to CT Scanning ( $\mathbf{3} \mathbf{~ c r}$.) 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. Every Year, Fall

RS 340 Principles of Mammography ( $\mathbf{3} \mathbf{c r}$ ) 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. Every Year, Fall

RS 350 Radiologic Clinical Education IV (2 cr.) This is a continuation of RS 252. Prerequisite: RS 252; Every Year, Fall

RS 351 Radiologic Clinical Education (2 cr.) This is a continuation of RS 350. Prerequisite: RS 350; Every Year, Spring

## RS 415 Introduction to Magnetic Resonance Imaging

 ( $\mathbf{3} \mathbf{c r}$ ) 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: RS 322; Every Year, Fall
## 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 450 Forensic Imaging I (1 cr.) Students are introduced to forensic radiography and photography. 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, photography and autopsy and/or necropsy of specimens. (1 lab hr.) Every Year, Fall

RS 452 Forensic Imaging II ( $1 \mathbf{c r}$ ) 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 ( $\mathbf{3}$ cr.) This 3-credit 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; Every Year, SpringRS 470 Ultrasound of the Abdomen ( $\mathbf{3} \mathbf{~ r . )}$ ) This course is designed to prepare the student toward eligibility for the abdomen ( AB ) portion of the ARDMS Registry. The course encompasses all aspects of abdominal scanning including: anatomy and vasculature, normal variants and congenital abnormalities, pathology, organ function and laboratory tests, and scanning methods and practical tips. Prerequisites: RS 300, RS 320; Every Year, Spring

RS 470L Abdominal Sonography Lab (0 cr.) Lab to accompany RS 470. (3 lab hrs.) Every Year, Summer

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, organ function and laboratory tests, and scanning methods and practical tips. Prerequisite: RS 470; Every Year, Fall

RS 471L Gynecological and Peripheral Sonography Lab ( $\mathbf{0}$ cr.) Lab to accompany RS 471. (3 lab hrs.) Every Year, Fall

RS 472 Obstetrics Sonography ( $\mathbf{3}$ cr.) This course is a continuation of the objectives and applications of RS 471 with emphasis on the obstetrical (OB) 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 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 320; Every Year, Summer

RS 481 Medical Sonography Clinic II (2 cr.) This course is a continuation of RS 480. Prerequisite: RS 470; Every Year, Fall

RS 482 Medical Sonography Clinic III (2 cr.) This course is a continuation of RS 480 and RS 481. Prerequisite: RS 471, RS 480; Every Year, Spring

RS 497 Directed Studies in Diagnostic Imaging (1 cr.) This distance learning course emphasizes individualized studies of various topics related to the field of diagnostic imaging with introductions to research methodologies and development of basic professional level communication and writing skills. The results of these developed topics are presented by the student throughout the course. Every Year, Summer

RS 498 Imaging Seminar ( $\mathbf{1}$ 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, Spring

Courses offered as needed
RS 299 Independent Study (3 cr.)
RS 352 Radiologic Clinical Education (2 cr.) Prerequisite: RS 351
RS 399 Independent Study ( 1 cr.)
RS 401 Quality Management in Diagnostic Imaging ( 3 cr.) Prerequisite: RS 245
RS 401L Quality Management in Diagnostic Imaging Lab (0 cr.)
RS 414 Research: Analysis and Critique ( 3 cr .) Prerequisite: RS 497
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) II (2 cr.)
RS 440 Artifact Imaging Practicum ( 1 cr.)
RS 465 Advanced Imaging II: Equipment and Instruments (3 cr.)

RS 473 Breast Sonography for Mammographers (1 cr.)
RS 491 Open Topic ( 1 cr .)
RS 492 Open Topic ( 2 cr .)
RS 493 Open Topic ( 3 cr .)
RS 499 Senior Thesis (3 cr.)

## 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 101H (UC) Honors 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 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, the nature and use of electricity, lighting and sound equipment, 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

DR 150 Performance Fundamentals ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~}$ 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 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. The class may work in collaboration with a mass communications video production class in taping short scenes on video. Every Year, All

DR 191 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, dra-
maturges and in various production roles. (Minimum 40 hours production work; process journal.) Every Year, All

DR 200 Special Topics ( $\mathbf{3} \mathbf{~ c r}$.) This course focuses on a specialized area of theater study. Past topics have included scenic and lighting design and special topics in theater history and dramatic literature. Course may be repeated for credit. Every Year

DR 210 Hands On: An Introduction to Puppetry (3 cr.) Students learn the art of puppetry by studying the theory and history of the form. They actively participate in the creation and manipulation of various forms of puppets. Prerequisite is waived if student has taken any 100- or 200-level studio art course. Prerequisite: DR 101; Every Year, Fall

DR 220 Voice and Movement ( $\mathbf{3}$ 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. Prerequisite: DR 101 or DR 160; Every Year

DR 230 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. Prerequisite: DR 101 or DR 160; Every Year

## DR 240 Introduction to Scenic and Lighting Design

 ( $\mathbf{3} \mathbf{~ c r . ) ~ S t u d e n t s ~ l e a r n ~ a b o u t ~ t h e ~ c r e a t i o n ~ o f ~ s c e n i c ~ a n d ~}$ lighting design for the live theater by completing projects in which they formulate a design concept for specific plays. The role of design in theatrical production is approached from a hands-on, as well as theoretical, perspective. Students learn basic skills of drafting, light hang and focus and the use of a computerized lighting board. The black box theater functions as a laboratory space for the practical aspects of the course. Prerequisite: DR 101; Every YearDR 260 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. Prerequisite: DR 101 or DR 160; Every Year

## 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. Prerequisite: DR 101; Every Year
## DR 275 (UC) World Theater History and Dramatic

 Literature II ( 3 cr.) Students trace the development of theater from the Renaissance through the late 19th 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. Prerequisite: DR 101; Every Year
## DR 286 (UC) Comparative Drama/ Play Analysis (3 cr.)

 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. Prerequisite: DR 101 or EN 102; Every YearDR 291 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). Every Year, All

## DR 305 Theater for Young Audiences (ED 362) (3 cr.)

This seminar course allows students to explore various aspects of creating theater for young audiences. Performance skills in improvisation and creative dramatics, adaptation of fairy tales, folklore and other children's literature for plays, and the integration of drama into classroom curriculum are emphasized. Students conduct enrichment workshops at participating area schools and/or perform for young audiences in staged readings, workshops and/or fully mounted productions. Communi-
ty outreach and service learning are emphasized. Prerequisite: DR 101; Every Year

DR 306 Modern Drama (EN 306) (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. Prerequisites: two courses from EN level 200; Every Other Year

DR 310 Laboratory in Theater and Community (3 cr.) Students investigate the potential for theater and performance to be catalysts for social change. The class explores how theater has been an effective site for cultural and political interventions. Moving from theory to practice in the staging of a socially-resonant piece of theater, students explore the ways in which theater may be used to articulate community conflict and to facilitate dialogue, and also examine the practical and ethical issues confronted by those who engage in theater for social change. Prerequisites: 1 group: DR 101; one course from HS, PO, DR or SO level 200; Every Other Year, Spring

DR 325 Theater Seminar (3 cr.) Students explore artistic, dramaturgical and production issues associated with the realization of a regional theater's season. Students read scripts produced during a particular semester by an area professional theater and attend technical/dress rehearsals and performances. Guest artists from the theater visit campus. Students also attend symposiums and other outreach programming offered by the theater. The seminar provides a forum for discussing the multifaceted process of selecting a regional theater season, formulating production concepts, conducting dramaturgical research, assembling artistic teams and realizing dramatic texts on stage. Prerequisite: DR 101; Every Other Year

DR 335 Musical Theater Performance ( 3 cr .) In this studio course, students gain expertise in the special skills and techniques necessary to perform in the musical theater style. Each student performs solo, duet and trio musical theater selections with CD accompaniment. (Music is provided; however, students may choose a different solo piece, provided they have the accompaniment track or access to a pianist.) As a culminating exercise, students select pieces drawn from the semester's performance exercises, and these pieces are performed with appropriate costumes, props and choreography in a public cabaret setting. Prerequisites: DR 160; one course from DR level 200; Every Year, Fall

DR 343 Shakespeare (EN 343) ( 3 cr.) This course presents a structural and thematic analysis of Shakespearian drama, with readings in contemporary drama and selected problems of scholarship, criticism and performance. Prerequisite: one course from EN level 200; Every Year, All

DR 345 Dance for the Musical Theater (3 cr.) Students learn musical theater dance styles and choreography through studio performance. As a culminating exercise, students select dance pieces to perform with appropriate costumes, props and choreography in a cabaret setting open to the public. Prerequisites: DR 160; one course from DR level 200; Every Year, Spring

DR 350 Playwriting ( $\mathbf{3} \mathbf{~ c r}$.) 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. Prerequisites: EN 101, DR 101; Every Other Year

DR 360 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 Internship in Theater Administration, Production, Performance, Education or Theater and Community ( $\mathbf{3}$ cr.) 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 375 History and Dramatic Literature of the Contemporary Theater ( 3 cr.) This advanced seminar class encompasses a socio-historical study of dramatic literature and theory from the beginnings of the modern era to the present with an emphasis on relevance to contemporary performance techniques. The course examines such movements as realism, naturalism, futurism, symbolism, expressionism, surrealism, constructivism and absurdism, studying the texts, artists and critics of the modernist and post-modernist movements in an attempt to locate contemporary theater within its social, historical and political contexts. Prerequisite: DR 101; Every Other Year

DR 380 Theater Administration (3 cr.) Students explore the economic and managerial aspects of American theater as they apply to the nonprofit professional theater. At the completion of the course, students are able to create a mission statement and marketing plan, and have a general understanding of budgeting reports, unions, laws and the roles of the government and the public in an arts organization. The Long Wharf Theatre in New Haven functions as a laboratory for student learning in this course, which is taught by a Long Wharf professional staff member. Prerequisite: DR 101; Every Year

DR 391 Theater Practice III ( 3 cr.) All basic theater components through the active production of a fulllength 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). Every Year, All

DR 410 Senior Project ( $\mathbf{3} \mathbf{c r}$.) 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 181 Improvisational Acting (3 cr.)
DR 199 Independent Study (1 cr.)
DR 290 Acting for Classical Stage ( 3 cr ) Prerequisite: DR 160
DR 299 Independent Study (1 cr.)
DR 300 Special Topics (3 cr.)
DR 320 Advanced Voice and Movement ( 3 cr .) Prerequisites: DR 101, DR 160, DR 220
DR 330 Advanced Directing ( 3 cr .) Prerequisite: DR 230, DR 101 or DR 160
DR 386 Modern Drama ( 3 cr.) Prerequisite: DR 101
DR 387 Contemporary Drama ( 3 cr .) Prerequisites: DR 101; EN 240, EN 250, EN 260, EN 270, EN 275, EN 280 or EN 281
DR 390 Acting and Directing for Video (3 cr.) Prerequisite: DR 160 or DR 260 DR 399 Independent Study (1 cr.)

## Economics (EC)

EC 111 (UC) 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. Prerequisite: MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141; Every Year, All

## 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. Prerequisite: MA 107, MA 110, MA 117, MA 118, MA 140 or MA 141EC 112 (UC) 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. Prerequisite: EC 111; Every Year, All

## 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. Prerequisite: EC 111; Every Year, AllEC 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. A knowledge of calculus is helpful. Prerequisite: EC 112; 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 of the course 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. Prerequisite: EC 112; 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 Year, Fall

EC271 Applied Statistical Methods (3 cr.) This course statistical methods and concepts used in decision making. Topics include descriptive statistics, sampling, estimation, hypothesis testing, correlation and linear regression. Prerequisite: MA 107, MA 117 or MA 118; Every Year, All

EC 304 Environmental Economics (3 cr.) This course examines economic efficiency both in market and nonmarket activities, how environmental problems are modeled from an economic perspective, principles of environmental policy design at the state and federal level and U.S. and international environmental policy. Prerequisite: EC 112; Every Other Year, Spring

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 ( $\mathbf{3}$ 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 ( $\mathbf{3} \mathbf{~ r}$.) 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 ( $\mathbf{3} \mathbf{c r}$.) 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. Prerequisites: EC 112, MA 118; Every Other Year, Spring

EC 452 Game Theory ( $\mathbf{3} \mathbf{~ c r}$ ) 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, sub-game 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 498 Special Topics in Economics (3 cr.)

## Education (ED)

ED 301 Elementary Field Study I (3 cr.) This course provides students with experience in an elementary school setting. Students explore the complexities of the work of teachers and develop skills in ethnographic field observation as a tool for reflection and research. Twenty hours of fieldwork over 10 weeks are required. Prerequisite: admission to the MAT program. Every Year, Fall

ED 302 Elementary Field Study II (3 cr.) This course provides students with experience in an elementary school setting. Students 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. Twenty hours of fieldwork over 10 weeks are required. Prerequisite:
ED 301; Every Year, Spring
ED 310 Field Study I ( 3 cr.) This course provides students with experience in a middle school or high school setting. Students explore the complexities of the work of teachers and develop skills in ethnographic field observation as a tool for reflection and research. Twenty hours of fieldwork over 10 weeks are required. Prerequisite: admission to the MAT program. Every Year, Fall

ED 311 Field Study II (3 cr.) This course provides students with experience in a middle school or high school setting. Students 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. Twenty hours of fieldwork are required. 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, FallED 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, Spring

ED 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.) This course provides students with experience in an elementary setting. Students 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. Twenty hours of fieldwork over 10 weeks are required. Prerequisite: ED 302; Every Year, Fall

ED 402 Elementary Field Study IV (3 cr.) This course provides students with experience in an elementary setting. Students 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. Twenty hours of fieldwork over 10 weeks are required. 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.) This course provides students with experience in a middle school or high school setting. Students evaluate the ethical choices teachers make and analyze the effects of these choices on students and the school community. Also, students engage in selfevaluation and assess their value-laden perspectives in light of the professional code of teacher responsibilities. Twenty hours of fieldwork over 10 weeks are required. Prerequisite: ED 311; Every Year, Fall

ED 413 Field Study IV ( $\mathbf{3} \mathbf{~ c r}$.) This course provides students with experience in a middle school or high school setting. Students 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. Twenty hours of fieldwork over 10 weeks are required. 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 is designed to provide knowledge of diagnosis, assessment and instruction strategies for the development of early literacy in Grades K-3. 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. National elementary curriculum benchmarks from learned societies are used to reflect upon the content and appro-priate learning opportunities in grades K-6 elementary classrooms. Students prepare units, lessons and assessment activities. Prerequisite: ED 302; Every Year, Fall

## ED 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 plan a nurturing learning environment 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

 ( $\mathbf{3} \mathbf{c r}$ ) This course introduces students to 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 401; Every Year, SpringED 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 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, and the particular needs of students for whom English is a second language. Prerequisite: ED 412; Every Year, Spring

## English (EN)

EN 098 English as a Second Language I ( $\mathbf{3} \mathbf{~ c r}$ ) This is a course for students whose primary language is not English. The course aims to increase the student's proficiency in reading and writing English. Students read and discuss short essays to improve reading comprehension and further their recognition of thought patterns in written English. The course emphasizes the logic and structure of the English language through short compositions and grammar exercises. It also introduces students to the organization and emphasis inherent in the English style of academic writing and includes an introduction to building vocabulary. English placement scores and consideration of the student's record determine placement in EN 098. Note: Students who pass EN 098 must take EN 099; neither course counts toward graduation requirements.

EN 099 English as a Second Language II (3 cr.) This course is a required continuation of EN 098. Academic
critical thinking skills developed in EN 098 are applied in an integrated program of writing and reading. Extensive practice in rhetorical strategies and techniques in the writing process is combined with a review of appropriate grammatical structure, syntax and verb tenses. Writing topics require students to use various rhetorical strategies, including compare and contrast, definition, process analysis, classification, and logical argument, in preparation for EN 101 Intensive. An increasing college-level vocabulary is studied. An exit examination may be required. Students who pass EN 099 proceed to EN 101 Intensive. Note: EN 099 does not count toward graduation.

EN 101 (UC) Elements of Composition I (3 cr.) Students develop techniques for effective writing by studying the writing process and the skills necessary for producing purposeful, unified and coherent short essays: rhetoric, effective diction, revising techniques, critical reading, critical thinking, awareness of audience, and introduction to research and documentation. Readings include expository prose and short fiction and provide a context for vocabulary and comprehension skills as well as for written response. Peer tutoring is available in the Learning Center. Students meet for three hours per week for instruction. Grade of C - or better required to pass EN 101. Students who do not attain a C- or better in EN 101 on their first attempt at the course receive a grade of Unsatisfactory and must retake it. Students who retake EN 101 and do not attain a C- or better receive an F. Every Year, All

## EN 101 (UC) Elements of Composition I Intensive

( 3 cr.) Students develop techniques for effective writing by studying the writing process and the skills necessary for producing purposeful, unified and coherent short essays: rhetoric, effective diction, revising techniques, critical reading, critical thinking, awareness of audience, and introduction to research and documentation. Readings include expository prose and short fiction and provide a context for vocabulary and comprehension skills as well as for written response. Peer tutoring is available in the Learning Center. Upon successful completion of EN 101 Intensive, students earn 3 credits, although they take five hours of instruction per week. Grade of C- or better required to pass EN 101 Intensive. Students who do not attain a C- or better in EN 101 on their first attempt at the course receive a grade of Unsatisfactory and must retake it. Students who retake EN 101 and do not attain a C - or better receive an F .

EN 102 (UC) Elements of Composition II (3 cr.) This course is a continuation of EN 101. The second semester reviews the student's grasp of short essay structure and of effective sentence structure, but emphasizes argument, persuasion and research writing. Essays are longer and more complex than in EN 101, and some attention is paid to writing across the curriculum. The readings, which
include expository essays, plus several longer works of fiction, drama, or a selection of poems, serve to unify the course content. Peer tutoring is available in the Learning Center. Every Year, All

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 common ground 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.) Prerequisites: EN 101, EN 102; Every Year, All

EN 200 Special Topics in Literature ( $\mathbf{3} \mathbf{c r}$.) Students are introduced to readings in literature dealing with a single theme or specific problem, e.g., mystery/detective fiction, masterpieces of Jewish literature, comedy, etc. The course may be repeated for credit when topic changes. Specific titles are announced from time to time. Prerequisites: EN 101, EN 102; Every Year, All

EN 201 Creative Writing ( $\mathbf{3}$ cr.) This advanced composition course blends seminar and workshop approaches to the reading, analysis, discussion and writing of imaginative literature. Students compose and revise original works of poetry, short stories or drama. (The choice of genre is at the discretion of the instructor.) This course counts toward both the English major and minor. Participants must submit a portfolio of both critical and creative works to the instructor before registration. Prerequisites: EN 101, EN 102; Every Year, Fall

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. Prerequisites: EN 101, EN 102; Every Year, Fall

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 102; Every Year, Spring

EN 208 (UC) Greek Tragedy ( 3 cr .) This comprehensive survey of Greek tragedy pays special attention to tragic
theory and to the evolution of classical drama from its birth in the cult of Dionysus to its culmination in fifthcentury B.C. Athens. The extant plays of Aeschylus and Sophocles and selected plays by Euripides are examined with special emphasis on form. Prerequisites: EN 101, EN 102; Every Year, Fall

EN 210 (UC) The Art of Poetry (3 cr.) Students undertake close reading and discussion of poetry not limited by historical period. Attention is paid to technique and repeated themes in an attempt to experience and understand poetry. Prerequisites: EN 101, EN 102; 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. Prerequisites:
EN 101, EN 102; Every Year, Fall
EN 213 (UC) The Nature Essay ( $\mathbf{3}$ 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. Prerequisites: EN 101, EN 102; Every Year, Fall

EN 214 (UC) The History Essay ( 3 cr.) This genre-based course in writing the historical essay is not a history course. It is a writing course that concentrates on the technique of the essay and introduces the principles of writing historical literature. Students explore history as a problem-solving tool, wherein the lessons from studying the past can be useful in understanding the present. The course examines newer (and more controversial) areas of cultural and social history. Prerequisites: EN 101, EN 102; Every Year, Spring

EN 215 (UC) The Travel Essay (3 cr.) This genre-based 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. Prerequisites: EN 101, EN 102; Every 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 102; Every Year, All

EN 235 (UC) Women's Literature (WS 235) (3 cr.) Students explore literature written by women, assessing their contributions to literary themes, forms and movements. The focus of the course is on notable American and English writers of the last two centuries, e.g., the Brontes, Dickinson, Browning, the New England regional writers, Chopin, Woolf, Mansfield, Lessing, Morrison, Walker, Atwood, Plath, Sexton and Rich. Prerequisites: EN 101, EN 102; Every Year, Fall

## EN 236 (UC) The Idea of the West in the American

Imagination ( $\mathbf{3} \mathbf{~ c r}$.) This course examines the influence of the frontier and the westward movement on American literature, revealed in such writers as Cooper, Whitman, Mark Twain, Eleanor Stewart, Willa Cather, Faulkner, A.B. Guthrie, Larry McMurtry, Louise Erdrich, Ed Abbey, Sam Shepard, Rick Bass and Linda Hogan. The nature of myth and reality and of the American attitude as affected by the opportunity to mold a fresh society is explored. Prerequisites: EN 101, EN 102; Every Other Year, Spring

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. Prerequisites: EN 101, EN 102; Every Year, Fall

EN 250 (UC) Survey of English Literature II (3 cr.) This course explores the development of English literature as reflected in the works of major authors from the Romantic to the modern age. Students gain an understanding and appreciation of this literature through the study of the cultural milieu, the literary work itself, and the life of the author. Prerequisites: EN 101, EN 102; Every Year, Spring

EN 260 (UC) Survey of American Literature I (3 cr.) This course covers the development of American literature as reflected in the works of major authors and works from Colonial times 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
include Bradstreet, Emerson, Thoreau, Whitman, Hawthorne, Melville and Davis. Prerequisite: EN 102; Every Year, Fall

EN 265 (UC) Survey of African-American Literature ( 3 cr ) This survey of African-American literature from Colonial times to the present concentrates on 20thcentury literature. Emphasis is placed upon close reading of selected texts in light of the changing socio-cultural conditions faced by African Americans. Prerequisites: EN 101, EN 102; Every Other Year, Spring

## EN 270 (UC) Survey of American Literature II (3 cr.)

This course covers 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. Prerequisites: EN 101, EN 102; Every Year, Spring

EN 275 (UC) Literature of the Modern South (3 cr.) The fiction, poetry and drama written by Southern authors from 1920 to the present are studied in this course. Some attention is given to earlier Southern writing, but everything is discussed within the historical, cultural and social context of the South. Major emphasis is on Faulkner, Warren, Williams, O'Connor, Porter, Welty and Dickey. Prerequisites: EN 101, EN 102; Every Year, Spring

## EN 280 (UC) The European Tradition in Literature I

( 3 cr .) 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 the generic traditions of literature. Prerequisites: EN 101, EN 102; Every Year, Fall

## EN 281 (UC) The European Tradition in Literature II

 ( 3 cr .) 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. Prerequisites: EN 101, EN 102; Every Year, SpringEN 283 (UC) The American Dream: Paradise or Failure
( 3 cr .) The American Dream is examined through literary
works. Differing views of the American character are analyzed through significant writers, from the Puritans to the present, with the purpose of gaining a better understanding of the American experience. Major authors include Emerson, Hawthorne, Fitzgerald, Faulkner and others. Prerequisites: EN 101, EN 102; Every Other Year, Fall

EN 300 Special Topics in Literature (3 cr.) This course explores readings in literature dealing with a single author, theme, or specific problem. The course may be repeated for credit when topic changes. Specific titles are announced from time to time. Prerequisite: one course from EN level 200; Every Other Year, Spring

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 304 Critical Approaches to Literature ( 3 cr .) This course presents a study of the major critical theories of literature: 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 comprehending how these modes aid in interpreting a work of literature. This course is recommended in the junior year. Prerequisites: two courses from EN level 200, 300; Every Year, Fall

EN 305 Composition of Argument Across the Disciplines ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ a s s u m e s ~ s o m e ~ f a m i l i a r i t y ~ w i t h ~}$ the abiding features of argumentation. Between reading a variety of texts about how various disciplines construct argumentative discourse, students keep journals and write a series of short essays that build toward a longer research essay. Students also listen to invited QU professors from across the disciplines regarding how arguments are made and are expected to make oral presentations in relation to their chosen area of research. Prerequisite: one course from EN level 200

EN 311 Epic Poetry (3 cr.) This lecture/discussion course examines the tradition of epic poetry in the Western world. Poems discussed include, or are selected from, The Epic of Gilgamesh, Homer's Iliad and Odyssey, Virgil's Aeneid, Beowulf, Dante's Inferno and Milton's Paradise Lost. The distinguishing qualities of the epic, the historical, cultural and social backgrounds also are examined. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 312 Autobiography ( $\mathbf{3} \mathbf{~ c r}$.) The literary form and history of autobiography are considered, from St. Augustine's Confessions to Rousseau, Wordsworth, and selected contemporary authors (e.g., Russell Baker, Claude Brown, Maxine Hong Kingston, etc.). Attention is paid to cultural and psychological changes in self-narrative. Prerequisite: one course from EN level 200; Every Other Year, Spring

## EN 313 The Bible: Beginnings and Endings (3 cr.)

Selections from the Old and New Testaments are studied from a cultural and literary perspective. Close examination of passages in class with emphasis on responses from the class. Prerequisite: one course from EN level 200; Every Other Year, Spring

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 Year, All

EN 321 The Russian Novel ( $\mathbf{3} \mathbf{~ c r}$.) The Russian Novel is framed as a survey course, from the publication of Alexander Pushkin's Eugene Onegin in 1823 as a serial novel, to material drawn from the Soviet period, especially from the work of Alexander Solzhenitsyn, Mikhail Sholokov, Abram Tertz (Andrey Sinyavsky), Anna Akhmatova and Maria Tsvetaeva. Major works by Lermontov, Turgenev, Dostoevsky, Tolstoy and Chekhov also are included in the course material. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 322 Studies in Modern and Contemporary Literature ( 3 cr .) This course focuses on readings in imaginative literature of the 20th and 21st centuries. The course may emphasize English, American, or world literature. As with EN 320, students may repeat this course when the topic changes. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 324 The Gothic Novel (3 cr.) The Gothic Novel offers a historical survey of the Gothic genre, from Horace Walpole's 1764 The Castle of Otranto to more contemporary exemplars of the Gothic genre in North America (Anne Rice, Suzy McGee-Charnas, Joyce Carol Oates) and Europe (Patrick Susskind, Patrick McGrath). The course considers the Gothic genre's development in historical, social and cultural contexts, as well as the structural and epistemological changes that have emerged since the late 18th-early 19th centuries. Prerequisite: one course from EN level 200; Every Other 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 his-
torical contexts. It is designed for students in the English major and minor, and required of all English majors in the MAT program. Prerequisite: one course from EN level 200; Every Year, Spring

EN 326 Modern Irish Drama (3 cr.) This course surveys the development of modern Irish dramas, from W.B. Yeats and the writers of the Gaelic Revival (1884-1916) to more current dramatists such as Tom Murphy and Brian Friel. The material not only covers the powerful body of work produced by Yeats, Synge and Lady Gregory (along with its influence on European and American drama) but also ranges over the work of G.B. Shaw, Brendan Behan, Sean O'Casey and Martin McDonagh. Students also consider modern works of the Irish stage, especially by women (e.g., Elizabeth Kuti) and other voices. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 335 Images of Women in Psychology and Literature (PS/WS 335) (3 cr.) The ways in which psychology and literature depict the female experience are considered. 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, the minority experience. Prerequisites: PS 101; one course from EN level 200; Every Other Year, Fall

EN 338 American Literature by Women of Color (WS 338) (3 cr.) This study of the diverse literary traditions, themes and narrative strategies employed by non-traditional American women writers examines the ways 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 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. The class includes trips to the Yale University Art Gallery and the Cloisters in New York. Prerequisite: one course from EN level 200; Every Third Year, Spring

EN 343 Shakespeare (DR 343) ( 3 cr.) Extensive structural and thematic analysis of Shakespearian drama is the basis of this course, which concentrates on selected problems of scholarship, criticism and performance. Required of all English majors. Prerequisites: two courses from EN level 200, 300; Every Year, All

EN 345 English Literature of the Renaissance (3 cr.)
This intensive study of the principal genres of the English Renaissance, including Utopia (More), lyric poetry (Sidney), and Romance and 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, Fall

EN 348 Milton and the 17th Century ( $\mathbf{3}$ cr.) This extensive survey of themes and writers within this revolutionary period emphasizes critical approaches to 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, like the metaphysical poets (Donne, Marvell, Herbert), and Ben Jonson, Francis Bacon and Thomas Middleton (drama). Also included are artistic form and style associated with the literature: Baroque painting (Rubens, Ribera), sculpture (Bernini), music (Gabrielli) and religious meditation (Ignatius). Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 350 18th-Century Literature (3 cr.) This study of literature of the long 18th century (1660-1800) considers authors, such as Behn, Swift, Pope, Defoe, Johnson, Fielding and Radcliffe. Emphasis is on the historical, intellectual, political and social concerns that characterize the literature of this period. Readings are thematic and generic, such as the growing popularity of the novel or the use of poetic satire to make socio-political statements. 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, Fall

EN 352 English Romantic Literature ( 3 cr.) This study of English Romanticism emphasizes the themes and intellectual concerns characterizing the period. Readings include selections from Blake, William and Dorothy Wordsworth, Coleridge, Byron, Keats, Shelley, the Brontes, Mary Shelley, Lamb, DeQuincey and others. Prerequisite: one course from EN level 200; Every Other Year, Spring

EN 355 Victorian Literature ( $\mathbf{3} \mathbf{~ c r}$.) The major writers of the Victorian period and the religious, social and scientific developments that influenced their writing are considered
in this course which includes selected readings from the poets, novelists and essayists. The course also examines the pre-Raphaelite and aesthetic movements. 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 Other Year, Spring

EN 365 The American Renaissance (3 cr.) This course presents a study of the dichotomy in the literature of the American Renaissance as reflected in such works as SelfReliance, 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 372 Law in Literature ( $\mathbf{3}$ cr.) The relationship between law and literature (essays, short fiction, and novels) is considered in this course, which focuses on themes common to both law and literature and on legal cases that serve as sources for the literary texts. 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 377 Faulkner and Literature Between the Wars

(3 cr.) Readings by Langston Hughes, T.S. Eliot, Anderson and Hemingway are followed by extensive structural and thematic analysis of Faulkner's major writings. The course includes close reading of the texts and consideration of problems raised by various critical approaches. Novels include The Unvanquished, As I Lay Dying, Light in August and Go Down, Moses. Prerequisite: one course from EN level 200; Every Other Year, Spring

## EN 380 Realism and Naturalism in American Fiction

( 3 cr .) This lecture/discussion course examines realistic and naturalistic American fiction in the period from 1875
to 1925 with emphasis on the novel. Close reading of primary texts is supplemented by theoretical and critical essays. Writers include Twain, Henry James, Chopin, Norris, Stephen Crane, Howells, Wharton, Jewett and Wright. Prerequisite: one course from EN level 200; Every Other Year, Fall

EN 382 James Joyce ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ p r e s e n t s ~ a n ~ i n t e n - ~}$ sive study of three of Joyce's major fictions: Dubliners, $A$ Portrait of the Artist as a Young Man and Ulysses. Emphasis is on close reading of the texts to examine structure, language, allusion, narrative point of view and themes. Secondary materials provide additional theoretical and critical perspectives. Prerequisite: one course from EN level 200; Every Year, Fall

## EN 387 The Men and Women of Wharton and James

 ( 3 cr .) The fiction of Wharton and James is examined with emphasis on 1 ) the literary period (realism); 2) the critical theory of each writer; and 3) the relationships between the men and women portrayed. Prerequisite: one course from EN level 200; Every Other Year, SpringEN 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 and, occasionally, select English minors. Every Year, Spring

EN 470 Senior Thesis ( $\mathbf{3}$ cr.) Senior thesis is open only for 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. Every Year, All

## Courses offered as needed

EN 101S Elements of Composition I Intensive Seminar (3 cr.)
EN 150S Advanced Revision and Editing Seminar (1 cr.)
EN 293 Internship (1 cr.) Prerequisites: EN 101, EN 102
EN 299 Independent Study (3 cr.)
EN 399 Independent Study (1 cr.)

## Film, Video and Interactive Media

FVI 102 Introduction to Film (3 cr.) Available only to non-FVI majors and students outside of the School of Communications, this survey of the art, industry and techniques of 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 stu-
dents develop their critical faculties and visual literacy. The course includes a weekly $2^{1} / 2$ hour screening with a separate lecture/discussion section. Every Year, All

## FVI 105 Video Essentials: News or Video Essentials:

 Sports (MEP 105) (3 cr.) Available only to non-FVI majors, this course introduces the fundamentals of news gathering or sports reporting including writing, preproduction planning, basic single-camera field audio and video acquisition and editing. There is an emphasis on evaluating the effectiveness and success of work undertaken. Students in FVI must take FVI/MEP 210 and 212 as their introductory production courses. Every Year, All
## FVI 210 Fundamentals of Media Production (MEP

210) (3 cr.) This first phase of a two-semester course gives students a thorough grounding in the basic techniques of audio and video storytelling. Students learn the theory and practice of audio recording and editing, followed by the fundamentals of lighting, composition and visual storytelling. The basics of remote video production and digital editing are covered. This is a hands-on course that requires students to produce a number of media projects throughout the semester. This course is for students majoring in FVI only. Sophomore status required. Prerequisite: MSS 101; Every Year, All

## FVI 212 Fundamentals of Media Production II (MEP

212) (3 cr.) This second phase of a two-semester sequence builds on the production skills acquired in FVI/MEP 210 and introduces students to the techniques of designing and producing creative and effective audiovisual communications. Students learn to develop creative concepts and to take them from script to screen. Video editing techniques and principles of good composition, structure and program design are emphasized. This course is for students majoring in FVI only. Sophomore status required. Prerequisite: MEP 210 or FVI 210; Every Year, All

## FVI 310 Creating Interactive Media (MEP 310) (3 cr.)

This course introduces students to the technological and creative aspects of posting content for distribution through the Internet and mobile delivery platforms. Students learn HTML tagging, non-linear navigation strategies and designs and other key factors that go into the development of professionally created interactive content. Technological literacy is not presumed. Every Year, Fall

FVI 312 Projects in Interactive Media (MEP 312) (3 cr.) This course focuses on the creation of interactive projects with an emphasis on the integration of content, technology, tools and methods. Students learn to produce works that are meaningful from a user perspective and deliver content with a balanced visual aesthetic. The distribution media for students' projects may include the Internet, CD/DVD, wireless device, computer monitor and/or game console. The concepts covered in this class can be
applied to any platform, from screen-based applications to interactive environments. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, Spring

## FVI 340 Analysis of the Moving Image (MEP 340)

( 3 cr.) How do we read images? This course explores moving image media-including film, television and the Internet-from a formal and aesthetic perspective. Students learn to think and write critically about images, editing strategies and non-narrative visual arts. Prerequisites: MSS 101, MSS 220; Every Year, All

## FVI 345 Writing and Producing Media (MEP 345)

( $\mathbf{3} \mathbf{~ c r . ) ~ M e d i a ~ m e s s a g e s ~ a r e ~ c r e a t e d ~ t o ~ m e e t ~ a ~ v a r i e t y ~ o f ~}$ 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 junior-level 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 production as they complete a series of projects during the semester, with special emphasis on creative conceptualization, message and writing. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

## FVI 355 Projects in Single-Camera Production

(MSS 355) ( 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, and narrative production for outside clients including the Connecticut Council on Problem Gambling. The course emphasizes professional production roles, including writing and directing, scheduling and production management, production, post-production, distribution and marketing. Students grapple with issues of visual esthetics, modes of representation and audience reception as they produce individual and/or collaborative projects. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

FVI 372 Scriptwriting (MEP 372) (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: JRN 160; Every Year, All

## FVI 375 Advanced Camera and Lighting (MEP 375)

( 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 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 number of projects outside of class. Prerequisite: MEP 345 or FVI 345; Every Year, Spring

## FVI 380 Projects in Audio Production (MEP 380) (3 cr.)

This course offers students an opportunity to develop a number of advanced-level audio projects. Topics and approaches vary and may include one or more of the following: instruction in sound design for television and motion pictures; radio programming in various genres, including news, issues, public affairs, entertainment, and sports; podcasts; audio documentary; oral histories; music production; instructional/educational programming; and radio drama. Prerequisites: MEP 210, MEP 212; Every Year, All

## FVI 390 Projects in Multi-Camera Production

 (MEP 390) (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 multicamera, 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: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, AllFVI 392 Post-Production Techniques (MEP 392) ( 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: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

## FVI 393 Animation Techniques (MEP 393) (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: MEP 210 or FVI 210;
MEP 212 or FVI 212; Every Year, All

## FVI 410 Game Design and Development (MEP 410)

( 3 cr .) This course covers the history, design and development of games, from popular board games to media-rich computer games. Interactive narrative and game strategy are stressed. Working in teams, students learn how to invent a game, design it and take it through the stages of development. Prerequisite: Permission of instructor. Every Other Year, Fall

FVI 450 Senior Seminar (MEP 450) (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. Every Year, All

FVI 490 Internship (MEP 490) (3 cr.) This internship consists of jointly supervised fieldwork with a cooperating institution or corporation. The goal is to motivate the intern toward professional growth through observation and participation. The course also provides students with the opportunity to meet active professionals and to stimulate career planning. Internships must be approved by the internship program director in accordance with school regulations. Junior/Senior status is required. This course is graded on a pass-fail basis. Every Year, All

FVI 494 Senior Project Colloquy (MEP 494) (1 cr.) This required 1 -credit colloquy must be taken in the semester prior to the student's undertaking of the Senior Project. Meeting collectively and individually, all fourth-year FVI students consult with the FVI faculty several times during the term to identify and hone the presentation of their required individual Plan for Senior Project. Prerequisite: senior year standing in FVI. Every Year, All

FVI 495 Senior Project (MEP 495) (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 faculty and staff from the School of Communications FVI program, and give graduating seniors important portfolio material. Every Year, All

## Courses offered as needed

FVI 397 Summer Production Project (MEP 397) (4 cr.) Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212
FVI 399 Independent Study (MEP 399) (1 cr.)

## 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 and 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 ( $\mathbf{3}$ 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 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 361 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; 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, Spring

FIN 420 Commercial Bank Management (3 cr.) This course examines the management of banks and other depository institutions in the current financial environment. Emphasis is placed on fundamental processes such as the management of liquidity, credit quality, investment portfolios, funding costs and capital adequacy. Maximizing shareholder value while properly managing the inherent tension that exists between these various processes is carefully described. Prerequisite: FIN 201; Every Year, Fall

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. Prerequisite: FIN 310; 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 Quinnipiac University Endowment fund. 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 460 Mergers and Acquisitions ( $\mathbf{3} \mathbf{c r}$.) 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 Market Microstructure and Trading ( $\mathbf{3} \mathbf{~ c r}$.)

This course is designed to introduce 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 on Financial Trading Systems (FTS) simulation. Prerequisites: FIN 310, FIN 350; Every Year, Spring

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 and corporate finance. 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

## 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 ( $\mathbf{3} \mathbf{~ c r}$.) 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 299 Independent Study ( 3 cr )
FR 301 Advanced French I (3 cr.)
FR 302 Advanced French II (3 cr.)
FR 399 Independent Study ( 3 cr.)
FR 499 Independent Study ( 3 cr .)

## Geography (GP)

GP 101 Introduction to Geography ( $\mathbf{3} \mathbf{~ c r}$.) 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, Fall

Courses offered as needed
GP 299 Independent Study in Geography ( 1 cr.)
GP 399 Independent Study in Geography (1 cr.)
GP 499 Independent Study in Geography ( 1 cr.)

## 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 ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ i s ~ a ~}$ continuation of GR 101. Prerequisite: GR 101 or placement into GR 102. Prerequisite: GR 101; Every Year, Fall

GR 201 Intermediate German I (3 cr.) This course is for students who wish to reinforce their ability to read, write and speak German at an intermediate level. Pre-requisite: GR102 for placement into GR201. Every Year, Fall

GR 202 Intermediate German II ( $\mathbf{3} \mathbf{~ c r}$ ) This course is a continuation of GR 201. Every Year, Spring

Courses offered as needed
GR 299 Independent Study ( 3 cr.)
GR 398 Independent Study - German (3 cr.)
GR 399 Independent Study - German (3 cr.)

## Gerontology (GT)

GT 200 Biology of Aging ( $\mathbf{3} \mathbf{~ c r}$.) 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 Orientation to Sociology, Criminal Justice and Gerontology (SO/CJ 205) (1 cr.) This course introduces sociology, social services, gerontology and criminal justice majors to the disciplines and fields in which they are majoring. In a seminar format, students meet once a week to discuss the origins, breadth and the potential careers in
their fields. The course is designed to orient the student to the professions within sociology, social services, gerontology and criminal justice through interaction with departmental faculty, former students and practitioners in the field. 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 or PS 133; 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: GT 263 or SO 263; Every Other Year

GT 292 Internship in Elderly Services (3 cr.) The student devotes eight hours a week to work in a public or private agency that provides services to the elderly and two hours a week in conference with the instructor. The student learns how an organization works, its relation to other programs serving the elderly, and the problems it encounters in meeting the needs of the elderly. Enrollment, limited to majors, requires a high standard of attendance and responsibility from the student. Prerequisite: GT 263 or SO 263; Every Year, All

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 non-bureaucratic structure of hospice care. Prerequisites: two courses from SO, GT; Every Year, All

GT 310 Elder Law (LE 310) ( $\mathbf{3} \mathbf{c r}$ ) This course introduces students to topics in the law affecting older persons, such as government benefit programs (Social Security, Medicare, Medicaid), nursing homes and incapacity.

Prerequisite: SO 263 or GT 263; Every Other Year, Fall and Spring

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, social services 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 social services 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; 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

## GT 365 Aging: Problems and Policies (SO 365) (3 cr.)

 This course considers the social problems associated with aging, particularly in the areas of health, housing, financing and family life and the governmental policies, past, present and future, that deal with these problems. Prerequisite: SO 263 or GT 263; Every Other Year, SpringGT 381 Evaluation Research (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 in their junior or senior year. Every Year, All

GT 385 Social Policy (SO 385) (3 cr.) This senior seminar is designed as the capstone course for students majoring in sociology, social services, and gerontology. Social policy is examined as the process by which specific societal problems are identified, researched and translated into social action. Students in this course complete a senior thesis and senior presentation on a social policy area of their choosing. For majors only in the senior year. Every Year, All

GT 392 Internship in Elderly Services (3 cr.) Students devote eight hours each week to work in a public or private agency that provides services to the elderly and two hours each week in conference with the instructor. The student learns how an organization works, its relation to other programs serving the elderly, and the problems it encounters in meeting the needs of the elderly. Enrollment, limited to majors, requires a high standard of attendance and responsibility from the student. Prerequisite: SO 263 or GT 263; Every Year, All

Courses offered as needed
GT 299 Independent Study (1 cr.) GT 399 Independent Study (3 cr.)

## Health Management (HM)

## HM 101 Organization and Agencies of Health Care

 ( 3 cr ) This course focuses on the organization of the American health care system including how health services are financed and delivered. It provides an overview of the management of the system and of the resources required for its operation: workforce, facilities and technology. Every Year, FallHM 202 Introduction to Public Health (3 cr.) This course reviews the origins and development of public health; the relationship of public health practice and the general health care system; the determinants of health and illness within communities; the structure of the public health system; and public health activities. Every Year, Spring

HM 217 Introduction to Health Economics (3 cr.) This course applies such tools as microeconomics and analysis to study the financing of public policy and its impact on the U.S. health care system. Every Year, Spring

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. This course is intended for physical therapy students only. Every Year, Fall and Spring

## Health Science (HSC)

## HSC 101 Career Exploration in Health Sciences (1 cr.)

This course is recommended for all health and science studies students; however it is open to any student interested in exploring careers in health sciences. The course assists students with the process of career planning through the development of appropriate skills. The course challenges students to consider their education in terms of maximizing available career opportunities. Every Year, Fall and Spring

HSC 161 (UC) Scientific Study of Mummies (3 cr.) This introductory 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, All

## HSC 201 Career Planning and Development in the

 Health Sciences ( $\mathbf{1} \mathbf{c r}$.) This course focuses on assisting students in developing their individual career and professional development plans within the field of health care. Topics covered include: exploring job search strategies, resume and cover letter preparation, interviewing skills, effective business communication and presentation skills, and professionalism in the workplace. This course is graded on a pass/fail basis. Every Year, Fall and SpringHSC 338 Human Anatomy I ( 4 cr.) This is the first course in 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, back, head and neck. Each unit begins with the study of joint structure followed by muscular, nervous and circulatory systems. Clinical correlations of musculoskeletal or neuromuscular pathologies are presented to develop problem-solving skills. Prerequisites:
BIO 211, BIO 212; Every Year, Fall

HSC 338L Human Anatomy Lab (0 cr.) Lab to accompany HSC 338. Every Year, Fall

HSC 339 Human Anatomy II (4 cr.) The same regional approach to the study of the human body is practiced as in HSC 338. The regions of study include the pelvis, lower extremity and the trunk. 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 from a systems approach to the study of the body cavities. Course includes a lab component. Prerequisite: HSC 338; Every Year, Spring

HSC 339L Human Anatomy II Lab (0 cr.) Lab to accompany HSC 339. (2 lab hrs.) Every Year, Spring

HSC 340 Kinesiology I (4 cr.) Kinesiology I introduces the basic principles of kinesiology. Numerous problemsolving processes and skills are developed throughout the semester. Forces and torques in static clinical free body diagrams are studied. The student learns to identify different muscle(s) interactions/combinations. Students then study movement and movement patterns of the upper extremity, comparing one area of the body to another. Course includes a lab component. Prerequisite: MA 141; Every Year, Fall

HSC 340L Kinesiology I Lab (0 cr.) Lab to accompany HSC 340. (2 lab hrs.) Every Year, Fall

HSC 341 Kinesiology II (4 cr.) Students study movement and movement patterns of the lower extremity and trunk, including normal gait. Both the kinematics and the kinetics at the hip, knee and ankle are emphasized, especially in relationship to the closed kinetic chain. Normal gait is introduced and becomes the central focus for this semester. Course includes a lab component. Prerequisite: HSC 340; Every Year, Spring

HSC 341L Kinesiology II Lab ( 0 cr .) Lab to accompany HSC 341. (2 lab hrs.) Every Year, Spring

HSC 342 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. Prerequisites: BIO 211, BIO 212; Every Year, Fall

HSC 343 Neuroanatomy II (3 cr.) This course deals with the function of the systems and structures covered in HSC 342 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. Prerequisite: HSC 342; 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. Learning tools include the text, tapes, videos and computer materials within the Israeli cultural context. Students are introduced to the Hebrew alphabet and use Hebrew script. They learn elementary conversational skills and basic Hebrew grammar. Every Other Year, Fall

Courses offered as needed
HBR 102 Introduction to Elementary Modern
Hebrew II (3 cr.) Prerequisite: HBR 101

## 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 non-Western 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, and social upheaval in the 19th century, and the domination of the West over the world and challenges to that domination during the 20th century. Every Year, All

HS 131 (UC) History to 1877 ( $\mathbf{3}$ 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. Students analyze how Americans have defined
themselves and a global mission. 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 208 (UC) Modern World History ( 3 cr.) This course covers the history of the world since the 19th century focusing on the experiences and perspectives of the nonwestern world. Students study the rise of nationalism, the disintegration of empire, and the growth of communal and ethnic strife across the globe in the 20th century. Prerequisites: 1 group: QU 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 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 non-European peoples, particularly those of Africa and Asia, on internal European developments. Prerequisites: 1 group: QU 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. Prerequisite: HS 132, PO 101 or PO 131; Every Year, All

## HS 211 (UC) 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: HS 131; HS 132 or SO 101; Every Other Year, AllHS 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; the modern struggle to define individual and community values in literature. This
course includes readings in Russian thought and literature. Prerequisite: HS 111, HS 112, HS 131 or HS 132; Every Other Year, All

HS 228 20th-Century Russia ( 3 cr.) This course considers Russian politics, society and culture in the 20th century; the Soviets in world affairs; changing American views of the former Soviet Union. Prerequisite: HS 111, HS 112, HS 131 or HS 132; Every Other Year, All

HS 229 The Irish ( $\mathbf{3}$ 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: HS 132, HS 111, HS 112 or HS 131; Every Other Year, All

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; international contacts to recent times. Prerequisite: HS 111, HS 112, HS 131 or HS 132; 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; World War II and postwar period. Prerequisite: HS 132, HS 111, HS 112 or HS 131; Every Year, All

HS 254 Colonial Latin America (LAS 254) (3 cr.) This course offers an introduction and examination of the history of Latin America and its people from PreColumbian 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: HS 131 or HS 111; 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: HS 111; Every Other Year, All

HS 296 The American Presidency Since 1945 (3 cr.) This course reviews the history of the period through the presidencies of the post-1945 years. Readings and discussions are mostly biographical. Biographies of two or three of the presidents are studied plus a short text on the period. Special emphasis is on the growth of presidential power culminating in Watergate. Prerequisite: HS 132; Every Year, All

HS 301 Special Topics II — History (3 cr.) This course focuses on readings and discussion of historical topics of special interest to students enrolled in the course. Prerequisite: HS 112

## 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, SpringHS 305 Vietnam (MSS 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: HS 111, HS 112, HS 131, HS 132 or MSS 101; 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. Prerequisite: HS 111, HS 112, HS 132, HS 131 or MSS 101; 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 topic, 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: HS 131; Every Year, All

HS 309 Women in America: 1920-Present (WS 309) ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ c o v e r s ~ t h e ~ e x p e r i e n c e ~ o f ~ w o m e n ~ i n ~ t h e ~}$

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: HS 132; Every Year, All

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: HS 111; 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: HS 111; 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; 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: HS 112; Every Other Year, AllHS 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; national reactions to the French developments elsewhere in Europe. Prerequisite: HS 112; 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: HS 112; Every Other Year, All

HS 321 Europe, 1914-1945 ( $\mathbf{3} \mathbf{~ c r}$ ) 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: HS 112; Every Other Year, All

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: HS 112 or HS 208; Every Other Year, All

HS 332 History of India ( $\mathbf{3} \mathbf{~ c r . ) ~ S t u d e n t s ~ e x a m i n e ~ t h e ~ h i s - ~}$ tory of the South Asian subcontinent between 1500 and 1950. 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: HS 112 or HS 208; 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: HS 112 or HS 208; Every Other Year, Spring

HS 340 The Colonial Period to 1763 (3 cr.) Through lectures and discussion of source and secondary readings, the American Colonial period to the pre-Revolutionary 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: HS 131; 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: HS 131; 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: HS 131; Every Other Year, All

HS 344 Civil War and Reconstruction ( $\mathbf{3} \mathbf{~ c r . ) ~ T h e ~ e c o - ~}$ nomic, 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 and domestic developments North and South, 1861-65; postwar problems and the history of Reconstruction, 1865-77. Prerequisite: HS 131; 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: HS 132; 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 ' 20 s, 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: HS 132; Every Other Year, All

HS 347 U.S. Foreign Policy from the American Revolution to the Present ( $\mathbf{3} \mathbf{~ c r}$.) This course presents a topical
interpretation of the formulation and execution of American foreign policy from the first Washington administration to Vietnam. American diplomacy in crisis is studied. Prerequisites: HS 131, HS 132; Every Other Year, All

## HS 352 The History and Social Impact of Baseball in

 America (SPS 352) (3 cr.) This course covers the role of baseball both as an agent and as a reflector of social change in America from the mid-19th century to the present. While developments and activities on the field are not ignored, greater emphasis is placed on events surrounding the game. Topics include the racism of the 1880s; the transition from a pastoral pastime to a billiondollar industry; the role of baseball in the assimilation of immigrants; the development of the Negro Leagues and the All-American Girls Professional Baseball League; the Jackie Robinson experiment; the growth of unionization in the sport and the most recent Latino invasion. Students explore how each of these developments is embedded in and reflective of the larger culture. Prerequisite: HS 132; Every Year, SpringHS 408 Seminars in History ( $\mathbf{3}$ 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 200 Special Topics in History ( 3 cr.)
HS 213 The Roman World (3 cr.) Prerequisite: HS 111, HS 112, HS 131 or HS 132
HS 215 American Business History (3 cr.) Prerequisite: HS 131, HS 132 or EC 112
HS 271 History of Southeast Asia 1 (3 cr.) Prerequisite: HS 132, HS 111, HS 112 or HS 131
HS 272 History of Southeast Asia 2 (3 cr.) Prerequisite: HS 132, HS 112, HS 111 or HS 131
HS 273 African History and Culture (3 cr.) Prerequisite: HS 111, HS 112, HS 131 or HS 132
HS 294 American Civilization: Prosperity and Depression in the 1920s and 1930s ( 3 cr .) Prerequisite: HS 132
HS 299 Independent Study in History ( 3 cr.)
HS 300 Special Topics in History (3 cr.) Prerequisite: HS 111, HS 112, HS 131 or HS 132
HS 302 Special Topics III ( 3 cr .)
HS 310 The Ancient Near East (3 cr.) Prerequisite: HS 112, HS 131, HS 132, HS 110 or HS 111
HS 311 The Ancient Hebrews (3 cr.) Prerequisite: HS 112, HS 131, HS 132, HS 110 or HS 111
HS 312 Ancient Greece ( $\mathbf{3}$ cr.) Prerequisite: HS 111
HS 313 The Roman World (3 cr.) Prerequisite: HS 111

HS 314 Europe in the Early Medieval Period, 325-842 (3 cr.) Prerequisite: HS 111
HS 315 Introduction to Medieval Europe: Europe in the High Middle Ages (3 cr.) Prerequisite: HS 314
HS 322 History of World War I ( $\mathbf{3}$ cr.) Prerequisite: HS 112 or HS 132
HS 323 World War II (3 cr.) Prerequisite: HS 112 or HS 132
HS 324 History of England to 1688 ( $\mathbf{3}$ cr.) Prerequisite: HS 111
HS 325 History of England: 1688 to the Present (3 cr.) Prerequisite: HS 111 or HS 112
HS 327 Islamic Societies and Cultures to 1300 ( 3 cr.) Prerequisite: HS 111
HS 330 History of Western Medicine (SV 330) (3 cr.) Prerequisite: HS 111 or HS 112
HS 348 The American West to 1900 (3 cr.) Prerequisite: HS 131 or HS 132
HS 351 The New South ( $\mathbf{3}$ cr.) Prerequisite: HS 132
HS 399 Independent Study in History (3 cr.)
HS 400 Special Topics in History ( 3 cr.)
HS 409 Honors Essay in History ( 3 cr.)
HS 499 Independent Study in History ( 3 cr.)

## Information Systems Management (ISM)

ISM 101 Principles of Information Technology (3 cr.) This course is based on the premise that virtually all college graduates, regardless of their major and future occupation, will be employed in computerized organizations. They will be expected by their employers to understand, use and possibly design computer-based information systems that employ various types of information technologies to gather, process, store, communicate and output information. Student gain an understanding of the terminology necessary for success in the information age, an appreciation of the effect of information technology on the world, and a basis for acquiring the necessary skill set to succeed in the 21st century. Every Year, All

ISM 107 Principles of Information Technology for Communications ( $\mathbf{3} \mathrm{cr}$.) This course is based on the premise that virtually all college communications graduates, regardless of their individual major, will be employed in computerized organizations. Consequently, they need to understand, use and participate to various degrees in the design, specification and development of computerbased information systems. Students are introduced to systems and development concepts, information technology and communications-specific application software. It explains how information is used in organizations and how information systems enable improvement in quality, timeliness and competitive advantage. This course is for communications majors only. Every Year, Spring

ISM 110 Introduction to Object-Oriented Programming ( $3 \mathbf{c r}$.) This introduction to object-oriented programming uses 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. A laptop computer is required. Prerequisite: ISM 101; Every Year, Spring

## ISM 210 Advanced Object-Oriented Programming

 ( 3 cr .) This course focuses on developing new customdesigned programs to meet user requirements in a distributed client-server environment utilizing object-oriented programming tools and techniques. The fundamentals of object-oriented analysis and design are stressed, and the basic tools needed to successfully program in an environment in which the horizontal integration of management data is the norm. A heavy focus on relational data architecture is maintained throughout the course. A laptop computer is required. Prerequisite: ISM 110; Every Other Year, FallISM 257 Information Mining ( 3 cr .) This course is the first in a two-course sequence dealing with the application of Internet technologies to communications practice, building on the skills of researching, reporting and interviewing, and applying those techniques to the World Wide Web. In particular, students learn the basics of web design and creation/editing, and how to conduct online searches, interviews and research. Students learn how to: 1) search the Internet to gather information; 2) analyze online resources for information gathering, and evaluate online media with respect to their credibility, reliability, layout and navigability; and 3) develop a critical understanding of the digital work environment. Prerequisite: ISM 101 or ISM 107; Every Year, Spring

ISM 260 Advanced Excel and ERP Systems (3 cr.) This course focuses on utilizing advanced features of the Microsoft Excel product to solve business problems. Formulas, macros and analytical tools are utilized. In addition, this course introduces the basic concepts of ERP applications and how they are used to support core business functions. Prerequisite: ISM 101; Every Other Year, Fall

## ISM 267 Tools and Techniques for Online Communi-

 cation (3 cr.) This course is the second in a two-course sequence dealing with the application of Internet technologies into communications practice. This course focuses on the application of the techniques of web design and creation/editing. In particular, students: 1) develop a critical understanding of the digital work environment for journalists and other communications professionals; 2) develop an understanding of legal and ethical issues for online media; 3) learn and apply non-linear storytelling techniques for online media; and 4) demonstrate anunderstanding of the concepts of usability, web design and web writing through hands-on work. Prerequisite: ISM 101 or ISM 107; Every Year, Spring

ISM 270 E-Business Systems ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ f o c u s e s ~}$ on the linkage between organizational strategy and networked information technologies to implement a rich variety of business models in the national and global contexts connecting individuals, businesses, governments and other organizations. The course provides an introduction to e-business strategy and the development and architecture of e-business solutions. Prerequisite: ISM 101; Every Year, Spring

ISM 301 Hardware and Software ( $\mathbf{3} \mathbf{~ c r}$.) This course focuses on how information systems hardware and software interact and examines how information is internally processed and stored across various hardware platforms. The role of the operating system and operating level software also is analyzed. Prerequisite: ISM 110; Every Year, Fall

ISM 330 Networking and Telecommunications (3 cr.) This course presents an introduction to the technology used in networking and communications, and is intended to provide an opportunity to develop a conceptual framework for communications and networking technology, practices and procedures, as well as to recognize the patterns of future development, and to develop a basis for judgment of available technology for communications and networking system practices. Prerequisite: ISM 301; Every Year, Spring

ISM 351 Database Programming and Design (3 cr.)
This course presents a comprehensive introduction to the use of database architecture as a tool for developing integrated solutions for the information requirements of a modern business environment. The course provides the students with the skills needed to identify business solutions through the use of data structure design, and to understand the interconnections between data structure and business policies. Students learn how to design, build and use databases and non-procedural applications appropriate to business problems. Prerequisite: ISM 301; Every Year, Spring

ISM 370 Systems Analysis and Design (3 cr.) This course presents a comprehensive introduction to the information engineering skills that students, as future users or systems analysts, will need to work in a highly competitive, computer-integrated business environment. The course provides the students with the skills to identify business problems which may be solved by technologybased solutions, determine requirements for information systems solutions, and develop detailed designs that form the basis for implementing systems. Prerequisites: ISM 110, ISM 301; Every Year, Spring

ISM 381 Client Side Web Development (3 cr.) This course focuses on the use of JavaScript to implement client side web developments. Topics covered include automatically updating pages, rollovers, opening and manipulating windows, frames and image maps, form validation, information access and retrieval, timing events, cookies. A laptop computer is required. Prerequisite: ISM 110; Every Year, Spring

ISM 411 Information Systems Security (3 cr.) This course is an introduction to the various technical and administrative aspects of information security and assurance. It provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system with appropriate intrusion detection and reporting features. Prerequisite: ISM 330; Every Year, Fall

## ISM 427 Design and Implementation of Information

 Systems in Emerging Environments ( 3 cr.) This course addresses the development, delivery, quality assurance, system implementation and post-implementation management of information systems in an emerging systems environment. Topics include emerging standards for object-oriented application design, software standards and quality metrics, software testing and quality assurance, configuration management, emerging techniques in HCI and information systems architectures. Prerequisite: ISM 301; Every Year, SpringISM 440 Project and Change Management (3 cr.) A comprehensive review of all prior required courses in which student teams are required to practice using system development concepts to analyze the need for a system, to design a solution, and to implement the designed solution in a business environment. A laptop computer is required. Prerequisite: ISM 101; Every Year, Spring

ISM 484 ISM Internship (2 cr.) This course provides students with on-the-job experience by employing their skills in a professional setting under a practicing professional. The internship involves in-depth work related to user-defined information needs and is usually completed during the summer between the junior and senior years. Students must obtain approval and register before starting the work experience. This course is graded on a pass/fail basis. Prerequisite: ISM 370; Every Year, All

## Courses offered as needed <br> ISM 265 Mobile Application Development (3 cr.) <br> Prerequisite: ISM 110

## 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, All

IDD 160 Digital Design I ( $\mathbf{3}$ 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, All
IDD 161 Digital Design II (IDD 161) (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. Prerequisite: IDD 160 or AR 160; Every Year, All

IDD 210 Modern Design Culture ( 3 cr.) This course explores the many styles and movements that inform contemporary design practice. Over the past century, schools, personalities and innovations have run the gamut from Art Nouveau to conceptual art. The course focuses on these movements and the influence of leading practitioners. Topics include advertising, architecture, furniture design, typography, photography, digital art, film and computer animation. Prerequisite: IDD 160 or AR 160; Every Year, Fall

IDD 250 Interactive Narrative Forms (3 cr.) Students read, view and critically analyze select examples from dramatic literature and interactive multimedia (videodiscs, CD-ROMs, DVDs, web sites, interactive installations and games). Students create interactive multimedia research essays for desktop and online presentation. Prerequisites: IDD 110, IDD 161, EN 102; Every Year, Fall

IDD 270 Type Design and Production 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 that are 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 160 or AR 160; Every Year, Fall

IDD 301 Motion Graphics I (3 cr.) Students explore ways to use the computer to create computer images and animation for interactive multimedia, computer games and for the Web. Students use professional quality software for the creation of animated motion graphics, text, images and dynamic audiovisual data. Students produce animated and motion graphics projects that demonstrate both design aesthetics and technical skills. Prerequisite: IDD 161 or AR 161; Every Year, All

IDD 302 3D Graphics and Animation I (3 cr.) Students explore the use of professional-level software to create 3D computer images and animation for print, interactive multimedia, motion graphics, computer games and for the Web. Topics include techniques of 3D modeling, texturing, animation, rendering, editing and compositing. Students develop projects that demonstrate both creativity and an introductory knowledge of 3D computer graphics. Prerequisite: IDD 301; Every Year, All

IDD 315 Scripting for Interactivity I (3 cr.) This course covers practical techniques of scripting for creating advanced interactivity for web site design and desktop multimedia presentations. Students use scripting to create projects that display a combination of artistic and design aesthetics, media theory and programming skills. Prerequisite: IDD 301; Every Year, Spring

IDD 370 Type Design and Production 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 401 3D Computer Graphics and Animation II

(3 cr.) This course explores advanced aesthetic, critical and technical topics in 3D computer graphics and animation. Students produce concept sketches, storyboards, animatics and low and high resolution renderings to complete a short 3D digital video animation that demonstrates both knowledge and understanding of the 3D computer graphics production process, a creative approach to storytelling and character development. Prerequisite: IDD 302; Every Year, Fall

IDD 405 Soundscapes ( $\mathbf{3} \mathbf{~ c r}$.) This course examines the tradition of arranging, mixing, sound art and musique concrete while covering techniques of digital sound synthesis, recording, sampling, and editing. Prerequisite: IDD 161; Every Year, Fall

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 ( $\mathbf{3}$ cr.) This course explores advanced aesthetic, critical and technical topics in motion graphics and animation. Students use professional quality software to design motion graphics including text, bitmapped and vector graphics elements with applied filter and special effects processing. 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 ( $\mathbf{3} \mathbf{~ c r . ) ~ U n d e r ~ t h e ~ s u p e r v i s i o n ~ o f ~ a ~}$ 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 299 Independent Study ( 3 cr .)
IDD 399 Independent Study ( 1 cr .)
IDD 420 Alternative Interfaces ( $\mathbf{3} \mathbf{~ c r}$.) Prerequisites: IDD 301, IDD 315
IDD 499 Independent Study ( 3 cr.)

## International Business (IB)

IB 105 (UC) International Business Environment (3 cr.)
Students are introduced to the worldwide business environment. The course takes a broad cultural approach to
understanding this environment, focusing on social, political and economic institutions. Students develop an appreciation of the importance of geography. Global business interactions also are studied. For non-business majors. Every Year, All

## IB 201 (UC) Globalization and International Business

 ( $\mathbf{3} \mathbf{c r}$.) This course introduces students to issues concerning globalization and international business. Students examine the critical role of 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 QU 101; Every Year, AllIB 201H Honors International Business (3 cr.) This course advances students' understanding of international business interactions and the global marketplace. Topics include: theories of international trade; theories of foreign direct investment and multinational corporations; globalization and the nature of international business; international organizations, international monetary systems and global financial market; foreign business environments; and management of international business opportunities and operations. The insights are drawn from economics, political science, psychology and other sources. Prerequisite: EC 112

## IB 313 International Marketing and 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. Prerequisite: EC 271; Every Year, Spring

## IB 320 Introduction to Global Entrepreneurship (3 cr.)

 This course introduces students to the major topics in global entrepreneurship, including: 1) the critical roles and motivations of the national governments, multilateral institutions, and international agreements in shaping the rules and conditions of 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

IB 324 Negotiating Internationally (3 cr.) 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

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

IB 345 Two-Way Management of the Global Supply Chain ( 3 cr .) Students are introduced to strategic and tactical issues in the global supply chain management such as what to make, what to buy and how to coordinate a global manufacturing and supply system. The focus is on procurement that includes: quality control, order processing, value analysis, scheduling, warehousing, inventory control, customer service, negotiation and legal issues. Prerequisite: IB 201; Every Year, Spring

IB 352 International Management (3 cr.) This course considers managing, motivating and communicating in a diverse, multicountry environment; strategies for crosscultural negotiation; expanding the company out of a unidimensional orientation; the roles of top managers, regional managers, product managers and functional managers. This course also introduces some basic approaches to conducting management research and highlights some of the special challenges resulting from cross-cultural research projects. Prerequisite: IB 201 or IB 105; Every Year, Fall

## IB 358 European Institutions: a Legal and Business

 Perspective ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ f o c u s e s ~ o n ~ t h e ~ b u s i n e s s ~}$ institutions of the European Union and the major countries of Europe, and their role in creating the legal and regulatory environment within which business operates in Europe. Prerequisite: IB 201; Every Year, FallIB 362 Research and Field Experience in the European Union-Part I ( 3 cr.) This two-part course focuses on designing and conducting a cross-cultural research study in two or more countries. Students learn about the cultural, socio-political and business environments of Europe
and, in particular, France and Germany. In Part I, participants review appropriate background literature, work on study design, identify research instruments and gather and analyze data from an appropriate U.S. population. Prerequisites: PO 332; IB 105 or IB 201; Every Year, Spring

IB 363 Research and Field Experience in the European Union-Part II (3 cr.) This two-part course focuses on designing and conducting a cross-cultural research study in two or more countries. Students learn about the cultural, socio-political and business environments of Europe and, in particular, France and Germany. In Part II, students travel to Europe to explore various cultural, social, political and business environments. When they return, students complete the research project by writing a research report. Prerequisite: IB 362; Every Year, Summer

IB 401 International Strategy and Business Plan (3 cr.) This course serves two purposes. First, it allows the student to integrate, into a comprehensive country marketentry project, the knowledge acquired in the core international business courses. This includes country assessment, marketing, finance and management dimensions, as well as a sensitivity section on the impact of a current event on the recommendation. Secondly, it allows the student to think beyond the confines of the country itself, and to consider the strategic ramifications of offering that prod$\mathrm{uct} /$ service in that country market. The firm's global strategy and thinking creatively about how to compete in the chosen industry are emphasized. Prerequisites: IB 313, IB 335, IB 352; Every Year, Spring

IB 488 International Business Internship (3 cr.) This internship in international business must be approved by the department chairman and the dean in accordance with school regulations. This course is graded on a pass/fail basis. Prerequisite: IB 201; Every Year, All

## Courses offered as needed

## IB 355 Advanced Topics in International Financial Management (3 cr.) Prerequisite: IB 335 or FIN 335

## Italian (IT)

IT 101 Elementary Italian I ( $\mathbf{3} \mathbf{c r}$ ) This introduction to the Italian language, focuses on development of reading, writing, aural comprehension and speaking ability in basic Italian. Italian culture and artistic achievements are presented. 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 ( $\mathbf{3} \mathbf{~ c r}$ ) 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 course includes readings of selected short texts including raccontini (anecdotes), novelle (short stories) and a classic play. The emphasis is on building vocabulary and learning more complex grammatical constructions. Prerequisite: IT 102 or placement into IT 201. Every Year, Fall

IT 202 Intermediate Italian II (3 cr.) This course is a continuation of Italian 201. Every Year, Spring

Courses offered as needed
IT 299 Independent Study (3 cr.)
IT 399 Independent Study ( 3 cr.)

## Japanese (JP)

JP 101 Elementary Japanese I ( $\mathbf{3} \mathbf{~ c r}$.) 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, Fall

Courses offered as needed
JP 199 Independent Study (3 cr.)
JP 299 Independent Study (3 cr.)
JP 399 Independent Study ( 3 cr.)
JP 499 Independent Study (3 cr.)

## Journalism (JRN)

JRN 105 Electronic News Gathering (1 cr.) Students are trained in the fundamentals of shooting news using digital cameras and editing news stories using a computer-based non-linear editing system. The goal is to prepare broadcast students for courses such as JRN 291 and JRN 311 and to prepare print students for courses such as JRN 305. For print and broadcast journalism students who are not in the media production concentration. 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. Prerequisite: EN 101 or EN 102H; Every Year, All

JRN 260 Reporting for Print ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ c o v e r s ~}$ advanced reporting and writing for the print media. Students learn interviewing techniques, discover how to organize complicated material, and cover campus news. Meetings are held with media professionals. Prerequisite: JRN 160; Every Year, All

JRN 263 Broadcast News Writing ( $\mathbf{3}$ cr.) This course introduces students to the fundamentals of writing for the broadcast media in a professional environment. It 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 (3 cr.) Students learn the principles of producing television news packages, which they edit using non-linear editing equipment (learned in JRN 105). All students cover news and sports primarily off campus. The focus is on writing, news judgment, content, interviewing, use of voice and doing standups. Stories can air on the TV newscast that is broadcast live weekly. Prerequisite: JRN 263, JRN 105 or MEP 105; Every Year, All

JRN 305 Reporting for the Web ( $\mathbf{3} \mathbf{c r}$ ) This course covers the principles and practices associated with researching and producing stories for non-linear, interactive media. Students examine the differences between interactive media and linear media and are required to produce in-depth stories that include textual, audio, video and interactive elements such as polls. Prerequisites: JRN 260 or JRN 263; MEP 105 or JRN 105; Every Year, All

JRN 311 Advanced Reporting for Television (3 cr.) In this course, students build on the skills learned in JRN 291 to 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 360 Public Affairs Reporting (3 cr.) Students cover news off the campus, on topics such as local government and education. Prerequisite: JRN 260 or JRN 263; Every Year, All

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 363 Computer-Assisted Reporting (3 cr.) This course presents an introduction to online news-gathering techniques and strategies and the use of spreadsheet and relational database software programs to enhance newsgathering efficiency and reporting accuracy. Students combine basics of news feature writing and computer-
assisted reporting skills to produce publishable news features and magazine articles. Prerequisite: JRN 260 or JRN 263; Every Year, All

JRN 365 Editing for Print ( $\mathbf{3}$ cr.) Students learn the basics of editing newspapers, magazines and online text, with emphasis on copyediting, headline writing, page composition and story packaging. Prerequisite: JRN 260; Every Year, All

JRN 391 Producing and Presenting the News (3 cr.) Students participate in a weekly live newscast in a team environment with students from other journalism and media production courses. They write and produce newscasts, using newsroom producing software, the Associated Press wire service and CNN feeds. The students anchor the news, weather, and sports. Newscasts are recorded for critique and for student portfolios. Prerequisite: JRN 311; Every Year, All

JRN 395 Broadcast Performance ( $\mathbf{3}$ cr.) This course explores the variety of skills required to communicate effectively through radio and television, including performance techniques, creativity, writing and analytical skills associated with newscasts, broadcast interviews and editorials, and commercials. Prerequisites: JRN 160, JRN 263; Every Year, All

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 Writing for Magazines ( $\mathbf{3}$ cr.) Students learn to write in-depth pieces suitable for publication in a quality magazine or as a special project for a newspaper or Internet site. Assignments are based on student proposals. Emphasis is placed on gathering information, conducting interviews and organizing the material into a coherent and interesting package. Prerequisite: JRN 260; Every Year, All

JRN 495 Advanced Reporting for Print ( $\mathbf{3}$ cr.) This class, the capstone for students in the print journalism sequence, stresses individual enterprise reporting, in which students plan, report, write and produce stories that can become part of a portfolio of clips for internships and jobs. Faculty members advise and coach students and help them edit their stories. The course emphasizes development of sources, investigative news-gathering techniques and interpretive writing. Prerequisites: JRN 260, JRN 365; Every Year, All

JRN 496 Producing and Presenting the News (3 cr.) In this course, the capstone for the broadcast journalism sequence, students participate in a weekly live newscast in a team environment with students from other journalism and media production courses. They write and produce newscasts, using newsroom producing software, the Associated Press wire service and CNN feeds. The students anchor the news, weather, and sports. Newscasts are recorded for critique and for student portfolios. Prerequisite: JRN 311; Every Year, All

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Courses offered as needed
JRN 300 Special Topics in Journalism (3 cr.)
Prerequisite: JRN 160
JRN 499 Independent Study (1 cr.)
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## Latin-American Studies (LAS)

LAS 201 Introduction to Latin America (PO 221) (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; Every Year, Spring

## LAS 204 Health Care Management for Latino Clients

( 3 cr.) This elective course provides a theoretical framework, an epidemiological profile, and specific strategies to enhance delivery of care for the Latino client. Prerequisite: SP 102; Every Year, Spring

## LAS 223 Latin American Societies and Cultures

(AN 223) (3 cr.) The course explores the diversity of Latin American cultures and societies throughout North and South America as well as in the Caribbean, and traces the history of European and African encounters with the indigenous peoples living in the New World. An emphasis is placed on the events and forces that influence today's cultural and social traditions. Prerequisite: AN 101 or SO 101; Every Year, Fall

LAS 331 Topics in Comparative Government (3 cr.) This course provides an in-depth examination of government institutions and practices, social and political forces and movements, and cultural traditions in particular regions of the world, such as Asia, Africa, Middle East, Latin America and Europe. Prerequisite: LAS 201, PO 101 or PO 131; Every Year, All

LAS 341 Market Entry and Management Practices in Latin American Markets ( $\mathbf{3} \mathbf{c r}$.) The deregulation and privatization of state enterprises all over Latin America
offer great opportunities for multinational enterprises and private entrepreneurs to enter the region. This course attempts to familiarize students with various modes of entry to Latin American markets. In addition to entry mode strategies, students also learn about maintenance and withdrawal strategies as well as management practices in Latin America. Prerequisite: LAS 201 or IB 201; Every Year, Fall

## LAS 350 Latin America Through Anglo Eyes

(MSS 350) ( 3 cr .) This course explores the ways in which English-speaking media identify and interpret Latin America and its issues. Readings draw from media theory and from examples of coverage found in the U.S. media. Guest speakers help draw out the differences between coverage and reality, and help us explore the consequences for misunderstandings. Prerequisite: MC 101 or LAS 201; Every Year, Spring

LAS 385 Conservation Biology (BI 385) (3 cr.) This course presents an introduction to the main concepts of modern conservation practices. Topics include extinction and endangered species; development and protection of natural area; integration of conservation measures in light of economic realities. The course involves lectures on campus and field studies in Costa Rica in lieu of the normal laboratory. Prerequisite: BI 101 or BI 105; Every Year, Fall

LAS 450 The Latin American World (3 cr.) This capstone course focuses on the dynamics of change and continuity in Latin America. The course analyzes issues of identity and diversity, economic and political globalization, the process of democratization, cultural changes, social problems and environmentalism. The course examines how the Latin American culture is changing as a result of globalization and how it influences other cultures including that of the United States. Every Year, Spring

LAS 488 Internship ( $\mathbf{3} \mathbf{~ c r}$.) Students in the program are encouraged to participate in an internship with a Latin American organization or an American organization doing business with Latin America. The internship adheres to standard Quinnipiac University regulations and procedures regarding internships. Prerequisite: LAS 201; Every Year, All

LAS 498 Study Abroad (3 cr.) Under the guidance of a faculty member, students minoring in Latin American Studies may elect to go to Latin American country(ies) and focus on a specialized topic(s) for a short term (summer or winter) in a host institute in Latin America. Such study abroad programs adhere to standard Quinnipiac University regulations and procedures set by the Office of International Education. The study abroad experience is tailored to students' career needs. The student may also choose a full semester abroad in a Latin American university. Prerequisite: LAS 201; Every Year, All

Courses offered as needed<br>LAS 254 Colonial Latin America (HS 254) (3 cr.)<br>Prerequisite: HS 131 or HS 111

LAS 300 Human Rights and Transition to Democracy ( 3 cr.) Prerequisite: LAS 201

## Law (LW)

LW 121 Business Law and Society ( $\mathbf{3} \mathbf{~ c r}$.) 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. 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. Prerequisite: LW 121; Every Year, Spring
## Legal Studies (LE)

LE 100 Orientation to Legal Studies (1 cr.) This course introduces students to the legal studies program and to important issues facing paralegals, attorneys and law office personnel. Issues to be covered include legal ethics and authorized practice, the practice of law, functions of the paralegal and the court system. The course must be taken during the student's freshman or sophomore year. This course is graded on a pass/fail basis. Every Year, Spring

LE 101 (UC) Introduction to the American Legal System ( $\mathbf{3} \mathbf{~ c r . ) ~ S t u d e n t s ~ a r e ~ i n t r o d u c e d ~ t o ~ t h e ~ A m e r i c a n ~ s y s - ~}$ tem of law and legal structure, including basic legal concepts, the structure of the American court system, legal theory and procedure, and gain an overview of several areas of law. Every Year, All

LE 115 Criminal Law ( $\mathbf{3} \mathbf{~ c r}$ ) 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 208 Legal Research (4 cr.) This course introduces the student to the law library and computerized legal research databases. Students learn how to move from a fact situation through finding the sources of legal authority to applying the law to the specific facts. Prerequisite: LE 101; Every Year, Fall and Spring

LE 210 Legal Writing (3 cr.) In the development of legal writing skills, emphasis is on precision and clarity in writing, and on legal citation and format. Students draft letters and memoranda of law. Prerequisites: LE 208, EN 101, EN 102; Every Year, Fall and Spring

LE 260 Trial Techniques ( $\mathbf{3} \mathbf{~ c r}$.) 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 ( $\mathbf{3}$ 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. Prerequisites: LE 100, LE 101, LE 208; Every Year, Fall

LE 302 Civil Procedures II ( $\mathbf{3}$ 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 310 Elder Law (GT 310) ( $\mathbf{3}$ cr.) Students are introduced to topics in the law affecting older persons, such as government benefit programs (Social Security, Medicare, Medicaid), nursing homes, incapacity. Prerequisite: SO 263, GT 263 or LE 208; Every Other Year, Fall

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. Prerequisite: LE 208; 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: LE 210, LE 301; Every Other Year, Spring

LE 315 Wills, Probate and Estate Administration (3 cr.) Legal concepts and statutes pertaining to wills and pro-
bate are examined, with special emphasis on preparation of forms necessary in administration of an estate. Prerequisite: LE 208; Every Other Year, Spring

## LE 320 Land Transfer and Closing Procedures ( $\mathbf{3}$ 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. Prerequisite: LE 208; Every Year, Fall

LE 325 Alternate 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 one. Students role play in the various methods to more fully understand the mechanisms of alternative dispute resolution. Prerequisites: LE 101, LE 208; 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. Prerequisite: LE 208; Every Other Year, Fall

LE 333 Law for Life (3 cr.) For non-legal studies majors, this course is a practical, hands-on survey of law for everyday living. Topics include buying a home, insurance, forming a business, marriage, employment, wills, taxes and dealing with the judicial system. Every Other Year, Spring

LE 340 The Constitution and the Courts ( $\mathbf{3}$ 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. Prerequisite: LE 208; Every Other Year, Spring

LE 345 Intellectual Property ( $\mathbf{3}$ 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. Prerequisite: LE 208; Every Other Year, Spring

LE 350 Federal Indian Law and Policy ( $\mathbf{3} \mathbf{c r}$.) 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 also are covered. Prerequisite: LE 208; Every Other Year, Spring

LE 480 Legal Internship I (4 cr.) Supervised placement in a law firm, agency or corporate legal department as a legal worker for 10 hours a week along with a weekly seminar where students meet to talk about their work, their roles, and challenges, of being a non-lawyer in the legal profession, and to work on various skills necessary for an advocate. Professional responsibility and ethics for paralegals are covered specifically. For majors only. Prerequisite: LE 302; Every Year, Fall

LE 481 Legal Internship II (4 cr.) This internship involves supervised placement in a law firm, agency or corporate legal department as a legal worker for 10 hours a week along with a weekly seminar where students meet to work on various skills necessary for an advocate, to talk about their work, their roles and challenges, of being a nonlawyer in the legal profession. Employment search skills, professional responsibility and ethics for paralegals are covered. For majors only. Prerequisite: LE 480; Every Year, Spring

Courses offered as needed
LE 250 Gender and the Law (WS 250) (3 cr.)
Prerequisite: LE 101 or WS 101

## Management (MG)

MG 203 Organizational Theory ( $\mathbf{3}$ cr.) This course examines both the micro and macro perspectives. The micro perspective explores how personal and organizational characteristics interact to affect job performance and attitudes. The macro perspective examines how the organization's structure and external environment interact to affect its performance and member satisfaction. Students are expected to conduct an in-depth analysis of a real-world organization. Prerequisite: MG 210; Every Year, Fall and Spring

## MG 210 Essentials of Management and Organizational

Behavior (3 cr.) This course provides an introduction to the role management plays in large and small organizations. Current theories and practices in the application of behavioral sciences to the management of individuals and groups within organizations are considered. An emphasis is placed on the development of managerial perspective and skills. Every Year, All

MG 211 Operations Management (3 cr.) This course provides an introduction to the concepts and processes underlying operations management. The course emphasizes how quantitative models and methods can be used
to enhance the decision-making process. Operations managers transform human, physical and technical resources into goods and services. Topics include operations systems design, capacity planning, job scheduling, inventory control, project planning, facilities location and layout, total quality management, and forecasting. Prerequisite:
EC 271; Every Year, All
MG 222 Ventures in Social Enterprise (3 cr.) Drawn from the public service dimension of the university mission, students in this course are guided in the conception, design and execution of experiential service learning projects in the nonprofit sector of the surrounding community. Students apply business concepts and tools to address social issues that comprise the missions of area nonprofit organizations. In the process they learn the functioning of the nonprofit organization and its importance to our free enterprise system. For sophomores and juniors. Every Year, Fall and Spring

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 Organizational and Group Processes ( $\mathbf{3} \mathbf{~ c r . )}$ The basic issues of group process are considered including: content versus process; dependence, independence and interdependence; group structure; norms; individual and group roles; conflict; expectations and trust; morale, and team defenses. Students study the characteristics of effective teams and how to build productive teams. The challenges, opportunities and problems of working with executive teams are experienced within the course structure. Prerequisite: MG 210; Every Year, Fall and Spring

MG 315 Self Management ( $\mathbf{3} \mathbf{~ c r}$.) 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 self-management; 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 intelli-gence. Lectures, case studies, personal assessments and small group activities are the essential methodology for this course. Prerequisite: MG 210; Every Other Year, Fall

MG 321 Business Decision Making ( 3 cr.) This course introduces students to analytical methods of decision making in organizations. Its focus is on management science techniques, linear programming, simulation, game theory and PERT. Emphasis is on problem formulation and interpretation rather than a mere solution methodology perspective. Behavioral issues associated with decision making also are explored. Prerequisites: MG 210, MG 211, MG 240; Every Year, Fall and Spring

MG 332 Achievement, Risk Taking and the Entrepreneur ( $\mathbf{3} \mathbf{~ c r}$.) This course examines the personal nature of an entrepreneur, focusing on two critical variables, achievement motivations and level of risk taking. Through interviews, case studies and personal analysis, students not only understand the personal traits' contributions to entrepreneurs' success but also assess their own personal predispositions as related to entrepreneurial behavior. Prerequisite: MG 210; Every Year, Fall and Spring

MG 333 Managerial Thought ( 3 cr .) This course presents a study of the development of managerial thought and theory. The assumptions and writings of such pioneers as Taylor, Fayol, Mayo, Maslow, Churchman, Simon and others are presented. Attention is given to the times and conditions under which these approaches were developed, the distinction between advocacy and scientific approaches, and the ethical, political and social bearings of thought and theory on management practice. Prerequisite: MG 210; Every Year, All

MG 340 Supply Chain Management ( 3 cr.) This course provides an introduction to the strategies, concepts, and techniques of supply chain management. Students examine a firm as a complete business operating within an integrated network of suppliers, customers, and logistics providers. Topics include the relationships between profitability, supplier management, quality, and logistics; the management of incoming supplies and services; storage and delivery of products and services to customers; and sustainability in supply chain management. Every Year, Fall

MG 371 Small Business Marketing ( $\mathbf{3}$ cr.) This course applies the principles of marketing to the process of developing a marketing plan and strategy for the small business. How that plan integrates into the overall business plan and how it applies to small business operations and strategy implementation are explored. Further understanding of what personal characteristics and insights the entrepreneur and small business owner must cultivate to be successful in marketing are learned through case studies of successful contemporary entrepreneurs. Every Year, Fall

MG 372 Entrepreneurial Finance (3 cr.) Entrepreneurial finance addresses the myriad problems of finance faced by the entrepreneur and by new and emerging businesses. The sources of capital-bootstrap, debt and equity-each 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. Prerequisites: AC 102, FIN 201; Every Year, Spring

MG 401 Project Management (3 cr.) The initiation, planning and execution of a project is one of the most demanding tasks required of managers. This course introduces students to the challenges of project management with exposure to critical behavioral issues such as intraand inter-group collaboration, resource allocation and time management. They are expected to carry out a semesterlong project that requires extensive group interaction. In addition to the behavioral issues, the course examines management science techniques (PERT/CPM) that facilitate project planning and control. Every Year, Fall

MG 402 Management Senior Seminar (3 cr.) This seminar is the capstone course for all management majors. Students individually and in teams integrate their previous course work through the analysis of a variety of business problems and the development of action plans to address those problems. Emphasis is placed on the use of analytical techniques and the effective presentation of proposed courses of action. For seniors only. Prerequisites: MG 210, MG 211; Every Year, Spring

## MG 433 Small Business Management and

 Entrepreneurship (3 cr.) This course introduces students to the world of entrepreneurship and small business management. Major components include selfassessment of entrepreneurial capabilities and the completion of a comprehensive business plan that provides the student with a step-by-step process to actually create a business. Successful small businesses and entrepreneurs are studied. Prerequisite: MG 332; Every Year, Fall and SpringMG 470 Entrepreneurial Creativity and Implementation (3 cr.) The course provides an in-depth study of the case histories of great entrepreneurs in articulating their inspiration as concepts, transforming the concepts into business opportunities and then implementing them as business ventures. For juniors and seniors. Prerequisites: MG 210, MG 211; Every Year, Fall

MG 488 Management Internship (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 dean is
required. For juniors and seniors. This course is graded on a pass/fail basis. Every Year, All

Courses offered as needed
MG 255 Human Resource Management (3 cr.)
Prerequisite: MG 210
MG 260 Power and Politics of Leadership (3 cr.) Prerequisite: MG 203
MG 311 Labor Relations ( 3 cr.) Prerequisites: LW 121, MG 203
MG 322 Computer-Aided Production Planning ( 3 cr .) Prerequisite: MG 321
MG 331 Quality Management (3 cr.) Prerequisite: MG 211
MG 350 Organizational Development (3 cr.) Prerequisite: MG 203
MG 370 Advanced Team Development ( 3 cr.) Prerequisite: MG 301
MG 390 Benchmarking: Concepts, Skills and Application (3 cr.) Prerequisites: MG 203, MG 321
MG 392 Business Ethics (3 cr.)
MG 460 Concepts in Strategy and Policy ( 3 cr.)
MG 471 Business Plan Competition (3 cr.)

## 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 (3 cr.) 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, Fall and Spring

MK 312 Advertising ( $\mathbf{3} \mathbf{c r}$.) 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 316 Advertising Design for New Media and Technology ( $\mathbf{3} \mathbf{c r}$.) This course focuses on the step-by-step development of high-impact advertising campaigns that are strategic, creative and integrated across media and communications channels. The class builds on the fundamental principles covered in previous classes, and combines this base of theory with practical hands-on experience and proven best practices for making great ads. Topics include brand design and development, competitive positioning, targeting, advertising strategy, composition and design, color theory, copywriting and strategies for delivering messages in a complex and evolving media/technology landscape. Special attention is given to the new media environment and engaging consumers online and through mobile devices. Prerequisite: MK 312 or MK 332; Every Year, Fall and 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, Fall and Spring

MK 325 Interactive Digital Advertising (3 cr.) This course examines multiple digital media including TV, the Internet and mobile applications to analyze how the use of multimedia have changed the advertising and marketing strategies. The focus is on concepts, terminologies and theories that help students develop effective digital advertising strategies and build a strong foundation for their future in a digital driven media environment. 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 and Spring

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, Fall and Spring

MK 340 Database Marketing ( 3 cr .) This course is designed to explore the marketing applications of database information, with particular emphasis on the firm's overall marketing strategy. Students examine the tools and theories that permit useful information to be derived from the growing number of information databases. Major types of databases to be examined include: scanner databases, direct marketing databases, geographic information databases, and Internet databases. Prerequisite: MK 201; Every Year, Spring

MK 355 Services Marketing ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ e x a m i n e s ~}$ 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, Spring

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. Prerequisites: EC 271, MK 201; 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, Fall and Spring

MK 401 Seminar in Marketing Strategy (3 cr.) This capstone course 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 450 Marketing History ( $\mathbf{3} \mathbf{~ c r}$.) 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 ( $\mathbf{3} \mathbf{c r}$.) 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 will be covered as will the planning process itself. A mix of advertising, promotions and integrated communications case studies, simulations and term projects will be 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 352 Retail Management (3 cr.) Prerequisite: MK 201

## Mathematics (MA)

MA 100 Pre-College Mathematics (3 cr.) This review of basic arithmetic and algebraic skills and an introduction to mathematical methods is designed so that the entering student with little or no mathematics background can attain 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. Students who have successfully completed MA 100 may challenge the MA 107 final examination. 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, All

MA 107 College Algebra ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ r e v i e w ~ o f ~}$ fundamentals of algebra covers equations and inequalities as well as linear, quadratic, rational, exponential and logarithmic functions. This class is designed for students who need to improve their algebraic skills to succeed in calculus. Prerequisite: Placement or MA 100. Every Year, All

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.

MA 118 (UC) Introductory 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: Placement or MA 107. Every Year, All

MA 140 (UC) Pre-Calculus (3 cr.) This course presents a study of the elementary functions: polynomial, rational , exponential, logarithmic and trigonometric. A graphing calculator is required; the TI-83 is recommended. Every Year, All

MA 141 (UC) Calculus of a Single Variable I (3 cr.) Students are introduced to functions and graphs, limits and continuity, derivatives, applications of derivatives, antiderivatives, and the definite integral. A graphing calculator is required; the TI-83 is recommended. Prerequisite: Grade of C or better in MA 140 or placement. Every Year, All

## MA 142 (UC) Calculus of a Single Variable II (3 cr.)

 Students are introduced to techniques of integration, numerical integration, applications of the definite integral, improper integrals, differential equations, infinite series, parametric equations and polar coordinate system. A graphing calculator is required; the TI-83 is recommended. Prerequisite: Minimum grade of C- in MA 141 or placement; Every Year, AllMA 205 (UC) Introduction to Discrete Mathematics ( 3 cr .) This course introduces students to basic concepts and structures of discrete mathematics. Topics covered include propositional and predicate logic, sets and set operations, functions and function machines, binary relations, graphs and trees, and basic number theory. Applications include computer science, biology, social sciences, law and the physical sciences. Prerequisite: MA 140 or MA 141; Every Year, All

## 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. Descriptive procedures, confidence intervals, hypothesis testing, regression and correlation, analysis of variance, non-parametric techniques are introduced.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 have a satisfactory score on the placement test and possess a basic knowledge of baseball. Every Year, All

MA 229 (UC) Linear Algebra ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ c o v e r s ~}$ vector spaces, systems of linear equations, linear transformations, determinants and matrix algebra. Every Year, Spring

MA 241 Calculus of Several Variables (3 cr.) Students are introduced to differential calculus of real-valued and vector-valued functions on $n$-space. Prerequisite: Minimum grade of C- in MA 142. Prerequisites: MA 142, MA 229; Every Year, Fall

MA 242 Integral Calculus And Differential Equations ( 3 cr.) This course covers multiple integrals, line and surface integrals and introduces differential equations of order one. Prerequisite: MA 241; Every Year, Spring

MA 275 (UC) Biostatistics ( $\mathbf{3} \mathbf{c r}$ ) 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. 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 forecastingtopics that are important for actuaries. Students are required to analyze real data sets using EXCEL, SAS, SPSS or similar computer programs. Prerequisite: MA 141; Every Year, Spring

MA 305 Applied Discrete Mathematics ( 3 cr.) Students are introduced to basic structures of discrete mathematics, sets, combinatorics, relations and digraphs, trees, Boolean algebra and logic, and their applications to computer science. Prerequisite: MA 229; Every Year, Fall

MA 318 Cryptography (MA 318) ( $\mathbf{3}$ 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 loga-
rithms, hash functions and digital signatures. Additional topics may include the Advanced Encryption Standard (AES), digital cash, games, zero-knowledge techniques, and information theory, and topics chosen by the students together with the instructor for presentations. Prerequisite: MA 229, CSC 215 or ISM 301; Every Other Year, Spring

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. They 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; Every Other Year, Spring

MA 321 Abstract Algebra ( $\mathbf{3}$ cr.) This course presents a study of topics selected from groups, normal groups, rings, ideas, integral domains, fields, polynominal-rings and isomorphism theorems. Prerequisites: MA 229, MA 305; Every Other Year, Spring

MA 341 Advanced Calculus I (3 cr.) The concepts of limit, continuity, differentiation and Riemann integration are studied in depth. Also considered are sequences and series, improper integrals, and Riemann-Stieltjes Integral. Prerequisites: MA 142, MA 305; Every Other Year, Spring

## MA 371 Mathematical Statistics and Probability I (3

 cr.) This course covers foundations of probability; selected probability distributions; moments; collections, classification, analysis, interpretation and presentation of empirical frequency distributions; statistical inference; sampling theory; applications. Prerequisites: MA 142, MA 229; Every Other Year, FallMA 372 Mathematical Statistics and Probability II (3 cr.) Students are introduced to general principles for testing hypotheses and for estimation; small sample distributions; regression and correlation; nonparametric techniques; design of experiments and analysis of variance; and other methods. Prerequisite: MA 371; 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 229; Every Other Year, Fall

MA 441 Complex Variables (3 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, MA 305; 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 299 Independent Study in Mathematics ( 3 cr.)
MA 365 Ordinary Differential Equations (3 cr.)
Prerequisite: MA 242
MA 399 Independent Study in Mathematics ( 1 cr.) MA 400 Special Topics in Math ( 3 cr .)
MA 421 Advanced Algebra ( $\mathbf{3} \mathbf{~ c r . ) ~ P r e r e q u i s i t e : ~ M A ~} 321$
MA 451 Elements of Point-Set Topology ( 3 cr .)
Prerequisite: MA 341
MA 499 Independent Study in Mathematics ( $\mathbf{3} \mathbf{~ c r . ) ~}$

## Media Production (MEP)

MEP 105 Video Essentials: News or Video Essentials: Sports (FVI 105) (3 cr.) Available only to non-FVI majors, this course introduces the fundamentals of news gathering or sports reporting including writing, preproduction planning, basic single-camera field audio and video acquisition and editing. There is an emphasis on evaluating the effectiveness and success of work undertaken. Students in FVI must take FVI/MEP 210 and 212 as their introductory production courses. Every Year, All

MEP 205 Media Design ( 3 cr ) The principles and practices associated with the creation of visual design elements for media are surveyed, including interface composition, content display, typography, page design and layout; and imaging for the World Wide Web, newspapers and brochures, among other display mechanisms. Every Year, All

MEP 206 Publishing for Interactive Media (3 cr.) This course introduces students to the technological and creative aspects of posting content for distribution through the Internet. Students learn HTML tagging, non-linear navigation strategies and designs and other key factors that go into the development of professionally created interactive content. Technological literacy is not presumed. Every Year, Fall

## MEP 210 Fundamentals of Media Production I

(FVI 210) (3 cr.) This first phase of a two-semester course gives students a thorough grounding in the basic tech-
niques of audio and video storytelling. Students learn the theory and practice of audio recording and editing, followed by the fundamentals of lighting, composition and visual storytelling. The basics of remote video production and digital editing are covered. This is a hands-on course that requires students to produce a number of media projects throughout the semester. This course is for students majoring in FVI only. Sophomore status required. Prerequisite: MSS 101; Every Year, All

## MEP 212 Fundamentals of Media Production II

(FVI 212) (3 cr.) This second phase of a two-semester sequence builds on the production skills acquired in FVI/MEP 210 and introduces students to the techniques of designing and producing creative and effective audiovisual communications. Students learn to develop creative concepts and to take them from script to screen. Video editing techniques and principles of good composition, structure and program design are emphasized. This course is for students majoring in FVI only. Sophomore status required. Prerequisite: MEP 210; Every Year, All

MEP 310 Creating Interactive Media (FVI 310) (3 cr.) This course introduces students to the technological and creative aspects of posting content for distribution through the Internet and mobile delivery platforms. Students learn HTML tagging, non-linear navigation strategies and designs and other key factors that go into the development of professionally created interactive content. Technological literacy is not presumed. Every Year, Fall

MEP 312 Projects in Interactive Media (FVI 312) (3 cr.) This course focuses on the creation of interactive projects with an emphasis on the integration of content, technology, tools and methods. Students learn to produce works that are meaningful from a user perspective and deliver content with a balanced visual aesthetic. The distribution media for students' projects may include the Internet, CD/DVD, wireless device, computer monitor and/or game console. The concepts covered in this class can be applied to any platform, from screen-based applications to interactive environments. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, Spring

MEP 340 Analysis of the Moving Image (FVI 340) ( 3 cr.) How do we read images? This course explores moving image media-including film, television and the Internet-from a formal and aesthetic perspective. Students learn to think and write critically about images, editing strategies and non-narrative visual arts. Prerequisites: MSS 101, MSS 220; Every Year, All

## MEP 345 Writing and Producing Media (FVI 345)

( $\mathbf{3} \mathbf{~ c r}$ ) 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 junior-level 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 production as they complete a series of projects during the semester, with special emphasis on creative conceptualization, message and writing. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

## MEP 355 Projects in Single-Camera Production

 (FVI 355) ( 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, and narrative production for outside clients including the Connecticut Council on Problem Gambling. The course emphasizes professional production roles, including writing and directing, scheduling and production management, production, post-production, distribution and marketing. Students grapple with issues of visual esthetics, modes of representation and audience reception as they produce individual and/or collaborative projects. Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, AllMEP 372 Scriptwriting (FVI 372) (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: JRN 160; Every Year, All

## MEP 375 Advanced Camera and Lighting (FVI 375)

 ( 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 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 number of projects outside of class. Prerequisite: MEP 345 or FVI 345; Every Year, Spring
## MEP 380 Projects in Audio Production (FVI 380) (3 cr.)

This course offers students an opportunity to develop a number of advanced-level audio projects. Topics and approaches vary and may include one or more of the following: instruction in sound design for television and motion pictures; radio programming in various genres, including news, issues, public affairs, entertainment, and sports; podcasts; audio documentary; oral histories; music production; instructional/educational programming; and radio drama. Prerequisites: MEP 210, MEP 212; Every Year, All

MEP 390 Projects in Multi-Camera Production
(FVI 390) (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 multicamera, 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: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

MEP 392 Post-Production Techniques (FVI 392) (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: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

MEP 393 Animation Techniques (FVI 393) (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: MEP 210 or FVI 210; MEP 212 or FVI 212; Every Year, All

## MEP 410 Game Design and Development (FVI 410)

 ( 3 cr .) This course covers the history, design and development of games, from popular board games to media-rich computer games. Interactive narrative and game strategy are stressed. Working in teams, students learn how to invent a game, design it and take it through the stages of development. Prerequisite: Permission of instructor. Every Other Year, FallMEP 450 Senior Seminar (FVI 450) (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. Every Year, All

MEP 490 Internship (FVI 490) (3 cr.) This internship consists of jointly supervised fieldwork with a cooperating institution or corporation. The goal is to motivate the intern toward professional growth through observation and participation. The course also provides students with the opportunity to meet active professionals and to stimulate career planning. Internships must be approved by the internship program director in accordance with school regulations. Junior/senior status is required. This course is graded on a pass/fail basis. Every Year, All

MEP 494 Senior Project Colloquy (FVI 494) (1 cr.) This required 1 -credit colloquy must be taken in the semester prior to the student's undertaking of the Senior Project. Meeting collectively and individually, all fourth-year FVI students consult with the FVI faculty several times during the term to identify and hone the presentation of their required individual Plan for Senior Project. Prerequisite: senior year standing in FVI. Every Year, All

MEP 495 Senior Project (FVI 495) (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 faculty and staff from the School of Communications FVI program, and give graduating seniors important portfolio material. Every Year, All

Courses offered as needed
MEP 305 Projects in Interactive Media ( 3 cr.) Prerequisites: MEP 210, MEP 212
MEP 397 Summer Production Project (FVI 397) (4 cr.) Prerequisites: MEP 210 or FVI 210; MEP 212 or FVI 212
MEP 399 Independent Study (FVI 399) (1 cr.)
MEP 405 Creating Interactive Media ( 3 cr.) Prerequisite: MEP 205

## Media Studies (MSS)

MSS 101 Introduction to Media Communications (3 cr.) This course introduces students to the structure, function and social impact of the communications media. Individual media industries are examined in terms of their historical development and the ways they inform, entertain and influence media consumers. The course also surveys issues related to media ownership, regulation, ethics, diversity and globalization. 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, Fall and Spring

MSS 150 Speech As Communication (3 cr.) MSS 150 presents fundamental principles and methods of selecting, analyzing, evaluating, organizing and developing speech material. Students deliver, listen to and critically analyze extemporaneous speeches. Every Year, Fall and Spring

MSS 190 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. Every Year, Fall and Spring

MSS 220 U.S. Media History ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ i s ~ a ~ s u r - ~}$ vey of media history. Students observe how media industries have developed and changed over time and study the relationships between various industries. The historical, political, economic and social contexts in which media have operated also are discussed. Particular attention is given to major events in media history, and how those events have shaped the contemporary media. Finally, students are introduced to archival research and have an opportunity to examine historical artifacts, including photographs, newspapers, magazines, books, newsreels, movies, records, tapes, etc. Prerequisite: EN 102; Every Year, All

MSS 220H Honors U.S. Media History (3 cr.) This honors course is a survey of media history. Students observe how media industries have developed and changed over the years and study the relationships between various industries. The historical, political, economic and social contexts in which media have operated also are discussed. Particular attention is given to major events in media history, and how those events have shaped the contemporary media. Finally, students are introduced to archival research and have the opportunity to examine historical artifacts, including photographs, newspapers, magazines, books, newsreels, movies, records, tapes, etc. Honors students only. Prerequisite: EN 102; Every Year, All

MSS 231 Media and Society ( $\mathbf{3} \mathbf{c r}$.) This course examines the role of media in contemporary society. The objectives for this course are twofold: to foster an understanding of the social context within which mass 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 examine how different cultural, political and economic structures create
constraints and leave open the possibilities for media practitioners and audiences. Prerequisites: MSS 101, JRN 160; Every Year, Spring

MSS 307 The Holocaust (HS 307) (3 cr.) Using historical texts, literature and film, this survey covers the systematic destruction of 10 million human beings at the hands of the Third Reich. Prerequisite: HS 111, HS 112, HS 132, HS 131 or MSS 101; Every Year, Fall

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, 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 or MSS 101; JRN 160, MSS 220; Every Other Year, Spring

MSS 331 Media Influence ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ o v e r v i e w ~ o f ~ c o n - ~}$ temporary approaches to media analysis examines media production, content and audiences with attention to political, economic and cultural contexts. It also focuses on a critical examination and interpretation of media content and its social implications. This course helps students to develop a greater understanding of the theories that guide media research by reading the germinal texts in media theory, analyzing the development of various research traditions and assessing the future of media studies research. Prerequisite: MSS 231; Every Year, Spring

MSS 332 Research Methods ( 3 cr .) The course introduces students to a variety of media research methods through readings and hands-on exercises. The goals are to help students become knowledgeable and critical readers of social research produced in both applied (for example, public opinion polls, marketing research) and academic settings and to teach students fundamental aspects of conducting media research and leading edge strategies for effectively communicating research findings. Topics include participant observation, interviewing, focus groups, content analysis, survey research, statistics and research ethics. Junior status required. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

MSS 340 Communications Law and Ethics (3 cr.) This course is an investigation of the history and present status of the statutory and case law under which the communications media are regulated. Attention is given to First Amendment guarantees, libel, privacy, journalist's privilege, the free press/fair trial controversy, pornography,
copyright, media regulation and related ethical issues/professional constraints. Selected cases are highlighted as examples of opinions handed down by state and federal courts along with case study analyses of various ethical dilemmas. Students discuss personal and professional practices, allowed under the law, but questionable given various ethical principles. Junior status in communications or permission of instructor required. Prerequisites:
MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring
MSS 345 Media Audiences (WS 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 indepth analysis of fan cultures. Prerequisite: junior standing and either WS 101 or MSS 101, JRN 160 and MSS 220. Every Other Year, Fall

MSS 346 Global Communication (3 cr.) 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 ( $\mathbf{3} \mathrm{cr}$ ) 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. Prerequisites: MSS 101, JRN 160, MSS 220; 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? This course is specifically designed for students interested in sports journalism, production and/or promotion. 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 perspec-
tives in media studies. Topics vary each term, focusing on the different media and current literature in the field. Senior status is required. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

MSS 490 Internship ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ i n t e r n s h i p ~ c o n s i s t s ~ o f ~}$ jointly supervised fieldwork with a cooperating institution or corporation. The goal is to motivate the intern toward professional growth through observation and participation. The course also provides students with the opportunity to meet active professionals and to stimulate career planning. Internships must be approved by the internship program director in accordance with school regulations.
Junior/senior status is required. This course is graded on a pass/fail basis. Every Year, All

MSS 495 Media Influence ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ o v e r v i e w ~ o f ~ c o n - ~}$ temporary approaches to media analysis examines media production, content and audiences with attention to political, economic and cultural contexts. It also focuses on a critical examination and interpretation of media content and its social implications. This course helps students to develop a greater understanding of the theories that guide media research by reading the germinal texts in media theory, analyzing the development of various research traditions and assessing the future of media studies research. Senior status required. Prerequisite: MSS 231; Every Year, Spring

Courses offered as needed
MSS 200 Special Topics (3 cr.)
MSS 299 Independent Study ( 1 cr.)
MSS 300 Special Topics (3 cr.)
MSS 305 The Vietnam Era: Images and Reality (HS 305) ( 3 cr.) Prerequisite: HS 111, HS 112, HS 131, HS 132 or MSS 101
MSS 320 History and Social Impacts of Communication Technologies ( 3 cr .) Prerequisites: MSS 101, JRN 160, MSS 220
MSS 344 Popular Culture and the Media (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 ( $\mathbf{3} \mathbf{~ c r}$.) Prerequisites: MSS 101, JRN 160, MSS 220
MSS 399 Independent Study ( 1 cr.)
MSS 400 Special Topics (3 cr.)
MSS 491 Research Project (3 cr.) Prerequisites: MSS 331, MSS 332
MSS 499 Independent Study (1 cr.)

## Music (MU)

MU 130 (UC) Understanding Music (3 cr.) In this music appreciation course, students study elements of musical forms and styles together with necessary histori-
cal background. Frequent direct listening is involved. Every Year, All

MU 140 Applied Guitar for Generalists (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 Quinnipiac University Singers (1 cr.) This workshop in music is devoted to the study, singing and presentation of choral music from early Renaissance to music literature of the 20th century, both sacred and secular. As a choral ensemble, the group represents the university in cultural affairs and participates in local convocations and special programs. Every Year, All

MU 191 Hamden Symphony Orchestra at Quinnipiac ( 1 cr.) This workshop in music is with the Hamden Symphony Orchestra. Students who play violin, viola, cello or string bass can earn academic credit by joining this fine regional orchestra rehearsing and performing on campus. Three concerts are presented on campus throughout the academic year-one in the fall and two in the spring semester. Every Year, All

MU 194 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. Every Year, All

MU 210 History of Musical Drama: From Opera to Broadway (3 cr.) This course is a survey of the history of music in theatrical productions from the beginning of opera in late 16th-century Italy to light opera to modern opera and musicals. Students examine selected works against the background of a changing cultural, aesthetic and political world. Prerequisite: MU 130; Every Year, Fall

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. Prerequisite: MU 130; Every Year, All

MU 213 (UC) Music of the 20th Century ( 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 Applied Guitar (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 Music Theory II ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ s t u d i e s ~ t h e ~}$ 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 Applied Guitar for Minors, Advanced ( $\mathbf{3} \mathbf{~ c r . )}$ 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. Prerequisite: MU 240; Every Year, Spring

Courses offered as needed
MU 299 Independent Study ( 3 cr.)
MU 399 Independent Study ( 3 cr.)

## Nursing (NU)

NU 301 Alterations in Holistic Integrity of Individuals I ( $\mathbf{3} \mathbf{~ c r}$ ) This course introduces holistic theory as it applies to nursing. Emphasis is placed on activities that foster skill in the assessment of holistic health states and on nursing interventions that support and protect these states. These activities are aimed at strengthening and promoting holistic integrity. Focus is on individuals of all ages in diverse care settings. Every Year, Fall and Summer

NU 301H Alterations in Holistic Integrity of Individuals I Hospital Lab (2 cr.) This lab must be taken with NU 301. It is composed of eight hours in a clinical practice setting. Every Year, Fall and Summer

NU 301L Alterations in Holistic Integrity of Individuals I Lab ( $\mathbf{0} \mathbf{~ c r}$.) This lab must be taken with NU 301. It is composed of two hours in the clinical skills laboratory. Every Year, Fall and Summer

## NU 302 Alterations in Holistic Integrity of Families I

( 3 cr ) This course considers the application of the concepts of holistic nursing theory to childbearing and childrearing families experiencing alterations in holistic integrity. Alterations related to the developing family unit including role, structure, composition and patterns of relating are explored. Every Year, Spring and Summer

NU 302H Alterations in Holistic Integrity of Families I Hospital Lab (2 cr.) This lab must be taken with NU 302. It is composed of seven hours in a clinical practice setting. Every Year, Spring and Summer

NU 302L Alterations in Holistic Integrity of Families I Lab ( $\mathbf{0}$ cr.) This lab must be taken with NU 302. It is composed of two hours in the clinical skills laboratory. Every Year, Spring and Summer

NU 303 Alterations in Holistic Integrity of Individuals II ( 3 cr ) This course considers the application of concepts of holistic nursing in the provision and management of care of persons experiencing alterations in holistic integrity. Emphasis is on planning and development of actual and potential nursing diagnoses with appropriate nursing strategies. Every Year, Spring and Summer

NU 303H Alterations in Holistic Integrity of Individuals II Hospital Lab ( 2 cr .) This lab must be taken with NU 303. It is composed of seven hours in a clinical practice setting. Every Year, Spring and Summer

NU 303L Alterations in Holistic Integrity of Individuals II Lab ( $\mathbf{0} \mathbf{~ c r . ) ~ T h i s ~ l a b ~ m u s t ~ b e ~ t a k e n ~ w i t h ~ N U ~ 3 0 3 . ~ I t ~}$ is composed of two hours in the clinical skills laboratory. Every Year, Spring and Summer

NU 304 Alterations in Holistic Integrity Managed in the Community I ( 3 cr .) The basic concepts related to community health and public health nursing are introduced. The student also is introduced to the management of alterations in holistic integrity of individuals and families requiring nursing intervention in the community setting. Every Year, Fall and Summer

NU 310 Theoretical Basis for Nursing ( $\mathbf{3}$ cr.) The underlying theoretical frameworks of nursing practice are examined. Selected nursing theories, the holistic model and clinical reasoning are explored. Every Year, All

NU 311 Holistic Health Assessment (4 cr.) Students are introduced to the holistic health assessment of individuals across the lifespan. Practice is provided in a laboratory
setting. Prerequisite: completion of the pre-professional nursing component. Every Year, Fall and Summer

NU 311L Holistic Health Assessment Lab (0 cr.) This lab must be taken with NU 311. It is composed of two hours in the clinical skills laboratory. Every Year, Fall and Summer

NU 350 History of Health Care and Modern Nursing ( 3 cr .) This course explores the history of health care and modern nursing from ancient times to current practices in the U.S. Using primary and secondary source documents, students critically examine the social, political and economic forces that have influenced the development of health care and modern nursing. Topics include the evolution of professionalism; gender, race and culture in nursing practice; the effects of technology and war on nursing practice, and the image of nursing within the media and American society. Every Year, Fall

NU 351 Nutrition in Health and Illness ( $\mathbf{3} \mathbf{~ c r}$.) This elective course is designed for health science students who wish to expand their knowledge of normal nutrition. Students explore the fundamentals of human nutrition in relation to disease prevention and treatment. The course applies practical nutrition concepts as vital 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. Every Year, All

## NU 352 Complementary and Alternative Therapies

 (3 cr.) This elective course is designed for health science students who wish to expand their knowledge of complementary and alternative therapies. Emphasis is placed on the theories, applications, validity and efficacy of a wide range of treatment modalities. Every Year, SpringNU 353 Communication Skills/Clinical Practice (3 cr.) This elective course is designed for health science students who wish to enhance their communication skills to interact more effectively with clients across the lifespan. Emphasis is placed on understanding and practicing various therapeutic methods of communication based on developmental theorists. Topics include family dynamics; life stages of development; and establishing healthy provider-client relationships and boundaries. Every Year, Spring

## NU 354 MidState Medical Center Summer Clinical

 Internship (3 cr.) This elective course is designed for nursing students who have completed the junior year nursing courses. It is composed of a 36 -hour work week which lasts for 10 weeks. The preceptored clinical experience is from June to August. Students are required to receive a passing grade in the preceptorship component, attend campus seminars, and complete written assignments. Students meeting program qualifications earn a salary and are eligible for tuition scholarships. Every Year, SummerNU 356 Pharmacology in Nursing Practice (3 cr.) This elective course provides health science students with additional background in pharmacology. Emphasis is placed on application of pharmacologic knowledge in the prevention and treatment of health problems across the lifespan. Strategies to improve client knowledge and adherence with medication regimens are explored. Prerequisite: BIO 212; Every Year, All

NU 401 Alterations in Holistic Integrity of Families II ( 3 cr .) This course is a continuation of NU 302, building on the concepts of holistic nursing theory to families experiencing alterations in holistic integrity. Alterations related to development from infancy through late adolescence are emphasized in the context of their impact on the child and the family. Every Year, Fall

NU 401H Alterations in Holistic Integrity of Families II Hospital Lab ( 2 cr .) This lab must be taken with NU 401. It is composed of seven hours in a clinical practice setting. Every Year, Fall

NU 401L Alterations in Holistic Integrity of Families II Lab ( 0 cr.) This lab must be taken with NU 401. It is composed of two hours in the clinical practice laboratory. Every Year, Fall

## NU 402 Alterations in Holistic Integrity Managed in

 the Community II ( $\mathbf{3} \mathbf{~ c r}$.) This class presents a study of the management of alterations in the holistic integrity of persons and families requiring nursing intervention in community settings. Principles of public and community health as well as management of care in the home, schools and ambulatory health care settings are stressed. Every Year, SpringNU 402H Alterations in Holistic Integrity Managed in the Community Hospital Lab (2 cr.) This lab must be taken with NU 402. It is composed of seven hours in a clinical practice setting. Every Year, Spring

NU 403 Alterations in Holistic Integrity Related to Behavioral Health ( $\mathbf{3} \mathbf{~ c r}$ ) This course presents a study of the management of alterations in holistic integrity experienced by individuals with behavioral health problems. The course addresses physiological and psychosocial alterations associated with mental illness and nursing strategies designed to help preserve the holistic integrity of behavioral health clients. Students discuss behavioral health problems that can occur throughout the life span. Every Year, Fall

NU 403H Alterations in Holistic Integrity Related to Behavioral Health Hospital Lab (2 cr.) This lab must be taken with NU 403. It is composed of seven hours in a clinical practice setting. Every Year, Fall

NU 404 Alterations in Holistic Integrity of Individuals III ( 3 cr.) The principles and practices of holistic nursing care for individuals with critical alterations in holistic integrity are introduced. Emphasis is on planning and implementing care for individuals of all ages experiencing alterations of a high level of acuity requiring sophisticated technologic care. Every Year, Fall

NU 404H Alterations in Holistic Integrity of Individuals III Hospital Lab ( 2 cr .) This lab must be taken with NU 404. It is composed of seven hours in a clinical practice setting. Every Year, Fall

NU 404L Alterations in Holistic Integrity of Individuals III Lab ( 0 cr.) This lab must be taken with NU 404. It is composed of two hours in the clinical skills laboratory. Every Year, Fall

NU 405 Alterations in Holistic Integrity of Adults IV ( 2 cr .) This capstone experience provides an opportunity to demonstrate synthesis of the complex, clinical concepts essential for professional nursing practice. Emphasis is on the implementation and evaluation of holistic nursing care for individuals and families across the lifespan. Every Year, Spring

NU 405H Holistic Nursing IV Hospital (3 cr.) This course must be taken with NU 405. It is composed of a nine-hour supervised, precepted experience in a variety of health care settings. Every Year, Spring

NU 405L Holistic Nursing IV Lab (0 cr.) This one-hour lab must be taken with NU 405. It provides preparation for the nursing licensure examination and includes content review and computer lab practice simulating the computer adaptive testing format of the NCLEX-RN. Every Year, Spring

NU 410 Introduction to Nursing Research ( $\mathbf{3}$ cr.) Current nursing research is examined and evaluated in relation to its application to nursing practice. Qualitative and quantitative research techniques are explored. Prerequisite: NU 310; Every Year, All

NU 420 Issues and Leadership in the Provision of Holistic Nursing Care (3 cr.) Problems in providing holistic nursing care in a pluralistic society are examined. Discussion focuses on the analysis of trends, issues, management and leadership concepts that are present in a dynamic health care delivery system. Every Year, All

## Courses offered as needed <br> NU 399 Independent Study (1 cr.) <br> NU 450 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 intercession. 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 315 Principles of Anatomy ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ p r e s - ~}$ ents a comprehensive study of structure and movement within the human body including emphasis on functional, muscular activity. This foundation provides the student with knowledge of body functions related to human occupation. Every Year, Fall

OT 315L Principles of Anatomy Lab (1 cr.) This lab presents a comprehensive study of the structure and movement within the human body through cadaver and computer simulation techniques. (2 lab hrs.) Every Year, Fall

OT 316 Kinesiology ( 3 cr.) Kinesiology addresses normal movement of the trunk, upper and lower extremities. This course builds on the knowledge of anatomy and physics as it relates to the human body force systems and functioning in everyday activities. Key components of this class include the understanding of linear and parallel force systems, torque and motion analysis in human movement and other performance skills. Every Year, Spring

OT 316L Kinesiology Lab (1 cr.) This lab experientially examines the concepts of kinesiology presented in lecture. Students have the opportunity to practically apply biomechanical theory to normal functioning of the human body range of motion muscle testing, daily activity, design concepts and motion analysis. (2 lab hrs.) 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. 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 health promotion and illness prevention topics and theories applicable to occupational therapy practice. Foundational concepts from public health, behavioral and social science literature, and occupational therapy models are taught to assist students to appreciate health and well-being. Students simultaneously complete a 2-hour-per-week fieldwork level 1 experience. Every Year, Fall

OT 345F Theory, Occupation and Wellness Fieldwork Level I ( 0 cr.) Fieldwork to accompany OT 345. This course provides the student with opportunities to observe and participate in structured observations and interactions in wellness settings that apply the theories that are taught
in the lecture components of the course. Fieldwork is two hours per week. 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 2-3 hour-per-week community experience component during which the student is able to observe and, as appropriate, apply the concepts of occupation and purposeful activity in a communitybased 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. Fieldwork is two hours per week. Every Year, SpringOT 365 Problem-Based Learning: Risk Factor Human Occupation (2 cr.) The purpose of this problem-based learning 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, Spring

OT 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 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 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 ( $\mathbf{3}$ cr.) This course reviews group dynamics theory and its application for intervention and professional development. Topics include group process, group interventions, family systems, cultural influences, group evaluation and contextual variables. Every Year, Spring

OT 446L Group Process Lab (1 cr.) This lab provides interactive group experiences that allow students to apply theories taught in lecture. Students use leadership skills from OT 210 and 212 to facilitate structured group activities and also design therapeutic interventions for client groups and populations to enhance therapeutic use of self. (2 lab hrs.) Every Year, Spring

## OT 466 PBL Health Conditions and Occupation I

(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 to synthesize information from previous courses and outside resources to solve problems related to complex health conditions. Critical thinking and group process are emphasized with frequent self-reflection. Every Year, Fall

## 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. Every Year, Spring
## Pbilosophy (PL)

PL 101 (UC) Introduction to Philosophy (3 cr.) This course offers students the opportunity to examine their own values and beliefs through critical exploration of ideas from selected great philosophers, western and nonwestern, on such themes as the nature of reality, the self, knowledge, the good, spirituality and the ultimate. Attention is given to the historical context of the persons and ideas studied and to their impact on human thought and development. Every Year, All

PL 202 Logical Reasoning (3 cr.) Students are introduced to ways of thought appropriate to practical concerns, public affairs or academic topics. Effective procedures for reaching conclusions or judgments are introduced. Informal criteria for assessing reasoning are covered and fuzzy thinking is considered. Prerequisite: EN 101, EN 102 or PL 101; Every Year, All

## PL 220 (UC) Ethics and Human Values (SL: Service

 Learning) ( 3 cr.) Various approaches in, and challenges to, ethics are explored and brought to bear on contemporary personal, professional and societal moral issues. Students undertake Service Learning projects and reflect upon the experience in relation to ideas encountered in course readings and discussions. Prerequisite: PL 101 or EN 102; Every Year, FallPL 222 Ethics in Biomedical Research and Health Care Delivery (BI 205) (3 cr.) Major ethical issues in biomedical research and health care delivery are explored, such as the concepts of health, the nature of human nature, ethical issues in decision-making, human experimentation, genetic engineering, behavior modification, euthanasia, and the right to health/health care. Prerequisite: PL 101 or EN 102; Every Year, Spring

PL 265 (UC) Living Religions of the World (3 cr.) Students explore the idea of a god, the phenomenon of religion and the main religions and related questions of today: aboriginal religion (Native American), Hinduism, Judaism, Buddhism, Christianity and Islam. Prerequisite: PL 101 or QU 101; Every Year, Fall

PL 268 Life, and Life After Death (3 cr.) This course presents a study of the ideas of immortality, resurrection, reincarnation and eternal life, drawing upon writings of philosophers, theologians and philosophers of science. The significance of these views in creating values for living is considered. Prerequisite: PL 101 or EN 102; Every Year, All

## PL 320 Thought and Work of Albert Schweitzer (3 cr.)

 Albert Schweitzer (1875-1965) made significant, often controversial contributions in several areas: music, philosophy, religion, medical care, service to human need, animal rights and ecological awareness. In 1952 Schweitzerwas awarded the Nobel Peace Prize for his many decades of humanitarian work at his jungle hospital in West Africa. In his 80 s, 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 political issues we face today. Prerequisite: PL 101 or QU 101; Every Year, Spring

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; Every Year, All

PL 380 Interactive Arts (AR 380) (3 cr.) This course presents an interdisciplinary examination of the functions in art, literature and theater through readings and discussions of selected creative and critical works. Topics include self-organization, open systems, emergence, complexity, pragmatism and play. Students use the final project to demonstrate a practical understanding of interactive processes. Junior status is required. Every Year, Spring

## Courses offered as needed

PL 214 American Philosophy (3 cr.) Prerequisite: PL 101 or EN 102
PL 234 Philosophies of Health, Healing and Medicine (3 cr.) Prerequisite: PL 101 or EN 102
PL 235 Philosophy of Science ( $\mathbf{3} \mathbf{~ c r}$.) Prerequisite: PL 101 or EN 102
PL 238 Philosophies of the Future ( $\mathbf{3}$ cr.) Prerequisite: PL 101 or EN 102
PL 250 Philosophy and Art (3 cr.) Prerequisite: PL 101 or EN 102
PL 299 Independent Study (3 cr.)
PL 300 Special Topics in Philosophy (3 cr.) Prerequisite: PL 101 or PO 111
PL 330 Philosophy and Gender (WS 330) ( 3 cr.) Prerequisite: one course from PL
PL 336 Philosophy of History ( $\mathbf{3}$ cr.) Prerequisites: PL 101; HS 111 or HS 112
PL 360 Innovation in the Arts and Sciences (AR 360) (3 cr.)
PL 372 Contemporary Philosophy (3 cr.) Prerequisites: PL 101; one course from PL level 200
PL 399 Independent Study (3 cr.)
PL 499 Independent Study Philosophy (3 cr.)

## Physical Education (PE)

PE 102 Yoga ( 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, All

PE 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, All

PE 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. Transportation is arranged. Fee \$90. Every Year, All

PE 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. Classes meet at the Sleeping Giant Golf Course and Driving Range. A full set of clubs and transportation are provided. Fee $\$ 40$. Every Year, All

## PE 115 Practically Private Tennis Lessons: Beginners

Only (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 funfilled environment. Racquets and balls are provided. Every Year, All

PE 118 Jujitsu (Self-Defense) (1 cr.) Skills in self-defense are taught in a traditional dojo setting. With an emphasis on realistic self-defense, Jukido jujitsu teaches practical techniques, which are effective for men and women regardless of size and strength. By utilizing optimal body dynamics, jujitsu enables individuals to defend successfully while maintaining the highest standards of safety. Fee \$30. Every Year, All

PE 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. Students must be able to shoot in the low 90 s for 18 holes. Students must be available Friday 4-7 p.m., and Saturday and Sunday 10 a.m. -4 p.m. Every aspect of the game is covered in seminars, on the driving range and on the golf course. Fee $\$ 45$. Every Year, Spring

## PE 122 Advanced Tennis Weekend Workshop (1 cr.)

This weekend tennis camp for intermediate and advanced players covers all aspects of the game including stroke
production, strategy, conditioning and care of equipment. Students must be available Friday 4-7 p.m., Saturday and Sunday 10 a.m. -4 p.m. Tennis racquets and balls are provided. Every Year, Fall

PE 125 Pilates ( $\mathbf{1} \mathbf{~ c r}$.) This class consists of mat exercises designed to stabilize the core of the body: the abdominal and back muscles. This class focuses on proper alignment and form, and emphasizes quality of movement, not quantity. These exercises create improved posture while sculpting your entire body. Every Year, All

PE 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, All

PE 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, All

## PE 135 Rocks and Ropes Camp-Out Weekend (1 cr.)

 This weekend workshop features one day of fully supported outdoor rock climbing, an overnight camp-out and a high ropes course on the second day. Experience is not necessary. Students must be available Friday night after 4 p.m. through Sunday afternoon. Fee $\$ 180$. Every Year, FallPE 139 Fitness Training and Nutritional Strategy ( 1 cr.) This fitness program is designed to decrease body fat and increase lean body mass through cardiovascular exercise, circuit training, resistance training, and proper nutrition. Every Year, All

PE 140 Elementary Physical Education (1 cr.) This class is designed for students who will be teaching physical education during their MAT internship; however, everyone is invited to enroll. This is a participation class...so be prepared to PLAY. Instruction includes various teaching techniques, organizational styles, activities and games for elementary school-age children. Students receive numerous handouts. Every Year, Spring

PE 142 Sailing Weekend ( 1 cr.) Spend a fabulous weekend learning to sail on New Haven Harbor. Learn basic sail techniques including points of sail, sailing terms, parts of the boat, rigging and local maritime sailing history. Students must be available Friday night 4-7 p.m.; Saturday and Sunday 10 a.m. -4 p.m. Transportation is arranged. Fee \$90. Every Year, All

PE 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 7 a.m. -1 p.m., and Sunday 8 a.m. -2 p.m. Fee $\$ 35$. Every Year, Spring

PE 147 Intramural Officiating-Winter (1 cr.) This class teaches students the rules, mechanics and positioning to officiate intramural basketball, volleyball and softball contests. Students are provided information to advance and officiate at the high school level. Every Year, Spring

PE 148 Spinning ( $\mathbf{1}$ 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 an offcampus facility. Transportation is arranged. Fee $\$ 85$. Every Year, All

## PE 149 Intramural Officiating-Fall Sports (1 cr.) This

 class teaches students the rules, mechanics and positioning to officiate intramural flag football, soccer and field hockey contests. Students are provided with information to advance and officiate at the high school level. Every Year, FallPE 150 Dance Salsa Plus! (1 cr.) This high energy, very rhythmic class introduces students to several forms of Latin Dancing Salsa and Merengue. Students learn the fundamental patterns for the basic step, body movement, and the art of turning while in motion. Students become aware of musical beats and rhythm while dancing. Cardio and muscle toning through Salsa instruction adds to the workout aspect of the sessions. Every Year, All

PE 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, All

PE 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, All

PE 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, All

PE 154 Cardio Kickboxing ( $\mathbf{1}$ cr.) This is a high-energy 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, All

PE 155 Integrated Strength (1 cr.) Integrated strength training is a simple and effective way to improve muscle strength, function, shape and definition. This class takes a base move and adds layers to challenge the muscles in every way possible. No heavy weights are utilized to get the burn and fatigue your muscles. The class is open to all fitness levels and incorporates balance and stability into basic strength-training moves, completing each workout with a section of flexibility. Participants experience an improvement in their total fitness level throughout the semester. Every Year, All

PE 160 Games, Games, Games ( 1 cr.) Students get plenty of activity as they play favorite games, including kickball, spud, four corners, relay races, scavenger hunts, parachute games and more. Students participate in planning activities and are expected to assist with at least one cam-pus-wide activity, such as Little Sibs Weekend and Recreational Games Weekend. This course is ideal for MAT students, camp counselors or those who just want to have fun. Every Year, Spring

PE 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, All

PE 162 Canoeing Weekend (1 cr.) 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 and transportation is arranged. Students must be available Saturday and Sunday from 9 a.m. -5 p.m. Fee: \$90. Every Year, Fall

PE 164 Fencing Weekend ( 1 cr .) Stage combat is a term used to describe fencing for the theater. This course teaches students the basic skills in fencing, leading to an understanding of how to incorporate those skills into various theatrical scenes. The students create, choreograph, rehearse, and perform their interpretations of famous fencing scenes from stage and screen. All equipment is provided. Students must be available Saturday and Sunday 10 a.m. -4 p.m.. Class Requirements: Comfortable, loosefitting clothing; sneakers.

PE 165 Weight Lifting for Body Builders (1 cr.) This class covers proper form for joint protection as it relates to weight lifting for a body-building effect. 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 body building. The class includes lectures as well as workout time in the Fitness Center.

PE 166 Intermediate Ballroom Dancing (1 cr.) This class is a progression of dances learned in PE 161 with more advanced patterns and improved style and technique. Class size is limited to 24 students; interested students must contact Department of Athletics and Recreation to register. Prerequisite: PE 161

PE 167 Walking (1 cr.) Walking is a safe, effective, and enjoyable exercise. It perfectly accommodates all ages and degrees of fitness. This class teaches the proper fundamentals of walking-including posture, technique, rhythm and speed. Each student participates at his or her preferred level of intensity-low, moderate, high. Walking journals are maintained. Every Year, Fall and Spring

Courses offered as needed
PE 163 Leisure Time Activities (1 cr.)

## Physical Therapy (PT)

PT 300 Physical Therapy Process (3 cr.) This course introduces students to the physical therapy profession, the history and evolution of physical therapy, and the role of the physical therapist within the health care system. Basic issues of ethics, professional behaviors and generic skills are discussed. Medical terminology, documentation and medical record review are covered, as are emergency incidents and the measurement of vital signs. The course introduces students to the theory and practice of basic physical therapy skills such as body mechanics, bed mobility training, transfer training and gait training. Every Year, Fall

PT 300L Physical Therapy Process Lab (0 cr.) Lab to accompany PT 300. (4 lab hrs.) Every Year, Fall

PT 301 Physical Therapy Process II (3 cr.) This course continues to develop basic physical therapy skills, with a focus on the test and measures applied by physical therapists in the evaluation and assessment of patients.
Goniometry and manual muscle testing for the spine and extremities are covered in depth, as are stretching and therapeutic exercise. Students learn about The Guide to Physical Therapist Practice. The course also includes units covering the tests and measures used to analyze specific patient problems including gait, pain, posture, skin and chest. Prerequisite: PT 300; Every Year, Spring

PT 301L Physical Therapy Process II Lab (0 cr.) Lab to accompany PT 301. (4 lab hrs.) Every Year, Spring

PT 400 Clinical Experience I (2 cr.) This course is designed as a special introductory clinical course. It allows students to practice and gain beginning skill with clinical techniques in the reality of the clinical setting. Preparation for applying didactic material to patient care during the experience was provided by lab practical exams and clinical problem solving which occurred during PT 300 and PT 301. This course is graded on a pass/fail basis. Every Year, Summer

PT 401 Issues/Topics in Physical Therapy ( 2 cr.) This course introduces prospective physical therapy students to the many topics and issues relevant to the physical therapy profession. Students explore the many roles of the American Physical Therapy Association, practice issues, professional skills and behaviors, including the profession's code of ethics and standards of practice. The role of the physical therapist in both the health care system and the community is discussed. Students also are introduced to the medical record, documentation and medical terminology. Every Year, Fall

PT 402 Introduction to Clinical Decision Making (3 cr.) This course integrates basic information obtained through case study information, students' experience in PT 300 and 301 (Introduction to PT Process I and II) and their previous four-week clinical experience. Students generate in small groups problem-based learning experiences, a basic problem list and therapy goals utilizing the Guide to Physical Therapy Practice. Students discuss sets of prewritten clinical cases in the presence of a faculty adviser who utilizes the Guide to Physical Therapy Practice as a framework for discussion, evaluation and treatment intervention appropriate to the problems and goals identified. This case-based learning experience allows students to gain a basic understanding of clinical protocol and its application to effectively prepare them for their clinical course work in the spring of the fourth year. (2 lecture hrs.; 2 lab hrs.) Every Year, Fall

## Physician Assistant (PY)

## PY 104 Orientation to Physician Assistant Seminar I

 ( 1 cr .) Students gain a basic knowledge of the fundamentals of the physician assistant profession. The physician assistant role expectations, practice and ethics in the health care field are examined. In addition, historical information on the profession is presented. Students must have active AAPA membership. Every Year, SpringPY 204 Orientation to Physician Assistant II-Introduction to Clinical Medicine (1 cr.) This one-semester course provides the student 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. 500 hours of documented patient contact is required to take this course. Prerequisites: PY 104, PY 397, PY 400; Every Year, Spring

PY 388 Clinical Training I ( 3 cr .) This course is for ELMPA majors only. It provides classroom and clinical experience and offers the pre-physician assistant student emergency medical technician training as a prerequisite for obtaining the 500 hours of documented direct patient contact required by the ELMPA program prior to entering the professional component. Emphasis in study is placed on patient assessment, clinical signs and symptoms, pathophysiology and the pre-hospital care of patients. Clinical rotations on an ambulance service are required. ELMPA majors who already have obtained EMT certification can replace this course with an independent study focused on emergency medical services during the semester in which the course is normally required. Successful completion of the PY 388-PY 389 sequence and the fulfillment of state mandated hours of instruction are required to be eligible for certification. 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. 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

( $\mathbf{3}$ 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 This course is for ELMPA students only. ELMPA students are requested to complete BMS 104 and BMS 388 as prerequisites. Prerequisites: BMS 104, BMS 388; 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 and supervised direct patient contact. Each student spends time with three to five physician assistant professionals who special-
ize in different areas of medicine. Students may register for the course according to the following criteria: permission of faculty; completion of a minimum of five semesters at Quinnipiac; satisfactory GPA. Prerequisites: PY 104, PY 397, PY 388, PY 389; Every Year, Spring

PY 401 Introduction to 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. 500 hours of documented patient contact is required to take this course. Prerequisites: PY 104, PY 397, PY 400; Every Year, Fall

## Physics (PHY)

PHY 101 (UC) Elements of Physics (3 cr.) A survey of basic principles of physics and some important applications. The laws of motion, gravity and electromagnetism are presented along with fluids, wave phenomena and optics. Modern physics includes quantum theory, atomic structure, radioactivity and semiconductors. Must be taken in conjunction with PHY 101L. This course is suitable for both science and non-science majors. Students who have credit for SCI 101 may not receive credit for PHY 101. Every Year, All

PHY 101L (UC) Elements of Physics Lab (1 cr.) Lab must be taken with PHY 101. (2 lab hrs.) Every Year, All

PHY 110 (UC) General Physics I (3 cr.) This course considers 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. Must be taken in conjunction with PHY 110L. This course is designed primarily for science majors. 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. Also covered are the study of D.C. and A.C. circuits, and some elements of modern physics. 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

## Political Science (PO)

PO 101 (UC) Introduction to Political Science: Justice, Politics and Power ( 3 cr .) This course presents an introduction to the systematic analysis of power relations in local, national and global spheres of social life. The course surveys major political ideologies and predominant institutions. Students explore how dominant institutions process issues of power and justice, and how those issues appear when viewed through the lenses of major political ideologies. Every Year, All

PO 131 (UC) Introduction to American Government and Politics (SL: Service Learning) ( 3 cr .) This course covers the development of the constitution, the nature of Federalism, the state and the national government. Duties and powers of the president, Congress, the Supreme Court and administrative agencies also are explored. Political parties, the nominating process, elections and electoral behavior as well as political interest groups and public opinion are considered. Every Year, All

PO 201 Political Inquiry ( $\mathbf{3}$ cr.) This course is designed for political science majors in their junior year. Students examine the culture of inquiry as a problem-solving discipline and contribute 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 to these issues. The course emphasizes theory development and hypothesis formation; various methodological approaches; and several sub-disciplinary perspectives within political science. For political science majors only. Junior status is required. Prerequisites: PO 101, PO 131; Every Year, All

## 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; Every Year, All

PO 311 Topics in International Relations (3 cr.) This advanced seminar focuses on in-depth critical analysis of current issues and themes in international relations. It may deal with topics from issues of war, peace and security, to the politics of the international economy, emerging international cultural norms, and international law. The course requires careful reading, intensive class discussion and multiple writing assignments. Prerequisite: PO 111 or PL 101; 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, and foreign policies of the First, Second and Third World countries with a view to providing cross-cultural and cross-national explanations regarding similarities and differences between and among nation-states. Prerequisites: PO 101; one course from PO level 200; Every Year, Spring

PO 332 European Politics ( $\mathbf{3}$ cr.) This course is designed to provide a general introduction to the European Union (EU) by exploring the dynamics of integration of Europe. The issues discussed relate to the general theoretical treatment of integration phenomena, the political economy of integration of Europe and its membership expansion, and the structural and behavioral implication of the Open Market. Of particular relevance to course discussions are the changing notions of security, economics, trade, market regulations, cooperation on the global scene. Special attention is paid to the single currency (the Euro) and how it impacts the process of integration in the EU. Prerequisites: PO 101; one course from PO or IB level 200; Every Year, Fall

PO 395 Advanced Internship (4 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. Prerequisites: PO 101, PO 111 or PO 131; one course from PO level 200; Every Year, All

PO 408 Senior Seminar ( 3 cr ) 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; Every Year, Spring

Courses offered as needed
PO 215H (UC) Honors Political Theory (3 cr.)

PO 216 (UC) American Political Thought (3 cr.)
Prerequisite: PO 131 or PO 101
PO 218 Politics of Health ( $\mathbf{3} \mathbf{~ c r}$ ) Prerequisite: PO 131
PO 219 Women in Political Thought (3 cr.) Prerequisite:
PO 101, PO 131, PL 101, PS 101, SO 101 or WS 101
PO 221 (UC) Introduction to Latin America (3 cr.)
Prerequisite: PO 101
PO 231 (UC) Elections and Political Parties (3 cr.) Prerequisite: PO 131
PO 245 (UC) International Political Economy (3 cr.) Prerequisite: PO 211 or EC 111
PO 247 (UC) Actors and Processes in U.S. Foreign Policy (3 cr.) Prerequisite: PO 211 or PO 131
PO 270 State and Local Government ( 3 cr.) Prerequisite: PO 131
PO 280 Congress and the Presidency ( 3 cr.) Prerequisite: PO 131
PO 287 Women and Public Policy ( 3 cr.) Prerequisite: one course from PO or WS level 200
PO 295 Internship in Political Science (1 cr.) Prerequisite: PO 101 or PO 131
PO 299 Independent Study in Political Science (1 cr.)
PO 315 Democratic Theory and Practice (3 cr.) Prerequisite: PO 131, PO 215 or PO 216
PO 317 International Law (3 cr.) Prerequisite: PO 211
PO 325 Public Opinion Research ( $\mathbf{3} \mathbf{~ c r . ) ~ P r e r e q u i s i t e s : ~}$ PO 131; one course from PO level 200
PO 331 Topics in Comparative Government ( 3 cr.) Prerequisites: PO 101; one course from PO level 200
PO 333 Middle Eastern History and Politics (3 cr.) Prerequisites: PO 101 or PO 211; one course from PO or HS level 200
PO 348 Political Communication (MSS 349) (3 cr.)
Prerequisite: one course from PO level 200
PO 350 Topics in Political Theory (3 cr.) Prerequisite: one course from PO level 200
PO 353 American Constitutional Law (3 cr.) Prerequisites: PO 131; one course from PO level 200
PO 354 Civil Rights I (3 cr.) Prerequisites: PO 131; one course from PO level 200
PO 355 Civil Rights II (3 cr.) Prerequisites: PO 131; one course from PO level 200
PO 357 Supreme Court and Foreign Policy ( 3 cr.) Prerequisites: PO 131; one course from PO level 200
PO 360 Topics in American Politics (3 cr.) Prerequisites: PO 131; one course from PO level 200
PO 390 Politics and Urban Change (SO 390) (3 cr.) Prerequisites: SO 101 or PO 131; one course from SO or PO level 200
PO 399 Intermediate Independent Study in Political Science (3 cr.)
PO 408H Honors Senior Seminar (3 cr.) Prerequisite: PO 201
PO 499 Advanced Independent Study in Political Science ( 4 cr .)

## Psychology (PS)

PS 101 (UC) Introduction to Psychology (3 cr.) Students are introduced to methods and objectives of contemporary psychological science. Topics include philosophical origins, nature of research, learning, neuroscience, issues in mental illness, and application of psychological thought and method to contemporary issues in society. Every Year, All

PS 101H (UC) Honors Introduction to Psychology ( 3 cr.) Students are introduced to methods and objectives of contemporary psychological science. Topics include philosophical origins, nature of research, learning, neuroscience, issues in mental illness, and application of psychological thought and method to contemporary issues in society. 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, chi-square, correlation, and analysis of variance. Psychology majors only. Prerequisite: MA 110; 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, Spring

PS 232 (UC) The Concept of Personality and Its Development ( $\mathbf{3} \mathbf{~ c r . ) ~ P e r s o n a l i t y ~ i s ~ v i e w e d ~ f r o m ~ a ~ v a r i e t y ~ o f ~ p e r - ~}$ spectives, including theories of its formation, social functioning and the evolution of man. 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 an interdisciplinary 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 contrast 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 childhood, 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 realworld 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, Spring

PS 250 Parenting Science ( $\mathbf{3} \mathbf{c r}$.) This course surveys research topics that pertain to effective parenting, such as parental discipline practices, and the effects of media on development. Research is drawn from fields such as developmental psychology, cognitive psychology, abnormal psychology and anthropology. Prerequisite: PS 236; Every Year, Fall

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 such applications. Optional lab accompanies the course. Prerequisite: PS 101; Every Year, Spring

PS 251L Conditioning and Learning Lab (0 cr.) Optional lab to accompany PS 251. Every Year, Spring

PS 252 Physiological Psychology ( $\mathbf{3}$ 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. Psychology majors only. Prerequisite: PS 101; Every Year, Fall and Spring

PS 254 Psychology of Close Relationships (3 cr.) Both familial and non-familial close relationships are examined. Topics such as love, friendship, living together, marriage, relationship maintenance and relationship dissolution are covered. Theories and research in each of these areas are read and discussed. The course aims to increase students' awareness of the issues and conflicts that affect close relationships. Prerequisite: PS 101; Every Other Year, Fall

PS 261 (UC) Social Psychology (3 cr.) Study of the effect of social forces on the individual; the role of the situational context in human behavior. Aggression, altruism, attribution, issues in social cognition, group behavior, attitude change and aspects of social psychology and law are among topics covered. Prerequisite: PS 101; Every Year, All

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, menstruation, selfconcept, menopause; and women's roles, productive and reproductive; and the changing conceptions of femininity, masculinity and androgyny. Prerequisite: PS 101; Every Year, Fall

## 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, AllPS 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 of Psychology I: The Experimental

 Tradition (4 cr.) This course provides experience with the tools, methods and findings of classic and contemporary experimental psychology, offered as the gateway to majoring in the field. Topics include logical reasoning, statistical inference, research ethics, experimenter effects and report writing. Students design, conduct and "analyze the results of an experiment. Must be taken with PS 307L. Psychology majors only. Prerequisite: PS 206 or MA 275; Every Year, AllPS 307L Experimental Methods I Lab (0 cr.) Lab to accompany PS 307. Every Year, All

## PS 308 Methods of Psychology II: Non-Experimental

 Methods (4 cr.) This course offers a critique of the experimental paradigm; experience with non-experimental methods such as interviewing, observation, content analysis; examination of selected contemporary research employing these methods. Students do a major piece of psychological research, including statistical analysis. Must be taken with PS 308L. Psychology majors only. Prerequisite: PS 307; Every Year, AllPS 308L Non-Experimental Methods Lab (0 cr.) Lab to accompany PS 308. Every Year, All

## PS 309 History and Systems of Psychology (3 cr.)

Current psychological theories are surveyed as related to their historical evolution. Development of psychology is linked to histories of philosophy and of science. Prerequisite: PS 307; Every Year, All

## 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. Five-year MAT students only. Prerequisite: PS 206; Every Year, Fall

PS 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

PS 335 Images of Women in Psychology and Literature (EN/WS 335) ( 3 cr .) The ways in which psychology and literature depict the female experience are studied. 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, Fall

PS 336 Cognitive Development ( 3 cr.) This seminar provides an in-depth examination of cognitive development from infancy through adolescence. Topics include the development of knowledge about physical objects, memory, language, numerical understanding, and an understanding of the mind. For each topic we discuss the results of various research studies with an emphasis on the methodologies used, various interpretations of the findings, and practical applications of the work. Prerequisite: PS 236 or PS 233; Every Other Year

PS 351 Psychobiology: Brain and Behavior (3 cr.) The biological bases of behavior are studied in detail. Emphasis is on the brain correlates of motivational states. Topics include reproductive behavior, neuronal plasticity, hunger and thirst, emotion, sleep, language, memory, vision and drug states. Prerequisite: PS 252 or BI 102; Every Year, Fall

PS 352 Psychobiology: Animal Behavior (3 cr.) Speciesspecific 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: PS 307 or BI 102; Every Other Year, 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

PS 357 Drugs, Brain and Behavior ( 3 cr.) In this course, students will be introduced to the effects and mechanisms of action of psychoactive drugs. Drugs used in the treatment of psychological disorders as well as drugs of abuse will be covered. In addition to describing basic principles of neuropharmacology, the course will cover 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. Prerequisites: PS 252 or permission of the instructor. Every Year, Spring

PS 358 School Age Development (3 cr.) 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. Five-year MAT students only. Prerequisite: PS 236; Every Year, All

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 Organizations ( $\mathbf{3} \mathbf{~ c r}$.) 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, Spring

PS 371 Clinical Psychology ( $\mathbf{3}$ 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 382 Advanced Social Psychology (3 cr.) Contemporary issues and topics in social psychology are examined.

Content varies as the area develops and changes but has characteristically emphasized theories of attitude change, psychological effects of mass media, attribution theory, interpersonal attraction, helping behavior, and psychological factors in contemporary social issues. Prerequisite: PS 261 or PS 307; Every Year, Spring

PS 391 Human Services Seminar (3 cr.) 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. Psychology majors in human services concentration only. Prerequisite: PS 371; Every Year, Fall

PS 393 Fieldwork in Human Services (3 cr.) 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. Psychology majors in the human services concentration only. Prerequisite: PS 371; Every Year, Fall

PS 394 Fieldwork in Human Services (3 cr.) Students receive placement in a community service agencies 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. Psychology majors in the human services concentration only. Prerequisites: PS 391, PS 393; Every Year, Spring

PS 409 Senior Seminar in Psychology ( 3 cr.) This seminar, for psychology majors only, consists of extensive readings of both original research and reviews of selected topics. A senior essay or thesis is written as part of the requirement for bachelor's degree candidates. 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. Prerequisite: PS 308; Every Year, Fall and Spring

Courses offered as needed
PS 200 Special Topics in Psychology (3 cr.) Prerequisite: PS 101
PS 222 Psychology of Disability ( $\mathbf{3}$ cr.) Prerequisite: PS 101

PS 234 Adult Development Psychology (GT 234) (3 cr.) Prerequisite: PS 101
PS 299 Independent Study in Psychology (1 cr.)
PS 300 Special Topics in Psychology (3 cr.) Prerequisite: one course from PS level 200
PS 300H Honors Special Topics (3 cr.)
PS 336H Honors Cognitive Development (3 cr.) Prerequisite: PS 236, PS 233, PS 236 H or PS 233 H
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 or WS level 200
PS 372 Child Psychopathology (3 cr.) Prerequisite: PS 272
PS 373 Positive Psychology (3 cr.) Prerequisite: PS 272
PS 383 Psychology and the Law ( $\mathbf{3}$ cr.) Prerequisites: two courses from PS level 200
PS 397 Fieldwork in Industrial/Organizational Psychology ( 3 cr.)
PS 399 Independent Study in Psychology (1 cr.)
PS 499 Independent Study in Psychology ( 1 cr.)
Prerequisites: PS 307, PS 308, PS 309

## Public Relations (PRR)

PRR 101 Principles of Public Relations (3 cr.) This course, which serves as the foundation of the public relations curriculum, traces the development of the public relations field and examines the role of public relations in organizations and society. Basic public relations principles and theories are examined along with the public relations campaign planning process. Every Year, Fall and Spring

PRR 201 Public Relations Writing (3 cr.) Writing is key to most public relations jobs. This writing-intensive course introduces students to the world of professional public relations writing. Topics include press releases, pitch letters, desktop publishing and fact sheets. Students are involved in both in-class and out-of-class assignments. Prerequisites: PRR 101, JRN 160; Every Year, Fall and Spring

PRR 311 Sports Public Relations ( $\mathbf{3}$ 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, Fall and Spring

PRR 332 Public Relations Research ( $\mathbf{3}$ cr.) The course presents an exploration of quantitative and qualitative research methods typically used in corporate public relations and in the public sector. Students learn how to use principles of scientific research to establish, monitor and evaluate public relations programs. Prerequisite: PRR 101; Every Year, Fall and Spring

PRR 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. Prerequisites: MSS 101, JRN 160, MSS 220; Every Year, Fall and Spring

PRR 495 Public Relations Campaigns (3 cr.) Campaigns is the capstone course for students preparing for a career in public relations. Students develop the mindset of a strategic communicator through case analyses and prob-lem-solving exercises. Attention is focused on the public relations planning process. Student teams develop strategic public relations plans for actual clients. Writing, research and presentation skills are expected. Prerequisites: PRR 101, PRR 201, PRR 332; Every Year, Fall and Spring

## Courses offered as needed

PRR 340 Public Relations Management (3 cr.)
Prerequisite: PRR 101
PRR 341 Corporate Public Relations (3 cr.) Prerequisite: PRR 101
PRR 343 Nonprofit Public Relations ( 3 cr.) Prerequisite: PRR 101
PRR 344 International Public Relations (3 cr.) Prerequisite: PRR 101
PRR 345 Investor Relations (3 cr.) Prerequisite: PRR 101
PRR 346 Healthcare Public Relations ( $\mathbf{3}$ cr.)
Prerequisite: PRR 101
PRR 400 Special Topics (3 cr.) Prerequisites: PRR 101, PRR 201, JRN 160

## QU Seminars (QU)

QU 101 (UC) The Individual in the Community ( 3 cr .) This interdisciplinary seminar for first-semester freshmen focuses on the broad theme of community as it introduces students to the university learning community. Sections examine the concept of community historically, in literature, and from the perspective of the social and natural sciences. Topics include: the relationship between individual and community identities; forms of engagement in communities; the rights and responsibilities of citizenship; ethics of community life; and diversity and pluralism in community. Students explore the specific individual-community relationships at Quinnipiac in a context designed to develop skills for academic success. QU 101 is a foundation for upper-level seminars on the national and global communities. Every Year, Fall

## QU 101H (UC) Honors Individual in the Community

 ( 3 cr .) This interdisciplinary seminar for first-semester freshmen focuses on the broad theme of community as it introduces students to the university learning community. Sections examine the concept of community historically, in literature, and from the perspective of the social and natural sciences. Topics include: the relationship betweenindividual and community identities; forms of engagement in communities; the rights and responsibilities of citizenship; ethics of community life; and diversity and pluralism in community. Students explore the specific individual-community relationships at Quinnipiac in a context designed to develop skills for academic success. QU 101 is a foundation for upper-level seminars on the national and global communities. Every Year, Fall

QU 201 (UC) National Community (3 cr.) In these sec-ond-level seminars, students gain an understanding of the major themes and concepts that structure life in the cultures of the pluralistic American community. Students investigate the interaction of people, ideas, science and technology, political, economic and social movements. Course material is drawn from a variety of disciplinary perspectives, including media, ethics, letters and literature, fine arts, religion, economics, business, science and technology. Prerequisite: QU 101; Every Year, Fall and Spring

QU 301 (UC) Global Community (3 cr.) In these seminars, students learn about the political, social, cultural, ecological and economic systems that define global community; investigate the variety of ways they-as individuals and members of local or national communities-are citizens of this global community; and examine the cultural values and identity in the context of religious and other belief systems. Course material is drawn from a variety of disciplinary perspectives, including media, ethics, letters and literature, fine arts, religion, economics, business, science and technology. Prerequisite: QU 201; Every Year, Fall and Spring

QU 301H Honors Global Community (3 cr.) In these seminars, students learn about the political, social, cultural, ecological and economic systems that define global community; investigate the variety of ways they-as individuals and members of local or national communitiesare citizens of this global community; and examine the cultural values and identity in the context of religious and other belief systems. Course material is drawn from a variety of disciplinary perspectives, including media, ethics, letters and literature, fine arts, religion, economics, business, science and technology. Prerequisite: QU 201; Every Year, Fall and Spring

Courses offered as needed
QU 201H (UC) Honors National Community (3 cr.) Prerequisite: QU 101

## Science (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 UC credit for SCI 101/PHY 101. Every Year, Fall and Summer

SCI 101L (UC) Survey of Physical Science Lab (1 cr.) Lab must be taken with SCI 101. (2 lab hrs.) Every Year, Fall and Summer

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 105 (UC) Food Chemistry and Nutrition (3 cr.) 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. Must be taken in conjunction with SCI 105L. This course is designed for non-science majors. Students may not earn UC credit for SCI 105/SCI 161. Every Year, Fall and Spring

SCI 105L (UC) Food Chemistry and Nutrition Lab (1 cr.) Lab must be taken with SCI 105. (2 lab hrs.) Every Year, Fall and Spring

## SCI 161 (UC) Nutrition: An Investigative Experience

 (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. This course is designed for non-science majors and can be used to fulfill the 3 -credit UC science requirement. Students may not earn UC credit for SCI 105/SCI 161. Every Year, AllSCI 161H (UC) Nutrition: An Investigative Experience (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. They have an opportunity to apply these concepts to analyze and improve their own diets. This course is designed for non-science majors and can be used to fulfill the 3-credit UC science requirement. This is an Honors course. Students are challenged to critically examine, discuss and present results reported in journal articles in the field of nutritional science. Every Year, All

SCI 162 (UC) Consumer Science I (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 non-science majors. Every Year, Fall and Spring

## Science and Values (SV)

SV 301 Science, Technology and Health Care: Present and Future Challenges (3 cr.) A seminar focused on an issue or theme chosen by the instructor of recent interest related to the connection between scientific, technological, and medical advances and ethical issues. Topics might include application of cloning to humans and animals, interspecies genetic manipulation and agricultural biotechnology, medical interventions in the beginning and end of life, or the cybernetic revolution. Required for Science and Values minor. Every Other Year

## Courses offered as needed

SV 101 Introduction to Science and Values ( 3 cr .) SV 330 History of Western Medicine (HS 330) (3 cr.) Prerequisite: HS 110, PL 101, HS 111, HS 112, HS 131 or HS 132

## 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. Every Year, All

SO 200 Special Topics (3 cr.) A variety of special topics courses are offered Every Year. Every Year, All

SO 201 Sociological Theory ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ h e l p s ~}$ students develop a working knowledge of sociological the-
ory and understand its relevance to modern life. Participants concentrate on the ideas and concepts of the great theorists, as well as the social forces at work in the world that drove their theories. Students learn how the life and times of each great thinker played essential roles in the development of ground-breaking theory. Prerequisite: SO 101; Every Year, Fall

SO 205 Orientation to Sociology, Criminal Justice and Gerontology (CJ/GT 205) (1 cr.) This course introduces sociology, social services, 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, social services 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 controversies such as poverty, violence, education, addictions 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 230 Government and Business: The Uneasy Partnership ( 3 cr .) This course presents a study of the way government and business affect one another. The evolution of entrepreneurship is followed historically, from its emergence in Western Europe until the present time, with an emphasis on the roles people, past and present, think each of these two institutions should play. Contemporary controversies such as those concerning freedom and free enterprise, and the proper care for the needy, are considered. Prerequisite: SO 101 or EC 111; Every Year, All

## SO 232 Women in the Criminal Justice System

 (CJ/WS 232) ( $\mathbf{3} \mathrm{cr}$.) 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
## SO 235 American Culture and Society: The 1950s1980s ( 3 cr .) Major historical, political, social and cultural events taking place between 1950 and 1980 are explored. The identification and development of dominant ideological themes and trends are considered, as well as transformations of values, beliefs, behavior patterns and institutions. 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 242 Race, Crime and Justice (CJ 242) (3 cr.) In this course, students explore the intersections of race, crime and law in terms of the historical context, the present-day situations and future directions. Participants examine race, crime and law from the viewpoints of the offender, the victim and the criminal justice practitioner within the various aspects of the criminal justice process-from law enforcement to courts to corrections. In addition, the course focuses on the interrelationship between theory, policy and practice. Prerequisite: SO 101; Every Other Year, Fall

SO 244 (UC) Social Stratification (3 cr.) The evolution of social class in America from pre-industrial times through the industrial era and into the present postindustrial era is explored. Topics include class conflict and interclass mobility; the relation of wealth, prestige and position; and differing styles of life of different social classes. Prerequisite: SO 101; Every Year, All

SO 245 Community: Place, Sentiments, Structure (3 cr.)
This course considers the sense of community, the community, suburbia and complex urban society; problems of conflict and cohesion, power structure and grass roots community organization; problem solving on the local level and problems beyond the scope of the local community. Prerequisite: SO 101; Every Other Year

SO 250 Youth Crime (CJ 250) (3 cr.) Although young people are processed through a different system of criminal justice than adults, theories of criminal behavior address motivations for both juvenile and adult crime. Of interest is the ongoing tendency to treat serious crimes committed by young people as if they were committed by adults. This course examines the consequences for problematic behavior in the criminal justice system, including incarceration and alternative programming for juveniles. Prerequisite: SO 101; Every Year, Spring

SO 255 (UC) Sociology of Families (WS 255) (3 cr.) Students are introduced to the sociology of the American family using comparative and interactional materials. Changing sex roles and socialization patterns, as well as economic and political factors that affect the family are considered in the family cycle. Prerequisite: SO 101; Every Year, All

SO 260 Social Control and Deviance ( 3 cr .) The ways in which normative behavior is determined, delineated and controlled are examined. Also considered are factors that produce deviant behavior and social mechanisms for defining and dealing with deviance. Prerequisite: SO 101; Every Year, All

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 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

SO 264 Social Welfare Institutions (3 cr.) 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 266 (UC) Population and Society (3 cr.) The components of population change births, deaths, migration and the importance of demographic trends for individual life changes are explored. Also discussed are the lasting effects of the Baby Boom generation, the migration to the Southwest, and changes in marriage patterns. Prerequisite: SO 101; Every Year, Fall

## 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 Other Year

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 ( $\mathbf{3}$ 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 Year, Fall

SO 283 Crime and Society (CJ 283) (3 cr.) This course considers crime as a cultural phenomenon and a problem of social control; the nature of law; characteristics of the institution of criminal justice and types of crime; critical evaluation of theories of crime. Prerequisite: SO 101; Every Year, All

SO 285 (UC) Protest and Change (WS 285) (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

SO 292 Internship in the Community ( 3 cr.) The student devotes eight hours a week to work in a public or private community agency and two hours a week in conference with the instructor or in a seminar. 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 majors only in the junior or senior year. Every Year, All

SO 300 Special Topics ( $\mathbf{3} \mathbf{~ c r}$.) The subject varies each semester depending on faculty and student interests. Topics explored have been law and society, and family in fact and fiction and housing and home. Prerequisites: two courses from SO; Every Year, All

SO 303 Popular Culture and the Media (3 cr.) The course explores popular culture with the purpose of learning about current American life in the context of change. It focuses on the relationship between popular culture, the media, and the broader social, economic and political environment. Popular media, leisure pursuits, news, sports, entertainment, and material consumption are considered. Attention is paid to the accumulated research from a wide variety of sources and visions. Prerequisites: two courses from SO; 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 this influences 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 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 func-
tion 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 non-bureaucratic structure of hospice care. Prerequisites: two courses from SO, GT; Every Year, All

SO 307 Sociology of Sport (SPS 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 socio-cultural 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 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, Fall

## SO 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, social services or psychology and at least junior standing. Prerequisites: two courses from SO, GT; Every Year, Fall

SO 312 Large-Scale Organizations ( $\mathbf{3}$ cr.) The effect of formalization both on the delivery of social services and on career opportunities and satisfactions is explored; studies of business corporations, schools, health and welfare agencies, and the police are examined for effectiveness, and alternate structures are considered. Prerequisites: two courses from SO; Every Other Year

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 social services 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 man-
agement practice in various social service settings. Prerequisites: two courses from SO, GT; Every Year, Spring

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 theoretical explanations. Prerequisites: two courses from SO, CJ; Every Other Year, Fall

SO 335 Systems in Criminal Justice (CJ 335) (3 cr.) This course presents an analysis of the three major people-processing units of the criminal justice system: law enforcement, the courts and correctional institutions. Units are viewed as semi-independent systems that both cooperate and conflict in their occupational ideologies, their operation and their internal growth and survival. Crime statistics, criminal typologies and satellite systems such as probation and parole are studied. 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 crimerelated 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 ( $\mathbf{3} \mathbf{~ c r}$.) This course looks at the social construction of mental illness. The changing definitions of, stigmas attached to, and solutions for mental illness are discussed. Prerequisites: two courses from SO; Every Year, Spring

SO 365 Aging: Problems and Policies (GT 365) (3 cr.) This course considers social problems associated with aging: particularly in the areas of health, housing, financing and family life and the governmental policies past, present and future that deal with these problems. Prerequisites: two courses from SO; Every Other Year, Spring

SO 381 Evaluation Research (GT 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 in their junior or senior year. Every Year, All

SO 382 Field Research Methods ( 3 cr .) This advanced sociology course is an introduction to qualitative research methods. The goal is to train students to sociologically examine the world using a variety of qualitative research tools. Participants learn by engaging in a variety of small research projects to learn about most of the methods covered. Every Year, Spring

SO 383 Sociology of Law (3 cr.) Students delve into the complex relationship between society and law. Does society create law, or does law create society? Society, in essence is itself a tangled web of laws turning would-be chaos into an organized bureaucratic existence. Participants use films, ethnographic work and an on-site courtroom observation project to explore and answer these and more questions about the sociolegal world. Prerequisites: two courses from SO; Every Other Year

SO 385 Social Policy (GT 385) (3 cr.) This senior seminar is designed as the capstone course for students majoring in sociology, social services and gerontology. Social policy is examined as the process by which specific societal problems are identified, researched, and translated into social action. Students in this course complete a senior thesis and senior presentation on a social policy area of their choosing. For majors only in the senior year. Every Year, All

SO 390 Politics and Urban Change (PO 390) ( 3 cr .) This interdisciplinary seminar focuses on the changing distribution of political and economic power among social groups in American cities. Special focus is on current urban problems facing the Greater New Haven urban community, including transportation, immigration, public education, poverty, housing and economic development. Faculty lead students on numerous field trips into New Haven. Students are required to complete multiple writing assignments and participate in class discussions. Prerequisite: SO 101 or PO 131; Every Third Year

SO 392 Internship in the Community ( $\mathbf{3} \mathbf{~ c r}$.) The student devotes eight hours a week to work in a public or
private community agency and two hours a week in conference with the instructor or in a seminar. 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 junior or senior sociology majors. Every Year, All

Courses offered as needed
SO 299 Independent Study ( 3 cr .)
SO 375 Sociology of the Everyday ( 3 cr.) Prerequisites: two courses from SO
SO 399 Independent Study ( 3 cr )
SO 499 Independent Study ( 1 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 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. The four language skills listening, speaking, reading and writing are developed. Prerequisite: SP 102 or placement into SP 201. Every Year, Fall and Spring

SP 202 Intermediate Spanish II ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ i s ~ a ~}$ 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 270 History of the Romance Languages (3 cr.) This course presents a study of linguistic development of Spanish in comparison with the other Romance languages: Catalan, French, Italian, Portuguese, Rhetian and Romanian. A study of the modern dialects of the Romance languages, especially Spanish, is included. The approach is
analytical. Instruction of this course is in Spanish. Prerequisite: SP 202; Every Other 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 302 Advanced Spanish II ( $\mathbf{3}$ 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 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 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 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 preColumbian 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 presents a study of the 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 ( $\mathbf{3}$ 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

Courses offered as needed
SP 299 Independent Study (3 cr.)
SP 399 Independent Study (3 cr.)
SP 499 Independent Study ( 3 cr.)

## Sports Studies (SPS)

SPS 101 Introduction to Sports Studies ( $\mathbf{3}$ 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, All

SPS 105 Video Essentials (MEP 105) (3 cr.) This course introduces students to the fundamentals of electronic field production. Participants learn all major phases of video production: scripting, preproduction planning, basic sin-gle-camera field production and digital editing. There also is an emphasis on evaluating the effectiveness and success of the communication. This course is designed for students concentrating in areas other than media production (i.e., public relations, media studies or a program outside the School of Communications). Students concentrating
in the media production track must take MEP 210 and MEP 212 as their introductory media production courses, and not MEP 105. Journalism majors must take JRN 105. Sports studies minors should register for the section cross-listed as SPS 105. Every Year, All

SPS 201 Medical Aspects of Sport and Activity (AT 201) ( 3 cr .) This course is aimed at students who plan to work in a sports-related field (i.e., coach, journalist or manager). Students examine a variety of sports medicine-related topics, including common sports injuries, an introduction to sports psychology and current events in sports medicine. Students who take SPS 201/AT 201 cannot also receive credit for AT 214. Prerequisites: 1 group: BI 101, BI 101L; BIO 105, BIO 105L; BIO 106, BIO 106L; CHE 101, CHE 101L; PHY 101, PHY 101L; BMS 110, BMS 110L; BMS 117, BMS 117L; BMS 118, BMS 118L; SCI 101, SCI 101L; SCI 102, SCI 102L; SCI 105, SCI 105L; Every Year, Fall

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: 2 groups; SO 101; SPS 101; one course from SO; Every Year, Spring

SPS 311 Sports Public Relations (PRR 311) (3 cr.) This course provides students with an insider's look at sports events management. Students gain hands-on experience planning, budgeting and executing an event. Students have opportunities to work with Quinnipiac as well as professional sports teams. Every Year, Spring

SPS 325 Sports Economics (EC 325) (3 cr.) The primary focus of this course is professional sports. Topics include microeconomic foundations of sports economics, industri-
al 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

## SPS 352 History and Social Impact of Baseball (HS

352) ( 3 cr .) This course covers the role of baseball both as an agent and as a reflector of social change in America from the mid-19th century to the present. While developments and activities on the field are not ignored, greater emphasis is placed on events surrounding the game. Topics include the racism of the 1880 s; the transition from a pastoral pastime to a billion-dollar industry; the role of baseball in the assimilation of immigrants; the development of the Negro Leagues and the AllAmerican Girls Professional Baseball League; the Jackie Robinson experiment; the growth of unionization in the sport and the most recent Latino invasion. Students explore how each of these developments is embedded in and reflective of the larger culture. Prerequisite: HS 132; Every Year, Spring

SPS 361 Sports Reporting (JRN 361) (3 cr.) This course introduces students to coverage of sports for the news media. Students write game stories and sports profiles. Prerequisite: JRN 260 or JRN 263; Every Year, All

SPS 420 Sports, Media and Society ( $\mathbf{3}$ 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? This course is specifically designed for students interested in sports journalism, production and/or promotion. Prerequisite: MSS 101 or 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. Prerequisite: SPS 101 and approval of sports studies director. Prerequisite: SPS 101; Every Year, All

Courses offered as needed
SPS 240 Philosophy of Sport (PL 240) (3 cr.)
Prerequisite: PL 101
SPS 499 Independent Study (3 cr.) Prerequisite: SPS 101

## Women 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, All

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, All

## 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, FallWS 235 (UC) Women's Literature (EN 235) (3 cr.) Literature written by women is explored to assess their contributions to literary themes, forms and movements. The course concentrates on notable American and English writers of the last two centuries, e.g., the Brontes, Dickinson, Browning, the New England regional writers, Chopin, Woolf, Mansfield, Lessing, Morrison, Walker, Atwood, Plath, Sexton and Rich. Prerequisite: EN 102; Every Year, Spring

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) The Family (SO 255) (3 cr.) Students are introduced to the sociology of the American family using comparative and interactional materials. Changing sex roles and socialization patterns, as well as economic and political factors that affect the family are considered in the family cycle. 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 265 Sociology of Work (SO 265) (3 cr.) This course considers the meaning of work in industrial society for blue-collar and white-collar workers; trends in the occupational structure, individual dreams and the opportunity structure. Particular occupations may be selected for intensive analysis through empirical studies, literature and observation. Prerequisite: SO 101; Every Other Year

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 301 Seminar in Women's Studies ( $\mathbf{3} \mathbf{~ c r}$.) This seminar provides an opportunity for students to explore a subject (for example: Virginia Woolf, 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, 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: one course from WS level 200; Every Other Year, Spring

WS 302 Women's Health and Aging (SO/GT 302) ( 3 cr ) The purpose of this advanced seminar is to study older women's health and experiences with aging. The focus is on the complex interplay between age and gender as students examine the health and policy issues surrounding the needs of elderly women and formal and informal caregivers. Prerequisite: SO 263 or GT 263; Every Third Year

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 Women in America, 1770-1920 (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, Fall

WS 309 Women in America: 1920-Present (HS 309)
( 3 cr .) This course covers the experience of women from the beginnings of the jazz age to the end of the century. Every Year, Spring

WS 310 Cross-Cultural Perspectives on Gender, Sex and Sexuality (AN 310) ( $\mathbf{3}$ 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: 6 credits from subjects AN or 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 sexual 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 315 Women Artists: Sex, Lies and Handbags

 (AR 315) ( $\mathbf{3} \mathbf{~ c r}$ ) This course introduces 15 women whose relationships affected their creative output. Students examine the lives of these women by viewing their artwork, reading about their marriages and liaisons, and by writing and presenting dialogues, poetry, essays, letters and memoirs. A variety of media are utilized to develop an appreciation of their creative processes. Students also have an opportunity to create their own artworks. Prerequisite:AR 102, AR 103, AR 104 or AR 105; Every Year, Spring
WS 335 Images of Women in Psychology and Literature (EN/PS 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, Fall

WS 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 indepth 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 219 Women in Political Thought (3 cr.) Prerequisite: PO 101, PO 131, PL 101, PS 101, SO 101 or WS 101
WS 287 Women and Public Policy (3 cr.) Prerequisite: one course from PO, WS level 200
WS 330 Philosophy and Gender (PL 330) (3 cr.)
Prerequisite: one course from PL
WS 370 Intimate Partner Violence Seminar (PS 370)
(3 cr.) Prerequisites: two courses from SO, WS, PS or CJ level 200
WS 399 Independent Study ( 3 cr.)
WS 499 Independent Study ( 3 cr.)

## Graduate Courses

## Accounting (AC)

AC 613 Financial Statement Analysis (3 cr.) This course provides an in-depth examination of the financial and governance disclosures contained in firms' SEC forms $10-\mathrm{K}$ and proxy statements. Topics include revenue recognition, income statement geography, usefulness of financial ratios, short-term liquidity analysis, cash-flow statements and corporate governance. The accounting for and analysis of receivables, inventories, plant assets and leases also are covered in depth. Instances of questionable financial reporting and the lessons that can be learned from them are addressed. The prerequisite is waived if the student has an undergraduate degree in accounting. Prerequisite: MBA 600; Every Year, Spring

## Biological Sciences (BIO)

BIO 500 Writing and Science ( $\mathbf{3}$ 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, Spring

BIO 515 Advanced Biochemistry ( $\mathbf{4}$ 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, Spring

BIO 541 Evolution (BI 383) (4 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. Lastly, because this course is intended to provide training for teachers, students review new insights about How People Know and how to teach science so that students learn with understanding. Every Year, All

BIO 543 Freshwater Invertebrates of Connecticut ( $\mathbf{4} \mathbf{~ c r . ) ~}$ This intensive classroom and lab study of the freshwater ecosystem in Connecticut emphasizes the ecology and taxonomy of invertebrate animals. Several field trips to
selected localities provide opportunities for detailed observation and collection of living specimens for the lab.
Every Other Year, Fall
BIO 543L Freshwater Invertebrates Lab (0 cr.) Lab to accompany BIO 543. Every Other Year, Fall

## BIO 545 Introduction to Marine Ecosystems (4 cr.)

 This class presents an introduction to the major ecosystems and the factors that control their distribution. Classroom study of benthic and pelagic habitats from the littoral to the abyss is supplemented by field and laboratory investigations of shore marine and estuarine ecosystems. Emphasis is placed on developing skills requisite for using living and preserved marine organisms effectively in the high school or middle school biology lab. Prerequisite: BMS 370; Every Other Year, FallBIO 545L Marine Ecosystems Lab (0 cr.) Lab to accompany BIO 545. Every Other Year, Fall

BIO 548 Vertebrate Natural History (4 cr.) This course involves the observation, collection and identification of terrestrial and aquatic vertebrate animals. Emphasis is placed on life histories of local species. There are frequent field trips. This course primarily serves the graduate science requirements of MAT students. Students enrolling in this course are expected to complete course goals beyond those students enrolled in BIO 218. (2 class hrs., 4 lab hrs.) Every Year, Summer

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 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.

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BIO 580 Animal Cell Culture (4 cr.)
BIO 589 Neurophysiology (3 cr.)
BIO }599\mathrm{ Computers in Science Teaching (3 cr.)
BIO }605\mathrm{ Molecular and Cell Laboratories I (4 cr.)
BIO }606\mathrm{ Molecular and Cell Laboratories II (4 cr.)
BIO 650 Thesis I in Molecular and Cell Biology (4 cr.)
BIO 651 Thesis II in Molecular and Cell Biology (4 cr.)
BIO }688\mathrm{ Independent Study (1 cr.)
BIO }689\mathrm{ Independent Study (1 cr.)
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## Biomedical Sciences (BMS)

BMS 510 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, All

BMS 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 Year, Fall

BMS 518 Pathophysiology ( $\mathbf{3} \mathbf{c r}$ ) 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 522 Immunology ( $\mathbf{3} \mathbf{~ c r}$.) This course examines theories, techniques and recent advances in immunology and latest knowledge on immunoglobulins, complement, 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 530 Endocrinology (3 cr.) The objective of this course is to introduce the student 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 530 Endocrinology (3 cr.) The objective of this course is to introduce the student 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 532 Histochemistry ( 4 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 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 Histochemistry Lab (0 cr.) Lab to accompany BMS 532. (3 lab hrs.) Every Year, Fall

## BMS 546 Ethics in Biomedical Research and Health

Care Delivery ( $\mathbf{3} \mathbf{c r}$.) This course explores the major ethical issues in biomedical research and health care delivery, including alternative decision-making approaches as social needs and the responsibilities of practitioners and health care institutions evolve. Students examine the interaction among new medical discoveries, products and their costs on patients, health insurance providers and government. Every Year, Fall

BMS 552 Introduction to Biochemical 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, 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 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 ( $\mathbf{3} \mathbf{~ c r}$.) 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 indepth 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 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 foodassociated organisms and standard microbiological procedures used to determine the quality and safety of foods. Every Year, All

BMS 576 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 psychoative and neurology compounds. 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. 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. Every Other Year, FallCourses offered as needed
BMS 526 Principles of Epidemiology ( 3 cr.)
BMS 527 Pharmacology ( 3 cr.)
BMS 528 Advanced Clinical Parasitology ( 4 cr )
BMS 529 Medical Entomology ( 4 cr.)
BMS 531 Advanced Clinical Helminthology (4 cr.)
BMS 533 Air, Water and Soil Microbiology ( 4 cr.)
BMS 542 Advanced Microbiology ( 4 cr.)
BMS 542L Advanced Microbiology Lab (0 cr.)
BMS 569 Antimicrobial Therapy ( 3 cr.)
BMS 570 Virology ( 4 cr.)
BMS 572 Pathogenic Microbiology ( 4 cr )
BMS 572L Pathogenic Micro Lab (0 cr.)
BMS 573 Mycology ( 4 cr .)
BMS 574 Microbial Physiology (4 cr.)
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.)
BMS 650 Thesis I (4 cr.)

BMS 651 Thesis II (4 cr.)<br>BMS 670 Comp Exam/Medical Laboratory Sciences ( 2 cr .)<br>BMS 688 Independent Study ( 4 cr.) BMS 689 Independent Study (4 cr.)

## Chemistry (CHE)

CHE 552 Introduction to Biochemical 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, 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

Courses offered as needed
CHE 599 Independent Study (4 cr.)

## 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-on-learning and work individually or in teams to complete a realworld project using contemporary data management tools and techniques. Every Year, Fall

CIS 622 Database Architecture and Administration ( 3 cr .) Students in this course develop databases on webbased platforms and networks. Issues such as architecture, administration, planning, design, implementation, server selection and compatibility with local servers and browsers are considered. Prerequisite: CIS 620; Every Other Year, Fall

CIS 625 ERP Development ( 3 cr.) This course provides a detailed explanation of enterprise resource planning (ERP), with a focus on SAP (systems, applications and products in data processing) software. The course focuses on how supply chains are implemented through electronic integration of sales logistics, production/material management, procurement and human resources. Every Other Year, Fall

CIS 627 Data Warehousing and Data Mining ( 3 cr .) This course focuses on accessing information across a network on a variety of platforms based in a variety of database management systems with the development of the interface to make the data warehouse experience as seamless and non-idiosyncratic as possible. Prerequisite:
CIS 620; Every Year, Fall
CIS 628 Business Intelligence and Knowledge-Based Systems ( 3 cr.) This course focuses on business intelligence as a decision-support tool, and looks at knowledge management systems and the information requirements needed to effectively implement those systems. Students receive hands-on experience using business intelligence software. Every Year, Spring

CIS 630 Business Design and Object-oriented Analysis ( 3 cr .) This course considers systems-development 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 realworld project using contemporary analysis and design methodologies and tools. Every Year, Fall

CIS 640 Communications and Networking ( 3 cr.) This course covers telecommunications fundamentals for all multimedia data interchange in business enterprises. Concepts, models, architecture, protocols and standards for the design, implementation, integration, security and management of digital networks are reviewed. Every Year, Fall

CIS 642 Network Design and Implementation (3 cr.) This course covers the development, design and implementation, and management of corporate networks, as well as topologies and their implementation. Security and management issues are examined. Current methods, practices and issues in the use of computer networks to enable communications are covered. Also considered are the physical and architectural elements and information layers of a communication network. International standards, network architectures, communication protocols, data link switching, routing and LANs, WANs and client/server environments are reviewed. Prerequisite: CIS 640; Every Year, Spring

CIS 650 Information Systems Security (3 cr.) This course focuses on technological and organizational techniques to secure computer hardware, software and data including local area networks and web-based systems. Policies and procedures for information system security are developed. Issues such as access control, telecommunications and network security, security management practices, security architecture and modes and operations security are considered. Every Year, Fall

CIS 652 Advanced Topics in Information Systems Security ( $\mathbf{3} \mathbf{~ c r}$.) This course covers advanced and emerging information security concepts. Topics include issues such as digital evidence, computer crime and computer forensics. Hands-on use of computer forensic tools is required. Prerequisite: CIS 650; Every Year, Spring

CIS 660 Electronic Commerce Implementation (3 cr.) This course explores the implementation of electronic commerce within the firm. Topics include infrastructure design, server management, marketing and the use of emerging technologies, methods and tools. Students develop electronic commerce sites with working databases, complemented by class discussion of case studies of actual firms operating electronically. Emphasis is on the successful implementation of e-commerce in the firm. 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 Year, Spring

## CIS 690 Managing Information Technology Projects

 and Organizations ( 3 cr ) This course focuses on a holistic approach to IT project management. Planning, scheduling, organizing and managing projects are covered. Emphasis is on the project-management process and tools to prioritize and lead large IT projects. In addition, this course provides an understanding of computerized proj-ect-management tools. Every Year, SummerCIS 691 Integrative Information Systems Seminar Information Systems Capstone (3 cr.) This course is the capstone course in the MS-CIS program. A major project or thesis that demonstrates a comprehensive understanding is required. The project is an integrated, in-depth experience, applying concepts from the other courses within the program. A presentation of the project or thesis is required. Prerequisites: Minimum of 24 credits completed in the MS-CIS program. Every Year, Spring

CIS 695 Enterprise Architecture ( 3 cr.) This course explores the strategic use of information systems and
technologies for the evolving global marketplace. Emphasis is on information technology architectures and system integration. Every Year, Spring

# Courses offered as needed <br> CIS 614 Graduate Seminar in Application <br> Development (3 cr.) <br> CIS 662 Integrated Electronic Commerce Solutions (3cr.) 

## Economics (EC)

Courses offered as needed
EC 688 Independent Study-Economics (3 cr.)
EC 689 Independent Study-Economics (3 cr.)

## 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 as well as national and state standards for the teaching of science are a focus of instruction. 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 as well as national and state standards for the teaching of English
are a focus of instruction. 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 as well as national and state standards for the teaching of history/social studies are a focus of instruction. Prerequisite: ED 524; Every Year, FallED 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 as well as national and state standards for the teaching of mathematics are a focus of instruction. 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 as well as national and state standards for the teaching of a world language are a focus of instruction. Prerequisite: ED 524; Every Year, Fall

ED 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 whole-language development in the secondary grades with an emphasis on reading and writing across the curriculum. Students explore practical applications of 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, FallED 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 provides the firstsemester intern in the five-year MAT program in secondary education with supervision of the internship placement, as well as a weekly seminar that focuses on developing skills of reflective practice, mindfulness and intentional teaching. Admission to the MAT program is required. 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 ( $\mathbf{3} \mathbf{c r}$.) 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, Fall

ED 524 Methods I (3 cr.) This course introduces students to theories and practices that have cross-discipline applications. Among the topics explored are constructivist teaching, interdisciplinary teaching, lesson development, authentic assessment, Gardner's multiple intelligence theory and Goleman's emotional intelligence theory. Permission of the program director is required. Prerequisite: ED 413 or ED 500; 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. Prerequisite: ED 500; 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: the brain-mind connection 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. Topics addressed include: 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 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, FallED 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 15 hours of literacy instruction 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 diagnosis, 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. Takenin conjunction with ED 547 Philosophy of Teaching, 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 ( $\mathbf{3}$ 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 research and to recognize the link between theory and practice. Finally, the course helps students develop the tools and mindset of a teacher-researcher to help them become truly reflective practitioners. Prerequisite: ED 402, ED 413, ED 501 or ED 545; Every Year, Summer

## ED 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 558; Every Year, Fall and SummerED 554 Internship and Seminar I ( 1 cr.) This course supports students in the five-year MAT program for elementary education in the first semester of their internship. Discussion and comparison of school experiences are shared in a seminar that accompanies the internship experience. Prerequisite: ED 552; 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 diagnosis, 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 ( $\mathbf{3} \mathbf{~ c r}$.) 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; increased knowledge of resources for science learning; and management considerations in such areas as material preparation, groupings and safety. Prerequisite: ED 534 or ED 552; 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 and learning in 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 543; 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 on the pedagogy of teaching social studies. The course incorporates other disciplines with curriculum 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 552; Every Year, Summer

## ED 568 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. 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 instructional meth-
ods 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 568; Every Year, Fall and Summer

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, Fall and Summer

ED 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. Prerequisite: ED 501; Every Year, Fall

ED 601 Student Teaching and Seminar ( 6 cr.) This 10week 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 or ED 545; 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 609 Health Issues in the Classroom (2 cr.) This course addresses the philosophy for, as well as laws and policies pertaining to, teaching health education in the middle and secondary schools. The topics required by Connecticut law include substance abuse prevention, conflict resolution and violence prevention, sexuality, disease prevention, and child abuse prevention. Specific teaching methods, activities and resources for teaching these topics are an integral part of this course. Prerequisite: ED 413 or ED 501; Every Year, Spring and Summer

ED 614 Elementary Education Internship III (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 fall semester of the student's second year of study. 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, SpringED 616 Secondary Education Internship III (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 fall semester of the student's second year of study. Prerequisite: ED 501; Every Year, Fall

## ED 617 Secondary Education Internship IV (1 cr.)

 This course provides the five-seminar 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. In addition, students begin to develop their electronic portfolio. 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. In addition, students complete their electronic portfolio. Prerequisites: ED 550, ED 693; Every Year, Spring

> Courses offered as needed
> ED 519 Language Arts Communication (3 cr.)
> Prerequisite: ED 413 or ED 525
> ED 599 Independent Study (1 cr.)

## Educational Leadership (EDL)

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, Spring

## 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 supervising 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 fieldbased experience involving classroom supervision of a specific instructional program across multiple grade levels. Every Year, Fall
## 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 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 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, Spring
## EDL 607 Internship in Educational Leadership (3 cr.)

 This field-based experience requires students to assume a leadership role and demonstrate application of the Connecticut Standards for Educational Leaders. 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. Course culminates in the development of an electronic portfolio, which represents the work during the internship. Prerequisites: EDL 601, EDL 603, EDL 605; Every Year, FallEDL 609 Educational Program Evaluation (3 cr.) This course introduces students to 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. Prerequisite: EDL 603; Every Year, Spring

EDL 611 Educational Law ( $\mathbf{3} \mathbf{c r}$.) 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, Summer

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, Summer

## English (EN)

EN 509 ( 3 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 540 Classical Literature for Prospective Teachers

 ( $\mathbf{3}$ cr.) Selected texts from classical Greek and Roman literature that are often taught in high school are examined in this course. Epic poetry and classical tragedy are emphasized. Historical, literary and generic background is explored. Authors include Homer, Virgil, Aeschylus, Sophocles, Euripides and Ovid. Some attention is paid to 19th- and 20th-century British and American poemsthat draw heavily on classical legend or myth. Every Other Year, Spring

## EN 541 Poetry for Prospective High School Teachers

( 3 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 ( $\mathbf{3}$ cr.) This close examination of language and discourse emphasizes process writing approaches, traditional and linguistic analysis of language and structure, techniques of rhetoric and discourse, and style and evaluation of expository student writing. Every Year, Spring

EN 554 Literature for Youth and Adolescents (3 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. Every Other Year, Spring

## EN 580 Realism and Naturalism in American Fiction

( $\mathbf{3} \mathbf{c r}$.) This intensive study of realistic and naturalistic American fiction in the period from 1875-1925 is designed specifically for prospective teachers of high school English classes. Close reading of primary texts is supplemented by background readings in critical theory. Every Other Year, Fall

Courses offered as needed
EN 500 Special Topics in Literature ( 3 cr .)
EN 599 Independent Study ( 1 cr.)
EN 699 Independent Study ( 3 cr )

## Finance (FIN)

FIN 610 Global Investment 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; Every Other 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; Every Other Year, Fall

FIN 616 Derivatives ( $\mathbf{3}$ cr.) This course provides an indepth 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; Every Other 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 600; Every Other Year, Spring

FIN 665 Issues in Equity Compensation (3 cr.) This course is a seminar in the theory and practice of equity compensation. Students are introduced to the economic and managerial incentives for utilizing equity compensation as well as the agency, corporate governance, valuation and accounting issues that arise when firms utilize equity compensation. Prerequisite: FIN 601, FIN 600 or FIN 601; Every Other Year, Spring

## FIN 690 Capstone Seminar in Investment Analysis

 ( 3 cr .) This is the capstone seminar course for students enrolled in the MBA/CFA track program. The course uses case study methodology to reinforce the entire CFA Candidate Body of Knowledge (CBOK). Students are expected to sit for the CFA Level I exam within two months of completing the course. Every Year, SpringCourses offered as needed
FIN 604 Risk Management (3 cr.) Prerequisite: FIN 600 FIN 613 Management of Financial Institutions ( 3 cr .) Prerequisite: FIN 600
FIN 615 Emerging Financial Markets (3 cr.)
Prerequisite: FIN 600
FIN 670 Trading and Exchanges (3 cr.) Prerequisite: FIN 610

## Health Management (HM)

HM 600 Foundations of Health Care Management ( $\mathbf{3} \mathbf{~ c r}$ ) 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 ( 3 cr ) This course provides a broad perspective on the fundamentals of measuring and assuring quality in health care facilities with a major emphasis on the application of industrial quality improvement techniques in health care. Students gain a working knowledge of accreditation organizations including the JCAHO and NCQA. The course explores in detail high priority efforts to reduce medical errors as well as the role of consumers in evaluating the quality of the health care services they receive. At the completion of the course, students are able to competently participate in health care quality endeavors at all levels of provider, payer, regulatory and accreditation organizations, while understanding the limitations of quality assessment methods currently in use. Every Year, Fall

HM 626 Epidemiology and Population Health ( $\mathbf{3}$ cr.) This course familiarizes students with the principles and methods of epidemiology and their application to the study of the health of populations. It focuses 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 Year, Spring

## HM 630 Corporate Compliance in Health Care Indus-

 try ( $\mathbf{3} \mathbf{~ c r}$ ) 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 660 Human Resource Management in Health

Care Administration ( 3 cr .) The policies, organization, procedures and techniques required to develop a positive personnel program and a favorable working climate 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 require-
ments, 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, Fall

HM 663 Integrated Health Systems and Managed Care ( 3 cr .) This course focuses on efforts to integrate provider networks to create more efficient and better coordinated health care systems. The impact of managed care activity on traditional health care provider roles is analyzed. Capitation and other managed care reimbursement techniques are explored as are the effects they have had on the efficiency and effectiveness of health care delivery. The successes and failures of integrated health systems and managed care organizations and attempts to forecast the future of both are examined critically. Every Other Year, Fall

HM 664 Financial Management in Health Care Organizations ( $\mathbf{3} \mathbf{~ c r}$ ) 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, Fall

## HM 667 Strategy Planning and Marketing in Health

Care Organizations (3 cr.) This course provides an understanding of current concepts of strategic planning in health care and how health care marketing relates to strategic planning. In addition, using the pharmaceutical industry as the principal example, the marketing of health care products and services is explored in detail. At the completion of the course, students understand how marketing principles are employed by payers, providers, pharmaceutical companies and medical equipment/device manufacturers to attract and retain customers, including individual patients. Every Other 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, Spring

HM 669 Organization and Management of Long-Term Care Facilities (3 cr.) This course covers the organization and administration of long-term care facilities. The sociology and psychology of aging as they affect long-term health care also are explored. Concepts of safety and secu-
rity, labor market trends, city and state codes, and major legislation regulating these facilities are reviewed. The course fulfills the educational requirement for licensure in Connecticut. Every Year, Fall

HM 670 Health Economics ( 3 cr.) This course provides knowledge of the principles of health economics and examines the application of economic analysis to health services. The course explores financial incentives in health-care delivery as well as methods used to measure cost effectiveness, analyze operations, and manage resources. The effects of the government's health policy and fiscal policy on health services also are examined. Every Year, Spring

Courses offered as needed<br>HM 625 Introduction to Physician Practice Management (3 cr.)<br>HM 645 Gerontology ( 3 cr )<br>HM 671 Health Policy and Politics ( 3 cr .)<br>HM 780 Internship I (degree Students Only) (3 cr.)<br>HM 781 Internship II (degree students only) (3 cr.)<br>HM 783 Consulting Practicum I (degree students only) ( 3 cr )<br>HM 784 Consulting Practicum II (degree students only) (3 cr.)<br>HM 790 Residency I (non-degree students only) ( 4 cr .) HM 791 Residency II (4 cr.)

## Health Science (HSC)

Courses offered as needed
HSC 562 Methods of Teaching Allied Health Science ( 3 cr .)
HSC 563 Microteaching (3 cr.)

## History (HS)

## HS 562 Topics in American Constitutional History

 ( 3 cr .) This course takes a detailed look at selected topics in American political/social history as they shaped and continue to shape American society. Topics are covered by integrating historical works with Supreme Court decisions to illustrate the evolution of constitutionalism and social thought. The topics vary, but every offering includes an initial component on the Declaration of Independence and the Constitution. Every Year, AllHS 564 Topics in East Asian History (3 cr.) Students are introduced to Chinese and Japanese civilizations from the dawn of history to the end of the 20th century. The course stresses the artistic, cultural and intellectual traditions that evolved in East Asia. Every Other Year, All

HS 565 Topics in Geography for the 21st Century (GP 565 ) ( 3 cr .) Students are introduced to the general structure and methodology of geographic study in a cultural setting. The interaction among environments, populations, ways of life and locations are studied in a coherent, organized way. The distribution of people, food, energy and resources are analyzed, and there is an assessment of how to evaluate environmental potential, to deal with other peoples, to maximize available opportunities, and to determine which course of action to follow for progress and growth. Every Year, All

Courses offered as needed
HS 563 Dynamics of American Social Structure (3 cr.)
HS 566 Chinese Civilization ( 3 cr .)
HS 599 Independent Study (3 cr.)

## Interactive Communications (ICM)

ICM 500 Special Topics ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ c o n s i s t s ~ o f ~}$ seminar-based classes on emerging areas of scholarly research or technological developments in interactive communications, with a particular focus on new technical applications or how developments illustrate issues regarding economic, gender and social groups. Every Year, All

ICM 501 Introduction to the Study of Interactive Communications ( $\mathbf{3} \mathbf{~ c r}$.) This course introduces students to the intellectual logistics of graduate study in general, to the historical and contemporary body of research literature in the scholarly subject area of interactive communications and to career opportunities. Students are expected to write several research papers capped by a bibliographical essay that covers books, professional journal articles or studies focused on interactive communications. Every Year, Fall

ICM 502 Visual Aesthetics (3 cr.) This course covers the principles and practices associated with design as both a physical manifestation of an artistic idea and a practical expression for communicating messages through images, icons and other elements that form the information architecture structure common to interactive media. Students analyze the aesthetics of artistic expression and acquire basic interface design skills via application of Photoshop software to specific assignments. Every Year, Fall

ICM 503 Advanced Visual Aesthetics ( $\mathbf{3} \mathbf{c r}$.) This course focuses on the use of skills in composition, layout, color theory and typography to explore advanced design topics in a screen-based environment. Students develop the ability to organize elements for a variety of visual effects and gain an understanding of how to use technology to create meaningful imagery. Every Year, Spring

ICM 504 Information Animation (3 cr.) This course covers the concepts and production elements that lead to
composition of the two-dimensional interactive moving illustrations and interfaces designed to convey a specific message or idea as a stand alone explanatory device or as part of a larger narrative. Students completing this course analyze the development and present state of informational animation and learn how to produce two-dimensional animations. Prerequisite: ICM 502 or ICM 503; Every Year, All

ICM 506 Writing for Interactive Media (3 cr.) This course covers compositional techniques associated with producing textual information in an interactive, comput-er-mediated environment for news and strategic communications. Students learn how to conduct factual research, compose nonfiction articles and create textual interactive content such as timelines, polls and quizzes and assemble the elements into a single narrative story. Every Year, All

ICM 508 Media Imaging and Sound Design (3 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 still and video images and audioclips, edit the material and weave the components into multimedia narratives such as slide shows. Every Year, Fall and Summer

ICM 512 Interactive Development for Strategic Communications ( $\mathbf{3} \mathbf{c r}$.) This course covers the fundamental practices associated with interface design, navigation cues and strategies, information architecture and usability testing as part of the production of interactive content. Students analyze the structure and presentation of information and prepare research papers that examine specific design and structural issues. In addition, students assemble a presentation consisting of original articles, images, audio, video and information animation components. Every Year, All

## ICM 522 Communications, Media and Society (JRN

 522) ( 3 cr .) This course focuses on the historical and contemporary state of personal and public interaction with popular media in the context of technological developments and the impact of these developments on society and culture. Students study journal articles, survey the research literature and write papers on the historical trajectory of information consumption from the emergence of mass-produced paper-based texts to the development of the World Wide Web. Every Year, AllICM 531 Graduate Internship ( $\mathbf{3} \mathbf{~ c r}$.) This course provides eligible journalism and interactive communications 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 90 hours in a supervised environment. All internships must be approved by the graduate program director. Every Year, All

ICM 542 Graduate Seminar (3 cr.) From time to time, the university invites in-residence adjunct lecturers or creates a team-teaching environment for colloquium over the course of a semester on varied issues within culture, technology and the media. Students enrolling in this course also may attend external conferences to both present papers and participate in discussions. Every Year, All

ICM 552 Media Law (JRN 552) (3 cr.) This course covers the legal and ethical dimensions of media communications across platforms, with an emphasis on First Amendment, privacy and copyright issues. Students examine historical cases, analyze the contemporary evolution of law as it relates to technological development and discuss ethical situations that arise from the confluence of accelerated technological development and the culture's ability to understand its consequences, unintended or otherwise. Every Year, All

ICM 590 Project Planning ( $\mathbf{3} \mathbf{c r}$.) This seminar is intended to guide the initial stages (ideation, planning, prototyping) of the master's project. This course provides a supportive environment for developing projects. Every Year, Spring

ICM 601 Master's Project (3 cr.) Students completing the interactive communications program are required to complete a capstone experience described as either a master's project or thesis. The master's project option requires students to create an original, fully functional presentation for informational services, news or strategic communications. Every Year, All

ICM 602 Thesis ( $\mathbf{3} \mathbf{~ c r}$.) Students completing the interactive communications program are required to successfully finish a capstone experience described as either a master's project or thesis. The thesis option requires students to research and write an original scholarly paper that explores an aspect of interactive communication. Students must receive approval for the thesis subject from their appointed thesis adviser. Every Year, All

Courses offered as needed
ICM 505 Web Programming ( 3 cr .)
ICM 513 Applied Usability (3 cr.)
ICM 520 Game Design and Development (3 cr.)

## International Business (IB)

IB 600 Managing in a Global Economy ( $\mathbf{3}$ cr.) This course helps students 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. Finally, they learn to recognize implications to business of dealing in foreign currencies, hedging and exchange-rate fluctuations. Every Year, All

IB 623 International Business Negotiation (3 cr.) This course teaches the arts and science of negotiations and helps students develop the fundamental skills necessary for systematic and thorough preparation and management of negotiations. Special emphasis is placed on learning how culture influences the negotiation behavior of people. Legal and ethical constraints of negotiation also are considered. Course content is drawn from the fields of communication, law, psychology, government, international diplomacy and all the functional areas of business. The course involves a lot of experiential activities that are designed to expose students to a broad spectrum of problems faced by business managers and deepen their understanding of complexities of negotiating globally. Prerequisite: IB 600; Every Year, Spring

## Courses offered as needed <br> IB 611 International Corporate Finance ( 3 cr.) <br> Prerequisites: FIN 600, IB 600

## Journalism (JRN)

JRN 500 Special Topics in Journalism (3 cr.) This course consists of seminar-based classes that consider emerging areas of scholarly research or industry developments in journalism, with a particular focus on how a specific research activity or industry development illustrates issues regarding economic, gender and social groups. Every Year, All

## JRN 502 Introduction to the Practice of Journalism

 ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ c o u r s e ~ a s s e s s e s ~ t h e ~ c o n t e m p o r a r y ~ s t a t e ~ o f ~}$ broadcast, print, online and other forms of journalism to highlight the problems and prospects facing the profession as students begin training for careers as reporters and editors. In addition, the course introduces students to the field as the subject of scholarly inquiry. Every Year, FallJRN 503 Computer-Assisted Reporting ( 3 cr.) The technological tools of reporting have rapidly evolved to the point where journalists need to reach a level of technological literacy to research stories. This course presents an introduction to computer-based techniques for finding information in a mass of data and for online research, analysis and presentation of the news. Every Year, All

JRN 504 Reporting for Print ( $\mathbf{3} \mathrm{cr}$.) This intense workshop stresses the fundamentals of reporting and writing for publication. Students learn the criteria of news judgment, techniques for story assignment, interviewing, news writing and news editing skills. Within the context of
diverse assignments, students are expected to produce news stories. Every Year, All

JRN 521 Writing for the Ear ( $\mathbf{3}$ cr.) Writing for the Ear is a newsroom-based course that prepares students to compose stories for radio and television news, based on same-day copy from the Associated Press and enterprise reporting. The course focuses on developing the style of conversational broadcast writing under deadline pressure. Every Year, All

## JRN 522 Communications, Media and Society

 (ICM 522) ( 3 cr .) This course focuses on the historical and contemporary state of personal and public interaction with popular media in the context of technological developments and the impact of these developments on society and culture. Students study journal articles, survey the research literature and write papers on the historical trajectory of information consumption from the emergence of mass-produced paper-based texts to the development of the World Wide Web. Every Year, AllJRN 524 Broadcast Journalism ( 3 cr.) This course emphasizes reporting for television news from story development to finished piece, covering the conceptual aspects and practical skills required for visual journalism including videography, editing and field reporting. Students attend workshops on the use of production gear and software. Every Year, All

JRN 527 Covering Government and Politics ( $\mathbf{3}$ cr.) This course is designed to apply the skills students learned in introductory writing and editing classes to the coverage of government. Additionally, the course introduces new skills needed to cover public and quasi-public agencies, organization and institutions, and the community organizations affected by public institutions. Every Year, Spring

JRN 531 Graduate Internship ( $\mathbf{3}$ cr.) This course provides eligible journalism and interactive communications 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 90 hours in a supervised environment. All internships must be approved by the graduate program director. Every Year, All

JRN 532 Advanced Broadcast Journalism ( 3 cr.) This course focuses on the production of long-form television news or other non-fiction programming for series or documentaries. Students learn how to develop story ideas and follow the production trajectory from preproduction planning and story research to videography and postproduction work. Prerequisite: JRN 524; Every Year, Spring

JRN 533 Advanced Print Reporting (3 cr.) Students explore the conceptual and practical skills required for
long-form reporting for newspapers and magazines. A particular emphasis is placed on investigative reporting. Students are expected to produce an original and publishable news article. Every Year, Summer

JRN 534 Story in Journalism (3 cr.) Students taking this course examine news writing in the context of traditional and alternative journalistic forms, including the role of dramatic narrative and other storytelling techniques. Students study the works of influential nonfiction writers and engage in intense practice in nonfiction writing. Every Year, All

JRN 536 Opinion Journalism (3 cr.) Opinion Journalism covers conceptual development and practical techniques toward producing subjective content for print, broadcast and interactive news media. This course places specific focus on studying the contemporary landscape in radio and cable television news talk shows. Every Year, Spring

JRN 538 Reporting for the Web (3 cr.) This course teaches the principles and practices of producing news for online platforms, with emphasis on creating and assembling audio, graphics, images, interactive elements, text and video into a single multimedia work of journalism. Students work individually and in teams to produce original multimedia news stories. Some experience in reporting for print or broadcast is required. Every Year, Spring

JRN 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, Fall

JRN 542 Graduate Seminar ( $\mathbf{3}$ cr.) From time to time, the university invites in-residence adjunct lecturers or creates a team-teaching environment for colloquium over the course of a semester on varied issues within culture, technology and the media. Students enrolling in this course also may attend external conferences to both present papers and participate in discussions. Every Year, All

JRN 552 Media Law (ICM 552) (3 cr.) This course covers the legal and ethical dimensions of media communications across platforms, with an emphasis on First Amendment, privacy and copyright issues. Students examine historical cases, analyze the contemporary evolution of law as it relates to technological development and discuss ethical situations that arise from the confluence of accelerated technological development and the culture's ability to understand its consequences, unintended or otherwise. Every Year, All

JRN 570 Writing for Magazines (3 cr.) Students learn to write in-depth pieces suitable for publication in a quality
magazine or as a special project for a newspaper or Internet site. Assignments are based on student proposals.
Emphasis is placed on gathering information, conducting interviews and organizing the material into a coherent and interesting package. Every Year, All

JRN 601 Master's Project ( $\mathbf{3}$ cr.) Students completing the journalism program are required to successfully finish a capstone experience described as either a master's project or thesis. The master's project option requires students to create an original, in-depth journalistic piece for print, broadcast or online distribution. Students must receive approval of the subject from the master's project adviser. Every Year, All

JRN 602 Thesis ( $\mathbf{3} \mathbf{~ c r}$ ) Students completing the journalism program are required to successfully finish a capstone experience described as either a major project or thesis. The thesis option requires students to research and write an original scholarly paper that explores an aspect of journalism history, criticism or related topic. Students must receive approval of the subject of the thesis from the thesis adviser. Every Year, All

Courses offered as needed
JRN 526 Editing for Print (3 cr.)

## Laboratory Science (LS)

Courses offered as needed
LS 650 Thesis I ( 4 cr.)
LS 651 Thesis II (4 cr.)
LS 670 Comp Exam/Medical Laboratory Sciences ( 2 cr .)
LS 671 Comprehensive Exam in Microbiology ( 2 cr.)
LS 672 Comprehensive Exam in Lab Management and Administration (2 cr.)
LS 688 Independent Study ( 4 cr .)
LS 689 Independent Study (4 cr.)

## Law (LW)

Courses offered as needed
LW 601 Legal and Regulatory Issues (3 cr.)

## Management (MG)

MG 610 Managing People and Organizations (3 cr.) This course introduces students to the core topics and issues in organization theory and managing people. 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, technolo-
gy, 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. Every Year, All

MG 640 Strategic Sourcing and Supply Management ( $\mathbf{3} \mathrm{cr}$.) 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 Operations and Supply Chain Management ( 3 cr .) This course examines the design, operation, and improvement of production systems that create and deliver a firm's primary products and services. The basic principles and the strategic issues pertaining to the role of the operation in a supply chain are covered. Topics include quality management, capacity management, inventory planning, facility location and layout, and lean systems. Every Year, Spring

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, Fall

MG 690 Strategic Management ( $\mathbf{3} \mathbf{~ c r}$.) This is a capstone course for MBA students taken in their last semester. 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. Prerequisites: MBA 600, MBA 610, AC 600, FIN 600, MK 600, MG 610; Every Year, All

Courses offered as needed<br>MG 603 Project Management (3 cr.)<br>MG 625 Entrepreneurship (3 cr.)<br>MG 626 Business Plan Competition (3 cr.)<br>MG 630 Corporate Governance ( 3 cr .)

## Marketing (MK)

MK 600 Managing Customers and Markets (3 cr.) This course presents an introduction to the tactical and strategic considerations employed by the marketing manager in the formulation, administration and evaluation of marketing policies. Overall marketing goals, policies and programs are formulated with emphasis on planning and implementation. Every Year, All

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; Every Year, Spring

Courses offered as needed
MK 610 Research for Marketing and Business
Decisions (3 cr.) Prerequisite: MK 600
MK 611 Managing Marketing Communications (3 cr.) Prerequisite: MK 600
MK 612 New Product Marketing (3 cr.) Prerequisite: MK 600
MK 613 Marketing Planning (3 cr.) Prerequisite: MK 600 MK 620 Applied Consumer Behavior Research (3 cr.)

Prerequisite: MK 600

## Master of Business Administration (MBA)

MBA 600 Strategic Business Problem Solving (3 cr.)
Using case analysis, this course introduces students to a systematic approach to identifying and solving business problems. Classic strategic thought and current business developments situate the problems of business in both current and historical contexts. Emphasis is on analysis, communication and strategic decision making. Every Year, All

MBA 605 Business Communications (1 cr.) This business communications course helps students develop and refine their business writing and presentation skills. Students receive assessment and coaching to improve their writing as applied to business documents, such as execu-
tive summaries, case analyses, reports, letters and email. Presentation skills also are covered. Every Year, All

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 deci-sion-making tools to business situations through cases. Every Year, All

## Mathematics (MA)

MA 541 Complex Variables ( $\mathbf{3} \mathrm{cr}$.) 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, MA 305; Every Other 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

Courses offered as needed
MA 570 Number Theory ( 3 cr .)
MA 580 Euclidean and Non-Euclidean Geometry ( 3 cr )
MA 583 Mathematics: Historical Insights (3 cr.)
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 (NU)

NU 500 Theoretical Foundations of Advanced Practice ( $\mathbf{3} \mathbf{~ c r}$ ) This course facilitates the student's formulation of a theoretical basis for knowledge, critical thinking, and ethical judgment at an advanced level of practice. Students analyze selected nursing theories as well as theories from other disciplines focusing on the evaluation of their relevance to nursing practice. Emphasis is placed on the theory of holism. Every Year, Fall

NU 502 Issues and Roles in Health Care (3 cr.) Students are introduced to critical thinking in areas that inform the practice of the professional nurse prepared at the master's level. The historical evolution of the advanced practice
role is discussed. Students deliberate on legal, ethical and political issues and analyze the impact and importance of these issues to health care policy, organization and financing. The leadership role of the advanced practice nurse in evaluating and responding to issues and policy to promote the health care of individuals and populations in diverse settings is examined. Every Year, Fall

NU 504 Methods of Nursing Research ( $\mathbf{3}$ cr.) Research reported in multidisciplinary and nursing literature is reviewed and exposes students to quantitative, qualitative and triangulated methods. The course is designed to build on previous knowledge of research and statistics. Consideration is directed toward critiquing research literature. Perspectives on the relationship of nursing and non-nursing theories to nursing research are explored. Required: undergraduate or graduate statistics within five years. Every Year, Spring

NU 506 Advanced Health Assessment (4 cr.) This course presents the principles of performing a comprehensive holistic health assessment and organizing and reporting the findings in a professional format. Attention is given to health assessment and physical examination across the lifespan within diverse communities. The processes underlying diagnostic decision-making are introduced. A lab component enables the student to master the techniques for performing a holistic health assessment. Every Year, Fall

NU 506L Advanced Health Assessment Lab (0 cr.) This lab must be taken with NU 506. It is composed of two lab hours.

NU 508 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, Spring

NU 517 Principles of Electrocardiography ( 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 and Family Nurse Practitioner tracks. Every Year, Fall

NU 518 Principles of Radiography ( $1 \mathbf{c r}$.) 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 and Family Nurse Practitioner tracks. Every Year, Spring

NU 570 Holistic Primary Care I (3 cr.) Health promotion, prevention and the diagnosis of common and chronic problems encountered in primary care settings are considered. An 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 Adult and Family Nurse Practitioner tracks. Prerequisites: NU 500, NU 502, NU 506, BI 518; Every Year, Spring

NU 571 Holistic Primary Care Practicum I (3 cr.) This course integrates the principles of primary care nursing (NU 570) 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 Adult and Family Nurse Practitioner tracks. Prerequisites: NU 500, NU 502, NU 506, BMS 518; Every Year, Spring

NU 626 Holistic 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 Adult and Family Nurse Practitioner tracks. Prerequisites: NU 570, NU 571; Every Year, Fall

NU 627 Holistic Primary Care of Adults: 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 Adult Nurse Practitioner students. Prerequisites: NU 570, NU 571; Every Year, Fall

NU 628 Primary Health Care of the Family: 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 knowl-
edge base to care for the pregnant woman, well infant and child in diverse communities. Opportunities to evaluate theory and research findings relevant to care of the family are provided. Intended for Family Nurse Practitioner students. Prerequisites: NU 570, NU 571; Every Year, Fall

## NU 629 Holistic Primary Care of the Family: 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 Family Nurse Practitioner students. Prerequisites: NU 570, NU 571; Every Year, FallNU 630 Holistic Primary Care III (4 cr.) This course focuses on selected complex and 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 Adult and Family Nurse Practitioner tracks. Prerequisite: NU 626; Every Year, Spring

NU 631 Holistic Primary Care of Adults: 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 Adult Nurse Practitioner students. Prerequisites: NU 626, NU 627; Every Year, Spring

NU 632 Primary Health Care of the Family: Pediatric Focus (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 Family Nurse Practitioner students. Prerequisite: NU 628; Every Year, Spring

NU 633 Holistic Primary Care of the Family: Practicum III ( $4 \mathbf{c r}$.) 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 Family Nurse Practitioner students. Prerequisites: NU 626, NU 628, NU 629; Every Year, Spring

Courses offered as needed<br>NU 586 Holistic Care in Forensic Nursing I (3 cr.)<br>Prerequisites: NU 500, NU 502, NU 506, BMS 518<br>NU 587 Holistic Care in Forensic Nursing: Practicum I<br>( $\mathbf{3}$ cr.) Prerequisites: NU 500, NU 502, NU 506, BMS 518<br>NU 610 Forensic Photography (1 cr.)<br>NU 644 Holistic Care in Forensic Nursing II ( 3 cr.)<br>Prerequisites: NU 586, NU 587<br>NU 645 Holistic Care in Forensic Nursing: Practicum<br>II (3 cr.) Prerequisites: NU 586, NU 587<br>NU 646 Holistic Care in Forensic Nursing III (3 cr.)<br>Prerequisites: NU 644, NU 645<br>NU 647 Holistic Care in Forensic Nursing: Practicum<br>III (4 cr.) Prerequisites: NU 644, NU 645<br>NU 656 Vitamins and Herbal Medicines ( 3 cr .)<br>NU 657 Sexual Assault Nurse Examiner (SANE)/<br>Sexual Assault Forensic Examiner (SAFE) (3 cr.) NU 688 Legal and Ethical Issues in Forensic Nursing ( 2 cr .)<br>NU 699 Independent Study (1 cr.)

## Occupational Therapy (OT)

OT 500 Fieldwork Level II ( 6 cr .) This supervised, 12week 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 Integration and Neurorehabilitation ( 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 Neurorehabilitation 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 Neurorehabilitation Lab (1 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, Fall

OT 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 refer-
ence 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, SpringOT 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 cus-tom-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 issuesrelated 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 ( 2 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 socio-cultural 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

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Courses offered as needed
OT 600 Evidence Based Practice in OT ( 3 cr .)
OT 601 Research Methods I ( 4 cr .)
OT 602 Practice Trends in Occupational Therapy ( 3 cr .)
OT 603 Research Methods II ( 4 cr ) Prerequisite:
    OT 601
OT 604 Directed Study in Evidence Based Practice
    ( 3 cr.) Prerequisite: OT 600
OT 605 Directed Study in Clinical Practice (3 cr.)
OT 606 Professional Paper Or Project Professional
    Paper or Project (3 cr.)
OT 607 Educational Leadership (3 cr.)
OT 608 Entrepreneurial Concepts for OT ( 3 cr .)
OT 609 Scholarly Seminar (3 cr.)
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## Organizational Leadership (OL)

OL 510 Stakeholder Development ( 3 cr .) This course explores the fundamental functions of marketing from the flow of goods and services to consumers. Analysis, planning and control of the marketing effort are covered. Topics include market segmentation, targeting, positioning of services and products. Students learn the methods, tools, skills and techniques required to develop a marketing plan. Every Year, All

## OL 520 Accounting in Action for Organizational

 Leaders ( $\mathbf{3} \mathbf{~ c r . )}$ ) This course is a blend of managerial and financial accounting. Topics covered include: financial statements, balance sheet, income statement and statement of cash flows. Focus is on critical accounting issues facing managers: income and expense recognition, footnote disclosures for financial statements, financial statement analysis, cost-volume-profit analysis and budgeting. This course provides the non-accounting manager an overview of key organizational accounting concepts. Every Year, All
## OL 601 Foundations of Organizational Leadership

 ( $\mathbf{3}$ cr.) This course explores supervisory dynamics such as problem solving, ethics, conflict resolution, delegation and empowerment. Students practice reflection, as applied within the framework and concepts of Schon's Reflective Practitioner. Participants engage in reflection-in-action as well as reflection-on-action as these approaches apply to supervision. Every Year, All
## OL 610 The Power and Politics of Communication

( 3 cr .) This course focuses on the persuasive communication techniques and strategies that can be used when one does not have or does not want to resort to the use of direct authority. The role of ethics is considered throughout. Situations include: how to gain commitment; how to overcome resistance; and how to effectively manage conflict. Students use their organizations as cases, employing communication technologies as appropriate. Prerequisite: MG 610 or OL 601; Every Year, All

OL 615 Leadership Across Cultural Boundaries Leadership Across Boundaries ( $\mathbf{3} \mathrm{cr}$.) This course covers the practical realities of leading across cultural differences and national boundaries. The focus is on coordinating and sustaining cooperative activities across various types of cultural boundaries (including generational, gender, ethnic and regional). Students explore differences both domestically and globally. Prerequisite: MG 610 or OL 601; Every Year, All

OL 620 Leading Through Metrics-Based Results (3 cr.) The foundation of this course is the application of metrics to performance improvement and process reengineering. The balanced scorecard approach is a key element. Students learn the essential tools and technologies required for this effective management technique. Prerequisite:
OL 520, OL 601; Every Year, All
OL 630 Performance Management ( 3 cr.) This course focuses on processes and approaches to ensure that organizational goals are met effectively and efficiently. Emphasis is placed on how to impact behavior and results. Students learn how behaviors and competencies support department and functional areas as well as the overall organization. Individual assessment approaches and feedback skills are stressed. The course provides students with an opportunity to develop or improve their interpersonal and coaching skills for sustained change. Prerequisite: MG 610 or OL 601; Every Year, All

OL 640 Project Management ( $\mathbf{3}$ cr.) This course goes beyond basic project management. 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. Prerequisite: MG 610 or OL 601; Every Year, All

OL 650 Leading Organizational Change ( 3 cr ) This course combines the principles of organizational dynamics with change strategies. Also covered are negotiation techniques and understanding the political dynamics involved in organization change, including mutual gain processes. Students learn how to evaluate an organization on several key levels such as communication, values and behavior.

Students also learn theory and practice for planning and implementing small- and large-scale change in organizations. Prerequisite: MG 610 or OL 601; Every Year, All

OL 651 American Higher Education Today: Conditions, Trends and Projections ( 3 cr.) The American system of higher education is one of the most diverse, complex and esteemed in the world. Create a foundation of understanding and learn about the many different organizational structures that make up multi-dimensional institutions of higher learning including: community colleges, four-year colleges, universities, for-profit, not-for-profit, land grant and research institutions. Explore the culture, mission, challenges, opportunities, and risks that are embedded in the future of American higher education. Discover the range of knowledge, skills and expertise needed by effective future leaders. Prerequisite: OL 601

OL 652 Leadership and Transformation in Higher Education ( 3 cr ) Explore the challenges faced by leaders of higher education and gain a greater understanding of the knowledge, perspectives and skills essential to the leadership roles in college and universities. What are the characteristics of a great higher education leader at any level of the organization? How does a leader create a vision and make it work? How does a leader make forward-thinking decisions? The challenges are many for leaders who strive to create and maintain quality educational programs and services while transitioning to an entrepreneurial business model of operation. Other topics such as technology, globalization, resource management, fiduciary responsibilities, ethics, external relations and partnerships are also be addressed. Prerequisites: OL 601, OL 651

OL 653 Preparing for Higher Education in the 21st Century (3 cr.) Assessment and reflection are tools for professionals who strive to adapt and grow in today's ever changing organizational environment. Institutions of higher education require current and future leaders to be change agents who can infuse new visions, adapt best practices, and foster excellence through innovation. Discover the importance of participating and strategic planning processes and explore ways to introduce ideas into the mainstream of thought at an institution. Learn about peer-reviewed research, the value of professional networks, and create a professional development plan for becoming an effective leader in higher education. Prerequisites: OL 601, OL 652

OL 654 Action Learning Capstone Project In Higher Education I ( $\mathbf{3} \mathbf{~ c r}$.) Action learning is a process of learning by doing through working on real problems, with a focus on learning and taking action. It will enhance students' knowledge as well as develop their leadership skills through a meaningful and practical real situation in an institution of higher education. The Action Learning Capstone Project (ALCP) is a
continuation of projects that were completed in OL 651, OL 652 and OL 653. Students determine the project methods and strategies, determine the resources needed, and implement the project. Prerequisites: OL 601, OL 651, OL 652, OL 653

## OL 655 Action Learning Capstone Project in Higher

 Education II (3 cr.) The second segment of the Action Learning Capstone Project (ALCP) is a continuation of OL 654. In this course, students complete the project and present their findings and conclusion. Their final project includes: 1) an interpretation and analysis of the results; 2) the strengths and weaknesses; 3) the implications for theory and practice; and 4) the implications for their career. Prerequisite: OL 654
## OL 661 Economics for Organizational Leaders (3 cr.)

 Designed for managers in both corporate and non-profit settings, this course teaches principles and theories of micro- and macroeconomics pertinent to contemporary organizational decision-making. Participants learn to use fundamental economic concepts and apply them to real world events and problems. Prerequisite: OL 601; Every YearOL 662 Principled Leadership ( 3 cr .) This course is a comprehensive study of leadership morality, workplace ethics and servant leadership. It approaches the study of organizations from a holistic viewpoint and explores the concepts of values and integrity. Prerequisite: MG 610 or OL 601; Every Year

OL 663 Analytical and Research Skills for Leadership (3 cr.) This course is designed for those engaged in evaluating or conducting original or secondary market or competitive research. The focus is on real world business research cases and examples. Students learn to work with statistical software to conduct and evaluate original research from original survey and secondary data. Emphasis is on using the Internet as a tool for research, analysis, synthesis and presentation. Prerequisite: OL 601; Every Year

OL 664 Operations Management (3 cr.) This course stresses effective problem solving associated with the planning and control of organizational operations, as well as major quality control processes that contribute to efficiency and effectiveness. Focus is on the end analysis of internal processes of profit and not-for-profit organizations. Prerequisite: OL 601; Every Year

OL 665 Blogging-Engaging Markets With Next Generation Web Technology ( $\mathbf{3} \mathbf{~ c r}$.) This course immerses students in blogging so that they have a practical basis for assessing three elements critical to the newly emerging face of the Internet: pushbutton web publishing, xml syndication and mass interaction. In combination, these elements allow companies to more easily discover and
engage their online markets, with potential to influence key customers and opinion makers. Every Year

OL 671 The New IT Leader ( 3 cr.) Today's successful IT leader requires leadership skills, an understanding of the business, and technology skills. In this course students learn about the role of the IT executive in today's system centric business environment. Leadership techniques that are required to create quality IT governance and the alignment of business objectives and IT are reviewed. Topics covered include: IT strategy and planning; managing technology investments; strategic enterprise architecture; and governance and organization. Prerequisite: OL 601

## OL 672 Strategic Issues in Corporate Information

Security ( 3 cr.) Data is recognized as an important corporate asset that needs to be safeguarded. Loss of information can lead to direct financial loss, lost sales, fines or monetary judgments. IT leaders must be aware of the issues associated with corporate information security so that they can direct the efforts of their staff and protect their data assets. In this course students gain a leader's understanding of the components of corporate information security so that they can direct the effort to protect data from destruction, alteration or loss through a combination of technology, business processes and best practices. Prerequisite: OL 601

## OL 673 Making the Winning IT Decisions (3 cr.)

Because IT is such an important part of today's business environment, major IT decisions often influence the overall success of the organization. Understanding how to make important IT decisions and understanding how to lead decision-making teams are important skills for an IT leader. In this course students learn the processes needed to make complex decisions that face IT leaders and how to harness the power of teams. Students are grouped into teams and use case analysis techniques to solve complex IT problems. Prerequisite: OL 601

OL 680 Strategic Response to Global Challenges (3 cr.)
In today's fast-changing global environment, businesses, countries and individuals alike face challenges demanding their response. To develop strategies adequate to the task, these global actors must understand the forces that drive change and have the ability to anticipate the outcomes that affect them. This course explores the following topics: globalization; challenge of the new global competitive paradigm; strategic responses and selected issues of global concern. Prerequisite: OL 601

OL 681 Leadership in Human Resources ( 3 cr.) In this course students are introduced to the principles of human resource management. 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. Prerequisite: MG 610 or OL 601; 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. Prerequisite: OL 601 or MG 610; Every Year

OL 683 Employee Development Strategies for The 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. Prerequisite: MG 610 or OL 601; Every Year

## OL 685 Applications of Intellectual Property Law

( 3 cr .) Why should a business person be well-versed in intellectual property law (IP)? Issues involving patents, trademarks, copyrights and trade secrets must be recognized in the business setting to ensure the protection and best use of business assets. This course examines IP issues relating to business assets in a host of areas, including information technology use and development, human resource administration, product development, management and advertising. Participants' own business and IP experiences are included. The course also examines the use and protection of business assets related to IP and the Internet. Prerequisite: OL 601; Every Year

## OL 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. Prerequisite: OL 601; Every Year, All

## OL 687 Strategic Planning for Public Service Organi-

 zations ( 6 cr.) This course develops skills in systematic planning within a variety of public sector organizational settings. Strategic goal setting, mission driven plans, managing constrained resources, and monitoring and modifying strategic plans in a dynamic environment are emphasized. Participants will explore the processes of advanced planning through the analysis of an organization?s strategic plan. Prerequisite: OL 601; Every Year, AllOL 690 Leadership Consulting Capstone ( 3 cr.) This capstone course is a faculty-facilitated, major consulting project for an external client. This course is taken last in the program and integrates knowledge and skills gained throughout the program. The course focuses on the design and implementation of student team consulting projects including a comprehensive analysis of a live organizational issue and development of appropriate recommendations to address the issue. The result is a deliverable for an external client organization. Every Year, All

OL 691 Leadership Consulting II (3 cr.) This second segment of the capstone course is a continuation of OL 690. This course has less emphasis on instruction and focuses more on the design and implementation of the student teams' consulting projects covered in OL 690. The result is a deliverable for the external client organization. Prerequisite: OL 690

Courses offered as needed<br>OL 675 The Changing Face of the Health Care System<br>and Leadership (3 cr.) Prerequisite: OL 601

## 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 lecture-lab 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 ( $\mathbf{4} \mathrm{cr}$ ) 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 ( $\mathbf{3} \mathbf{~ c r}$.) This series of lectures utilizes Kodachrome 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 Kodachrome 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 three-semester 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 three-semester 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 three-semester 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 three-semester inclusive practical course in methods of gross tissue description, dissection and preparation, fixation and storage of surgical specimens for light, immuno-fluorescent, immunochemical, frozen and electron microscopy. The 12month 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, immuno-fluorescent, 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 three-semester 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 12month 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 532 Histochemistry ( $\mathbf{3} \mathbf{~ r}$.) 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 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

PA 532L Histochemistry Lab ( 0 cr ) Lab to accompany PA 532. (3 lab hrs.) Every Year, Spring

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 dis-
eases 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 Per-
fusion (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 Cardiovascular

 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, SpringPR 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 B - is required to progress. Every Year, Fall

PR 509 Extracorporeal Circuitry and Lab II (1 cr.) This intensive study of the appropriate procedures for providing extra-corporeal circulation for a variety of purposes includes operation of specialized medical devices, quality control and troubleshooting techniques. Intra-aortic 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, Spring

PR 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 B - is required to progress.

Prerequisites: PR 503, PR 506, PR 509, PR 510, PR 512; Every Year, Summer

PR 516 Physiologic Monitoring ( $\mathbf{4}$ 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 B- is 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 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 500 Clinical Education I (8 weeks) (4 cr.) Students are assigned to a full-time, eight-week clinical internship that provides them with an understanding of the continuum of care. Students may be involved in evaluating, developing and implementing treatment for patients with various musculoskeletal, neurological and cardiopulmonary dysfunctions. Students begin to develop their professional personas and interpersonal skills through their interactions with patients, families and other health professionals. Successful completion of this internship is a prerequisite for continuing in the program. Preparation for applying didactic material to patient care during this internship was provided by lab practicals, clinical problem solving, and role playing which occurred during PT 344, $345,438-439,442,443,444$ and 447 . This course is graded on a pass/fail basis. Every Year, Summer

PT 521 Pathophysiology II (3 cr.) This course prepares students to recognize the different characteristics of each system and how they interact within the body. Students become well acquainted with the disease process and how it affects the human body. They learn to recognize signs and symptoms of the disease and are introduced to the treatments and complications of that disease. The course provides a continuation of how the effects of a disease state affect the human person. Diseases of the cardiovascular, pulmonary and integumentary homeostasis mechanism are considered. Students also learn how changes in
homeostasis, hemopoietic fluids and electrolytes affect the function of the body. Every Year, Fall

PT 522 Pathophysiology III (3 cr.) PT 522 provides students with information concerning the major systems and their role in the function of the body. The students become familiar with the disease state of each system. This includes etiology, signs and symptoms, and treatment and complications. The systems covered are gastrointestinal, urinary, reproductive, endocrine, hemopoietic, environmental diseases, immunology and AIDS. Additional information is provided in regard to oncology. Every Year, Spring

PT 524 Applied Pharmacology II (1 cr.) PT 524 introduces students to the clinical application of the chemical agents within the human being and how these agents alter the function of the body. Students learn how drugs are administered intelligently and safely. The different modes of action, side effects, mechanism of action, toxicity of such chemicals and the kinetics are considered. The course is meant to provide a comprehensive, accurate and relevant understanding of how drug therapy can affect cardiovascular and pulmonary patients. Additional information is provided in regard to anesthesia. Every Year, Fall

PT 525 Applied Pharmacology III ( 1 cr.) This course is the third seminar in pharmacology. It continues to introduce physical therapy students to the chemical agents that provide structural basis and energy supply to living organisms. The course gives an understanding of how drugs are administered intelligently and safely. It teaches the different modes of action, side effects, toxicity, and kinetics of chemical interactions within the human body. The course provides a comprehensive, accurate and relevant understanding of how drug therapy can affect patients receiving physical therapy. Areas of study include the gastrointestinal system, endocrine system and specific treatment of diabetes mellitus. Every Year, Spring

PT 528 Musculoskeletal I ( $\mathbf{3}$ cr.) This course builds upon information taught in the foundational sciences and is designed to provide the physical therapy major with the necessary knowledge and skills to examine physical therapy clients with upper extremity musculoskeletal and peripheral nerve dysfunctions. Upon completion of the examination, students are able to generate a diagnosis, prognosis and plan of care for these clients. The relevant theory and practical learning experiences are provided for the student to develop the knowledge and skills necessary for understanding, presenting rationale for, and applying evidence-based physical therapy intervention strategies to those physical therapy clients described previously. Every Year, Spring

## PT 529 Physical Therapy Process-Musculoskeletal II

 ( 5 cr .) This course builds upon information taught in thefoundational sciences and is designed to provide the physical therapy major with the necessary knowledge and skills to examine physical therapy clients with the following dysfunctions: lower extremity and spine musculoskeletal, lower extremity peripheral nerve. Upon completion of the examination, students are able to generate a diagnosis, prognosis and plan of care for these clients. The relevant theory and practical learning experiences are provided for the student to develop the knowledge and skills necessary for understanding, presenting rationale for, and applying evidence-based physical therapy intervention strategies to those physical therapy clients described previously. Every Year, Spring

PT 529L PTP Musculoskeletal II Lab (0 cr.) Lab to accompany PT 529. (3 lab hrs.) Every Year, Spring

## PT 531 Physical Therapy Process-Acute Care and

 Cardiopulmonary Physical Therapy I (4 cr.) This course provides the student with a broad background in the physical therapy management of patients with acute medical problems with special emphasis on pulmonary, cardiac and dermatological pathologies. Drawing upon the anatomy, physiology and pathology previously and concurrently taught, the student develops the ability to integrate this information to appropriately evaluate and establish an effective treatment plan for any patient with an acute cardiopulmonary disorder, dermatological condition, or other acute medical problems encountered in the hospital setting. The student learns about appropriate precautions to be taken in the hospital. There are opportunities to learn about different areas within the hospital including the intensive care unit. Every Year, Spring
## PT 531L PTP Acute Care Cardiopulmonary Lab I

 (0 cr.) Lab to accompany PT 531. (2 lab hrs.) Every Year, SpringPT 532 Acute Care and Cardiopulmonary II (3 cr.) This course builds on material presented in PT 447 and continues to examine the evaluation, treatment planning and physical therapy intervention of the acute care and cardiopulmonary patient. Physical therapy students examine the cardiopulmonary changes that are present over the lifespan of the individual, and the manner in which the physical therapist intervenes. Physical therapy management of acute care patients in specialized units such as the transplant unit, the neonatal unit and the pediatric unit are explored, as well as the ways in which the physical therapist interacts with other members of the acute care health team. Goal setting and discharge planning in the unique setting of acute care are examined. Physical therapy students explore the challenging cardiopulmonary issues that are present in treating the bariatric patient, and also review the cardiopulmonary ramifications of treating the patient with sleep apnea. Every Year, Fall

## PT 532L Physical Therapy Process: Acute Care and

 Cardiopulmonary II Lab ( 0 cr .) Lab to accompany PT 532. Every Year, FallPT 533 Neurological Rehabilitation I (4 cr.) This course presents physical therapy assessment and treatment procedures for the child with neurological and orthopedic pathology. Assessment procedures covered include the evaluation of normal and abnormal movement, functional mobility and other specific neurological impairments. The use of standardized testing in this population also is covered. The semester concludes with intensive laboratory instruction in neurodevelopmental treatment techniques. Upon completion of this course the student is expected to perform a comprehensive evaluation of a child with neurological impairments, plan appropriate treatment and write a comprehensive case study. Exams require students to synthesize and integrate knowledge gained from current and previous course work. Every Year, Fall

PT 533L Neurological Rehabilitation Lab I (0 cr.) Lab to accompany PT 533. (2 lab hrs.) Every Year, Fall

PT 534 Neurological Rehabilitation II (4 cr.) This course presents physical therapy assessment and treatment procedures for the adult with neurological impairments. Assessment procedures include the evaluation of normal movement, abnormal movement, functional mobility and other specific neurological deficits. The semester concludes with intensive laboratory instruction in the neurodevelopmental treatment techniques. Upon completion of this course the student is expected to perform a comprehensive evaluation of an adult with neurological impairments, plan appropriate treatment and write a comprehensive case study. Exams require students to synthesize and integrate knowledge gained from current and previous course work. Every Year, Spring

PT 534L Neurological Rehabilitation Lab II (0 cr.) Lab to accompany PT 534. (2 lab hrs.) Every Year, Spring

## PT 539 Physical Therapy Process-Selected Topics in

 Rehabilitation (4 cr.) This course provides an in-depth background of the assessment and treatment of individuals with spinal cord injury, and individuals requiring a lower extremity orthotic or prosthetic device. Abnormal gait is presented as a foundation to understanding the function of orthotic or prosthetic devices. Students build on knowledge of the biomechanical concepts of normal gait, developed in Kinesiology II (BI 341) to understand ambulation using prosthetic or orthotic devices. Assessment and treatment procedures are emphasized for individuals with peripheral vascular disease resulting in amputation, musculoskeletal deficiencies requiring orthotic management, or sensory-motor losses resulting from spinal cord injury. Every Year, SpringPT 539L Selected Topics Rehabilitation ( 0 cr ) Lab to accompany PT 539. (2 lab hrs.) Every Year, Spring

PT 548 Physical Therapy Process-Physical Agents ( $\mathbf{3} \mathrm{cr}$ ) This course provides the student with the necessary knowledge and skills to properly utilize physical agents in patient treatment. These agents include electricity, sound, thermal and light energy. An emphasis is placed on integration of theory and clinical application. Students are tested with practical problem-solving examinations that require the synthesis and integration of current theoretical and evidence-based rationale for proper application to specific patient situations. Every Year, Spring

PT 548L PTP Physical Agents Lab (0 cr.) Lab to accompany PT 444.(2 lab hrs.) Every Year, Spring

PT 555 Clinical Education Seminar II (0 cr.) This ungraded seminar course is a continuation of PT 351. Every Year, Spring

PT 556 Clinical Education Seminar III (0 cr.) This ungraded seminar course is a continuation of PT 555. Every Year, Spring

## PT 557 Diagnostic Imaging for Physical Therapists

 ( 3 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 techniques such as CT scan, nuclear medicine, angiography, magnetic resonance imaging, arthrogram 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, SpringPT 562 Applied Concepts in Education (2 cr.) This course introduces students to the educational concepts used in physical therapy. Students learn to apply principles of teaching and learning to: improve their own learning; maximize their patient intervention strategies; and develop an original educational experience for presentation. Ultimately, students are able to educate others (patients, families, students, peers and other health care professionals), using a variety of teaching methods that consider the needs of the learner. Every Year, Spring

## PT 564 Psychosocial Aspects of Physical Disability and

 Management ( 3 cr ) The course addresses the psychosocial dimensions of physical therapy intervention from both the therapist and client perspectives. Students foster clinical reasoning by completing and presenting an integrative case project at the end of semester. Topics include: the human-istic philosophy as part of psychological rehabilitation; physical and psychological variables that influence recovery; the clinical reasoning process of PTs and qualities of experts; the therapeutic relationship and client-centered practice; psychological influences on rehabilitation and adaptation including stress and trauma; typical mental health conditions that are part of PT practice; behavioral management of difficult persons and situations including suicidality, abuse and mental illness; and sexuality and dis-ability-intervention strategies. Every Year, Spring

## PT 564L Psychosocial Aspects of Physical Disability Lab (0 cr.) Lab to accompany PT 564. Every Year, Spring

PT 565 Research Theory ( 3 cr .) The lecture component of this courses covers foundations of clinical research (theory, ethical issues), concepts of measurement (reliability and validity), research design (research question, sampling, experimental design, single-subject design, descriptive research), and quantitative procedures and their corresponding computer analyses (descriptive statistics, statistical inference, t -test, one-way ANOVA). The purpose of the discussion component of the course is to provide the skills and knowledge needed to read, analyze and critique physical therapy research. Students participate in weekly discussions evaluating current research articles relevant to physical therapy practice. Every Year, Spring

PT 565L Research Theory Lab ( 0 cr .) Lab to accompany PT 565. (1 lab hr.) Every Year, Spring

## PT 568 Professional Issues in Physical Therapy (2 cr.)

The purpose of this course is to introduce the student to the current issues facing the physical therapy profession. Topics include professional trends and professionalism, risk management, manpower trends to include minority and cultural impacts to care, education trends, legal and ethical issues and reimbursement issues. The course addresses physical therapy concerns related to state and federal legislation as well. Every Year, Spring

PT 581 Clinical Internship I ( 6 cr.) Ten weeks of clinical internships increase the student's clinical skills. Students progress from fine tuning of clinical skills and comprehension of their role as part of the health care provider team to demonstration of entry-level skills, professionalism and exploring clinical areas of special interest. Variable individual clinical internship time blocks allow students to pursue in-depth practice in areas of interest or gain a wide variety of clinical experiences. The philosophy of the physical therapy program is to expose students to a great variety of clinical experiences while allowing them to gain additional experience in an area of interest. Sequenced objectives for the fourth- and fifth-year clinical internships assure progression to entry-level skill. Taken following the fifth year. This course is graded on a pass/fail basis. Every Year, Summer

PT 625 Selected Topics in Physical Therapy (3 cr.) This 3-credit lecture/lab course has been designed to help the international student become familiar with or polish skills in some physical therapy areas and procedures. The curriculum is based on the fact that some physical therapy practices may differ in various countries. This course ensures that the student are consistent with current practice in the United States. Topics include infection control and current Federal guidelines are explored. Manual muscle testing, range of motion testing, and therapeutic exercise are reviewed and utilized in patient case studies. The acute care setting is presented, including medical records review, medical abbreviations, lab values, and practice in the Intensive Care Unit. A field trip to a mock ICU is part of this unit. Tests and measures for the cardiopulmonary and vascular systems are practiced. The Guide to Physical Therapist's Practice and new government guidelines on patient privacy are presented. Every Year, Fall

PT 629 Physical Therapy Process-Musculoskeletal III ( 3 cr .) This course builds on information taught in the foundational sciences and provides the physical therapy major with the necessary knowledge and skills to examine physical therapy patients with musculoskeletal dysfunctions of the spine, pelvis and temporomandibular joint. Upon completion of the examination, students are able to generate a diagnosis, prognosis and plan of care for these patients. The relevant theory and practical learning experiences are provided for the student to develop the knowledge and skills necessary for understanding, presenting rationale for, and applying evidence-based physical therapy intervention strategies to those physical therapy patients described previously. (3 lecture hrs.; 3 lab hrs.) Every Year, Fall

PT 636 Physical Therapy Process Neurological Rehabilitation III (4 cr.) A continuation of PT 533 and 534, this course teaches additional assessment and treatment principles pertaining to adults with neurological impairments. 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 evaluate, plan a treatment program for, and treat a patient they visit in the clinic. Exams require students to synthesize and integrate knowledge gained from current and previous course work. Every Year, Spring

## PT 636L Neurological Rehabilitation III Lab ( 0 cr.)

 Lab to accompany PT 636. (2 lab hrs.) Every Year, Spring
## PT 644 Physical Therapy Process Manual Therapy

( 3 cr .) This course introduces the student to the following manual therapy approaches for patients with musculoskeletal and neuromuscular dysfunctions of the body: myofascial release, craniosacral therapy, manual lymph drainage and
acupressure. The theoretical rationale for treatment, and indications/contraindications for each approach are taught. Students learn to integrate specific examination and intervention techniques to optimize patient/client physical therapy management. Every Year, Spring

PT 644L Manual Therapy Lab (0 cr.) Lab to accompany PT 644. (2 lab hrs.) Every Year, Spring

## PT 649 Physical Therapy Process Selected Topics in

 Rehabilitation (4 cr.) This course provides an in-depth background of the assessment and treatment of individuals with spinal cord injury, and individuals requiring a lower extremity orthotic or prosthetic device. Abnormal gait is presented as a foundation to understanding the function of orthotic or prosthetic devices. Students build on knowledge of the biomechanical concepts of normal gait, developed in Kinesiology II (BI 341), to understand ambulation using prosthetic or orthotic devices. Assessment and treatment procedures are emphasized for individuals with peripheral vascular disease resulting in amputation, musculoskeletal deficiencies requiring orthotic management, or sensory-motor losses resulting from spinal cord injury. Every Year, FallPT 649L Selected Topics Rehabilitation Lab (0 cr.) Lab to accompany PT 649. (2 lab hrs.) Every Year, Fall

PT 655 Clinical Education Seminar IV (0 cr.) This ungraded seminar course is a continuation of PT 556. Every Year, Spring

PT 658 Differential Diagnosis (3 cr.) This course introduces the students to the fundamental knowledge about current diseases. Students are able to identify symptoms, signs, investigation, complications, differential diagnosis, etiology and epidemiology. This course considers lifestyle and diet, pharmacological, other treatment, management issues and prognosis of diseases. The course addresses the general concepts of the body and with the manifestations diagnosis and principles treating diseases affecting the body. The course also discusses various organ systems and their disease states, as well as diagnostic tests associated with the various disease states. Every Year, Fall

PT 659 Advanced Clinical Decision-Making (4 cr.) The course, which is designed as a small group, problem-based learning, discussion course integrates patient clinical information from the major areas of PT practice outlined in the Guide to Physical Therapy Practice: musculoskeletal, neuromuscular, cardiovascular, pulmonary and integumentary. Students research and discuss cases and generate the following information: pathology (including significant contributing factors), PT evaluation, PT problem list, PT goals, PT assessment and treatment, both PT and any appropriate medically based interventions. Topics such as pharmacology, X-ray interpretation, differential
diagnosis and delegation of treatment are integrated into case discussion as appropriate. (2 lecture hrs.; 2 lab hrs.) Every Year, Spring

PT 661 Administration and Management ( 3 cr .) The student learns about various components influencing the role of PT as a manager and/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 and managerial styles; program planning and decision-making; policy development; quality assurance; utilization review; financing, reimbursement, and budget preparation; regulating agencies and managed care; legal issues and risk management; consumer satisfaction; and ethical considerations. Professional topics include career planning strategies such as resume writing and development. Every Year, Fall

PT 661L Administrative and Management Lab (1 cr.) Lab to accompany PT 661. (2 lab hrs.) Every Year, Fall

## PT 663 Topics in Community Health and Wellness

( $\mathbf{3} \mathbf{c r}$.) The course covers theories of wellness, prevention and health promotion including implications for persons and/or health programs within a community setting. A primary reference for this course is Healthy People 2010. Related topics include health maintenance and health promotion in client-centered care; identification of health risks and disparities related to age, gender, culture, ethnicity and lifestyle; general systems theories and the determinants of health; leading health indicators and focus areas; and health promotion models. Students design a health promotion program by the completion of the course. Every Year, Spring

PT 663L Community Health and Wellness Lab ( 0 cr.) Lab to accompany PT 663. (1.5 lab hrs.) Every Year, Spring

PT 666 Research Application (3 cr.) This course provides students with more advanced skills and knowledge needed to read, analyze and critique physical therapy research. Quantitative procedures and their corresponding computer analyses are covered: multiple comparison tests, nonparametric tests of significance, correlation, regression, analysis of frequencies, statistical measures of reliability, and multivariate analysis. Upon completion of this course, the student produces a research proposal to include statement of the problem, purpose and background of the study, and methods of the research. Every Year, Fall

PT 667 Capstone Research Project ( 3 cr ) The research project proposed by students in PT 551 or PT 666 is conducted and results are analyzed and interpreted. The end product is a research manuscript that includes statement of the problem, rationale/theoretical framework, lit-
erature review (from PT 551 or PT 666), methods, results, discussion and conclusions. This project is reported to peers and advisers in the form of a poster and oral power point presentation and submitted for presentation at a regional or national meeting or to a peer reviewed journal. This course is graded on a pass/fail basis. Every Year, Spring

PT 671 Clinical Education I (4 cr.) Students are assigned to a full-time, eight-week clinical internship, which provides an understanding of the continuum of care. Students may be involved in evaluating, developing and implementing treatment for patients with various musculoskeletal and cardiopulmonary dysfunctions. Students begin to develop their professional and interpersonal skills through interactions with patients, families and other health professionals. Successful completion of this internship is a prerequisite for continuing in the program. Course is taken following fourth year. This course is graded on a pass/fail basis. Every Year, Summer

PT 672 Clinical Education II (4 cr.) This second fulltime eight-week clinical experience helps students develop skills in evaluating and treating inpatients or outpatients with a variety of musculoskeletal and general medical/surgical diagnoses. This includes the practice of effective communication skills with patients and professionals. Preparation for applying didactic material to patient care during this internship was provided by lab practical exams, clinical problem solving and role playing, which occurred in all previous physical therapy process course work. Course is taken following fifth year. This course is graded on a pass/fail basis. Every Year, Summer

PT 673 Special Topics ( $\mathbf{3}$ cr.) This course provides both didactic and clinical work in selected areas of physical therapy interventions for patients presented in earlier PT 150 PTP courses. Areas include home health care, aquatic therapy, health promotion and disease prevention, hippotherapy, early intervention and women's health issues. Every Year, Fall

PT 674 Special Topics II (3 cr.) This course provides both didactic and clinical work in selected areas of physical therapy interventions for patients presented in earlier PTP courses. Areas include home manual lymph drainage, vestibular rehabilitation, advanced therapeutic exercise techniques, and nutrition. Every Year, Spring

PT 677 Research Capstone II (1 cr.) This is the third of a three-course series that culminates in a paper that meets the requirements for submission to a peer-reviewed physical therapy or physical therapy-related journal. Working individually or in small groups under the supervision of a faculty adviser, students propose and plan (PT 551), complete (PT 667) and communicate results (PT 677) of a capstone project. Project options include: 1) research
reports to include projects that use experimental and nonexperimental design research methods; 2) resident's case problem (as described and published in the Journal of Orthopaedic and Sports Physical Therapy), evidence in practice (as described and published in Physical Therapy); 3) service (community) learning. This course is graded on a pass/fail basis. Every Year, Spring

PT 681 Clinical Internship I ( 6 cr.) This 10-week clinical internship increases students' clinical skills, as they progress from fine tuning their clinical skills and comprehending their role as part of the health care provider team to demonstrating entry-level skills, professionalism and exploring clinical areas of special interest. Variable individual clinical internship time blocks allow students to pursue in-depth practice in areas of interest or gain a wide variety of clinical experiences. Sequenced objectives for the fourth- and fifth-year clinical internships ensure progression to entry-level skill. Course is taken following the sixth year. This course is graded on a pass/fail basis. Every Year, Summer

PT 682 Clinical Internship II (6 cr.) An additional 10 weeks of clinical internship further increases the students' clinical skills. Students progress from fine tuning their clinical skills and understanding their role as part of the health care provider team to demonstrating entry-level skills, professionalism and exploring clinical areas of special interest. Variable individual clinical internship time blocks allow students to pursue in-depth practice in areas of interest or gain a wide variety of clinical experiences. Sequenced objectives for the fourth- and fifth-year clinical internships ensure progression to entry-level skill. Course is taken following the sixth year. This course is graded on a pass/fail basis. Every Year, Summer

Courses offered as needed
PT 601 Orthopedics I (3 cr.)
PT 602 Orthopedics II (3 cr.) Prerequisite: PT 601
PT 603 Muscle Energy for the Axial Skeleton ( 3 cr .)
PT 604 TMJ Cervical Dysfunction (3 cr.)
PT 605 Differential Diagnosis (3 cr.)
PT 606 Electrotherapy ( 3 cr .)
PT 611 Examination and Treatment of the Post-
surgical Patient (3 cr.)
PT 612 Biomechanics ( $\mathbf{3} \mathrm{cr}$.)
PT 630 Spinal Mobilization and Manipulation (3 cr.)
PT 632 Topics in Foot and Ankle Therapy ( 3 cr.)
PT 634 Physical Therapy Research ( 2 cr .) Prerequisite: BMS 510
PT 635 Peripheral Joint Mobilization (3 cr.)
PT 637 Physical Therapy Research Proposal (1 cr.)
Prerequisite: PT 634
PT 639 Movement Impairment Syndromes and
Mobilization with Movement (3 cr.)
PT 680 Clinical Residency (2 cr.)
PT 688 Independent Study ( 1 cr.)

## Physician Assistant (PY)

PY 501 Physiology ( $\mathbf{4}$ cr.) This course takes a system approach to physiologic and biochemical function 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 systems-based 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 (3 cr.) 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, Spring

PY 505 Clinical Pharmacology I (3 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 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 ( $\mathbf{3} \mathbf{~ c r}$.) 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 ( $\mathbf{4} \mathbf{~ c r . ) ~ T h e ~ f u n d a m e n t a l s ~ o f ~ s u r g i c a l ~ d i s e a s e ~ a r e ~ e x p l o r e d ~}$ 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 and counseling. Students are familiarized with the biological and psychological attributes that contribute to sexual expression as well as the societal values that shape both perception and expression. The 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 patient history, performing the appropriate physical exam, presenting an oral report and demonstrating 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 gradu-ate-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 ( $\mathbf{3} \mathbf{~ c r}$.) 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. Students also become familiar with a framework for critical review of the medical literature. 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, FallPY 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

Courses offered as needed
PY 599 Independent Study (3 cr.)
PY 699 Independent Study (3 cr.)

## Public Relations (PRR)

## PRR 501 Principles and Theories of Public Relations

( $\mathbf{3} \mathbf{~ c r}$.) Students are introduced to the growing body of knowledge in the discipline and gain expertise that contribute 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, Fall

## PRR 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

PRR 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 class also familiarizes students with IRB protocols and helps them hone scholarly and professional writing skills, including the proper use of citations. Prerequisites: PRR 501, PRR 502; Every Year, All

PRR 504 Law and Ethics in Public Relations (3 cr.) Students review laws and regulations that impact public relations professionals and become familiar with industry standards for ethically conducting 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 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. Students also explore links between unethical public relations practices and heightened legal regulation in the field. Every Year, Fall

PRR 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. Prerequisite: PRR 501; Every Year, All

PRR 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

## PRR 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: PRR 501; Every Year, AllPRR 510 Crisis Management ( $\mathbf{3} \mathbf{~ c r}$.) 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

PRR 511 International Public Relations (3 cr.) This course focuses on the practice of public relations across borders. 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: PRR 501; Every Year, All

PRR 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

PRR 514 Public Relations and New Media (3 cr.) This course addresses the impact of new media on public relations. It focuses on conducting public relations campaigns online and responding to public relations issues via new media, such as social networking and bookmarking sites, blogs, podcasts/vodcasts, discussion boards and conferences, wikis and mobile media. Every Year, All

## PRR 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

PRR 601 Public Relations Professional Project (3 cr.) Students develop a professional research project under the direction of program faculty. Prerequisites: PRR 501, PRR 502, PRR 503; Every Year, All

PRR 602 Public Relations Research Thesis (3 cr.) Students develop a research thesis under the direction of program faculty. Prerequisites: PRR 501, PRR 502, PRR 503; Every Year, All

Courses offered as needed
PRR 513 Issues Management in Health Care ( $\mathbf{3}$ cr.) PRR 515 Special Topics in Public Relations (3 cr.) PRR 606 Independent Study ( 3 cr .)

## Radiologist Assistant (RA)

RA 505 Clinical Pharmacology I (3 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

RA 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

RA 517L Human Anatomy Lab (0 cr.) Lab to accompany PY 517. (6 lab hrs.) 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 Recog-

 nition 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 Recog-

 nition 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 (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 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 ( $\mathbf{3}$ 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 Educa-

tion ( 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, Fall

RA 550 Seminar I (1 cr.) Students 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 Seminar II (1 cr.) Students present a minimum of five 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 Seminar III (1 cr.) Students present a minimum of five 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 (4 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 procedural 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 590 Thesis $\mathbf{I}(1 \mathrm{cr}$ ) 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 fivechapter thesis and is required to present the completed thesis. Every Year, Summer

## Science (SCI)

Courses offered as needed
SCI 599 Computers in Science Teaching ( 3 cr.)

## Spanish (SP)

SP 501 Spanish Grammar ( $\mathbf{3} \mathbf{~ c r . ) ~ T h i s ~ i n t e n s i v e ~ s t u d y ~ o f ~}$ 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 517 Literary Genres (3 cr.) Literary genres and their manifestations in Spanish and Spanish American literature are studied in depth in this course. Every Third Year, Fall

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 20th-century realism, and concludes with manifestations of late 20thcentury 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 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 572 Hispanic Culture (3 cr.) This study of Latin American culture focuses on selected topics that have shaped the Hispanic world from 1492 to the present. Readings are drawn from history as well as literature. Every Third 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 ( $\mathbf{3}$ 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


[^0]:    Courses offered as needed
    BIO 534 Industrial Microbiology/Biotechnology (4 cr.) BIO 546 Medical Zoology (4 cr.)
    BIO 560 Protein Biochemistry and Enzymology ( 3 cr .) Prerequisite: BIO 515
    BIO 562 Bioinformatics ( $\mathbf{3} \mathbf{c r}$ ) Prerequisite: BIO 571 or BIO 471
    BIO 571 Molecular Genetics ( $\mathbf{4}$ cr.)

